State of Minnesota Small Meat Processing Industry

Comparative Analysis of 2000 and 2013 Meat Processors Survey Results

Research Study Results – May 2014

By:
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Requested By:
Minnesota Department of Agriculture
Acknowledgments

AURI expresses its appreciation to the Minnesota Department of Agriculture for initiating the study. The team is grateful for the expertise and contributions of the Minnesota Beef Council, Renewing the Countryside, and the Minnesota Institute for Sustainable Agriculture. Gratitude is also extended to the Southwest Minnesota State University Marketing Advisory Center for carrying out the survey, interviews, and supplying the study data reports. Further appreciation is extended to the meat processors who provided information that made the study possible.
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Executive Summary

This study was initiated in the fall of 2013 to determine the needs of the meat processing industry in Minnesota. Findings are intended to inform state agencies of the needs and priorities of small meat processors to determine targeted services and funding opportunities. This study was requested by the Minnesota Department of Agriculture (MDA) and carried out by the Agricultural Utilization Research Institute (AURI) with assistance from Southwest Minnesota State University Marketing Advisory Center (SMAC) in the fall of 2013. Both MDA and AURI sought a greater understanding of the changes that have occurred in Minnesota’s small meat processing industry since the 2000 AURI Meat Processor Census & Survey (referred to as 2000 MPCS in the rest of the document) produced benchmark data from processing facilities. To ascertain the changes, a mixed methods study consisting of interviews and a survey were conducted with very small and small meat processing facilities in Minnesota. This report presents a summary of the findings from the 2013 data and a report on the comparison of the 2000 MPCS data and the 2013 data as applicable.

The primary findings from the 2013 data indicate:

- two-thirds of owners are at or near retirement age;
- two-thirds of owners have no facility succession plan in place;
- half of the processing facilities are over 40 years old;
- one-third of the processors surveyed have plans to expand;
- fifteen percent of the facilities have plans to change their inspection status;
- more facilities are in the State inspected category than in 2000;
- regulation changes have resulted in more paperwork and documentation, impacting business; and
- a shortage of inspectors is limiting processing at some facilities.

Recommendations include strategies to assist with the consistency of supply and demand, reinvestments, succession planning, training and barriers to growth. As well, ongoing monitoring is recommended by 1) repeating a similar study every 3-5 years and 2) convening a series of focus groups (by inspection status) facilitated by AURI and MDA as a means to further explore the gaps in this study and to discuss the implementation and prioritization of the recommendations from this study.
Introduction

The purpose of this comparative analysis is to provide a more detailed view of Minnesota’s very small and small meat processing facilities. These processors are essential to the state’s economic vitality by providing local and highly specialized meat and poultry processing services and products. However, processors of this size face significant issues of operational growth and sustainability, which threaten the availability of local meat processing. This is important as consumer demand of locally produced foods has risen sharply over the past few years. Local livestock producers need access to local processing facilities that are appropriately skilled to prepare meat and poultry safely, legally, and in a way which satisfies producer and customer expectations. Without the important infrastructure of small meat processing facilities, the supply of local meat and poultry are restricted. According to the United States Department of Agriculture (USDA) a primary issue for small processors is the lack of consistent business required for profitability and sustainability. Given the importance of these processing services, this study focused on challenges and opportunities of very small and small meat and poultry processors in Minnesota. Findings will be used to inform state agencies of the needs and priorities of small meat processors to determine targeted services and funding opportunities.

There are more than 280 very small and small meat processors in the state of Minnesota. According to the USDA, processing facilities can be categorized based on size using the following definitions. “Small processors” are defined as having 10 or more employees but fewer than 500. “Very small processors” are considered having fewer than 10 employees or annual sales less than $2.5 million. Based on these definitions, the majority of the processors in Minnesota are classified as either very small or small.

To further categorize meat processors, there are four inspection classifications in which meat processors can market their product: Custom, State, USDA and Retail Exempt. These categories are dependent upon where and how processors want to sell their products (MDA 2013). When processing meat and poultry products for the owner of an animal, the category is referred to as Custom. If the processor is selling the processed product to other businesses such as convenience stores, grocers, or bars in Minnesota, it is categorized under State inspection. The USDA inspection category is for those that sell across state lines and also meet the criteria in the State inspection category. Finally, if the processor is processing meat and poultry from inspected (either State or USDA) products and selling the products from the processor’s own retail store, this requires the category of Retail Exempt. In addition, it’s important to note that many facilities have multiple inspection statuses for different operations within their facility. For example, some facilities may only slaughter under the Custom inspection category, but process and sell product under the State inspection category.

One cannot examine the very small and small meat processing industry in isolation from the producers further upstream. Minnesota is one of the nation’s highest ranking states in livestock production, therefore this is important to the strength of the overall supply chain. The USDA-ERS recently published a report, Local Meat and Poultry Processing: The Importance of Business Commitments to Long-Term Viability, which discusses the interdependencies between producers and processors. Of the three various supply chain models discussed (very local, local-independent, and regional-aggregated), all are dependent upon the linkages between producers and processors. The performance and efficiency of one link affects the performance and efficiency of the other:

“Consumer demand for local meat and poultry is increasing. To service this market, farmers need access to appropriate-scale processing facilities with the skills, inspection status, and other attributes to handle these
products safely, legally, and to customer specifications. Farmers say that limited processing infrastructure restricts the supply of local meat and poultry. At the same time, existing small processors often lack the steady, consistent business they need to be profitable. From their perspective, capacity is often not lacking but in excess. Seasonal demand for their services creates an unstable “boom-and-bust” cycle that is difficult to maintain: fixed costs are paid all year and skilled workers need year-round paychecks” (Gwin, 2013).

The competitiveness of Minnesota’s livestock producers is evident. The state ranks 1st in turkey production, 2nd in hog production, and 4th in meat animal production1. These numbers reflect the following percentages of total U.S. farm receipts from the Economic Research Service (ERS). The ERS reported that in 2012, Minnesota sold 15.4% of the U.S. farm receipts for turkeys, 12.9% of hogs, 2.1% of cattle and calves, and 0.5% of broilers.2 A closer look at the 2012 Census of Agriculture data reveals that over 28,000 livestock and poultry farms operate in Minnesota.

- 3,746 poultry operations represent 5% of the total farms and nearly 6% of total state receipts of livestock and poultry sales ($1.23 billion).
- Cattle and calves are produced by 20,383 farms or just over 27% of the total operations, and represent 8% of total state receipts ($1.64 billion).
- Hogs and pigs are produced by 3,420 farms or 4.6% of operations with receipts of 13% of total ($2.8 billion).

As reported in the 2000 MPCS, the 1997 Census of Agriculture reported that the value of livestock, poultry and related products sold in Minnesota was in excess of $4 billion. In contrast, the 2012 Census of Agriculture data indicates that this number has grown to just over $7.4 billion.

All of these indicators point to a strong competitive position for Minnesota’s very small and small meat processors, yet they do not give the reader an intimate view of the industry’s needs. Significant opportunity exists for these facilities to continue to add value to livestock commodities by processing meat locally, especially as demand grows. According to the 2007 Census of Agriculture, “…direct-to-consumer marketing amounted to $1.2 billion in current dollar sales in 2007, compared with $551 million in 1997, a growth of 118%” (Johnson, 2012). The purpose of this report is to provide a more detailed view of the state’s very small and small meat processing facilities. The report indicates changes that have occurred since the 2000 MPCS, an analysis of the comparisons, and recommendations. This information is intended to inform MDA, AURI, and other service providers as they strive to ensure programs and services are meeting the needs of the small meat processing industry.

This report is organized into three sections, Background, 2013 Findings and Comparative Analysis, and Recommendations. The Background describes the 2000 MPCS, the methodology for the 2013 study, limitations and constraints, and demographic data. The 2013 Findings and Comparative Analysis provides an overview of the 2013 study findings and compares the 2000 MPCS and the 2013 study. Recommendations are in the last section. Appendixes A and B provide the details of the 2013 study findings.

Background

2000 Study

The current study used the 2000 MPCS as benchmark data for the comparative analysis. The MPCS consisted of a census and a survey. The census collected data from all meat processing facilities in Minnesota regardless of size through a survey of randomly selected processors in Minnesota and surrounding states (South Dakota, North Dakota, Iowa, and Wisconsin). A total of 306 questionnaires were sent to meat processors in these five states. There were 68 questionnaires sent to meat processing facilities in Minnesota and 37 usable surveys were included in the data.

Methodology

The goal of this study was to provide a more detailed view of the state’s very small and small meat processors. This study is based on the 2000 MPCS methodology and survey instrument. Secondary research (interviews) was conducted to provide a current picture of the industry and informed relevant changes to the survey instrument. The survey instrument and complete results are found in Appendix A.

Study Sample

In contrast to the 2000 MPCS that targeted all meat processors regardless of size, the target population of the 2013 study was very small and small Minnesota meat processors. This decision on target population was made as the majority of meat processors in the state are very small or small. In addition, AURI and MDA wanted the opportunity to highlight the significant opportunities that exist for these facilities to add value to livestock commodities as local meat processing is important. A list of current members of the Minnesota Association of Meat Processors was obtained as were updated lists of meat processors from MDA, the Minnesota Institute for Sustainable Agriculture (MISA), and the USDA, resulting in a list of 280 processing facilities. Given the small sample size, all 280 facilities were eligible to complete the survey. Sixty-seven usable surveys were returned for a 24% response rate. A sample of 96 facility owners, representative of all inspection statuses, were invited to participate in the interview process. There were 37 interviews conducted with more than 10% of facilities from each inspection status category.

Interviews and Survey Instrument

Given that the benchmark data was established 13 years ago, secondary research was conducted based on the 2000 MPCS survey questions to develop a knowledge base and to test the questions for conciseness and clarity. To prepare for the interviews, a moderator’s guide was prepared. The guide assured that basic subject issues relevant to meat processing facilities were covered. A total of 96 meat processing facilities were contacted and 37 interviews were conducted via telephone. Given the number of participants interviewed and the interviewees’ level of expertise, the data are considered descriptive of the environment (Creswell, 2009). Based on the interview data, the final survey questions were modified to focus on slaughter and processing capacity, ownership demographics, plans for and barriers to expansion, perceived need for technical assistance, and the impact of recent regulations, which resulted in a 50 item survey (see Appendix B). The resulting questions were validated by AURI.

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the Minnesota Beef Council, MDA, Renewing the Countryside, and MISA. Changes were suggested and the survey instrument was further revised and resubmitted to the groups for final approval.

Procedure

A variation of Dillman’s Total Design Method (1978)\(^5\) was used to conduct the survey. The survey was mailed to each participant in October 2013 and included a cover letter describing the study, the purpose of the survey, the importance of an individual’s response, instructions to complete the survey, and the submission deadline. Reminder phone calls were placed to encourage submission of the survey.

Data Analysis

The respondents’ answers to the survey were entered into the analytical software, Statistical Package for Social Sciences (SPSS), for data tabulation, frequencies, interrelationships of questions, and cross-tabbed. The 2013 study data was analyzed against the 2000 MPCS benchmarks.

Validity

In the survey data, validity was assured given the percentage of respondents in each ownership category. Interviews were conducted by SMAC, a third party research provider, with no conflicting interests in the study. For the recommendations, five AURI staff independently reviewed the data and reached consensus, thereby limiting individual bias (Creswell, 2009)\(^6\).

Reliability

Interview data are considered reliable when participants from a similar field verify one another’s answers, as was the case in this study. The owners of the processing facilities are considered experts in this industry. While many factors can influence reliability, every precaution was taken to ensure consistency, a hallmark of accuracy in the qualitative method (Shank, 2006)\(^7\). The reliability of the survey instrument is based on interviews that served as a pre-test to refine the survey questions (see Appendix B). Through the interviews, it was determined the instrument would elicit the data needed to address the goal of the research.

Comparison Constraints

Given the difference in the subject pool, it is not possible to make direct comparisons with data of every survey question. The selection of questions and resulting data from the 2000 MPCS were those that were specific to Minnesota. This resulted in the comparison of 13 questions and the associated data. With the 13 questions, it is also important to note that some questions and response options were not worded exactly the same in both studies. The 2000 MPCS was composed of two portions. The census obtained data from Minnesota meat processors of all sizes and the survey included processors from Minnesota, North Dakota, South Dakota, Iowa, and Wisconsin. Therefore, there were certain questions presented in the 2000 MPCS that were only asked of


Minnesota processors regardless of size through the census of the 2000 MPCS. The following questions did not have data from the 2000 MPCS study that was specific to only small processors.

- Age of facility
- Busiest and slowest months
- Currently co-packing
- Types of equipment
- Processing capacity
- Plans to expand and why

**Limitations**

Given the environmental changes since the 2000 MPCS, new survey questions were developed, therefore some results were not directly comparable due to the differences in the survey questions between the 2000 and the 2013 studies. While the questions selected for this analysis had many similarities, interpretations may have differed by some of the respondents, resulting in some variation in responses to the questions. However, the reliability tests indicated high levels of clarity and questions elicited the expected data. Therefore, like questions were considered comparable.

**Demographics of Ownership**

Figure 1 shows the percentages of business types. The majority of respondents (34%) identified their business structure as sole proprietorships. This response was closely followed (31%) by family-owned. Further, 26% were classified as corporations and 15% were classified as limited liability companies.

![2013 Survey - Legal Structure of Business](image)

*Figure 1. Structure of meat processor businesses. Adapted from SMAC, 2013 (Appendix B).*
Figure 2 shows the number of years facilities have operated under their current ownership type. The majority of facilities surveyed had been operating under their current form of ownership structure from one to 20 years, while 16% of respondents have been operating under their current form of ownership from 21 to 40 years. In addition, 15% of respondents had been in operation under their current form of ownership for over 50 years.

![Bar chart showing years under current form of ownership](image)

*Figure 2. Current ownership. Adapted from SMAC, 2013 (Appendix B).*

The net annual income is shown in figure 3. The net annual income (before taxes) for 42% of respondents was between $0 and $100,000; 16% were between $110,001 and $200,000; 10% had an income of $200,001 - $300,000; and 16% reported an income of $1,000,001 or greater.

![Bar chart showing net annual income](image)

*Figure 3. Annual net income. Adapted from SMAC, 2013 (Appendix B).*
Figure 4 shows the ages of facility owners. The majority of facilities surveyed had owners between the ages of 41 and 60 years of age. Further, 13% of facilities had owners who were 61 to 70 years of age. It is interesting to note that only 35% of owners are under the age of 50.

Figure 5 shows the break out in percentages of succession plans that are in place. Sixty-eight percent of facilities had no succession plans in place while 32% of respondents reported having succession plans in place.

Figure 4. Owner ages. Adapted from SMAC, 2013 (Appendix B).

Figure 5. Succession plans. Adapted from SMAC, 2013 (Appendix B).
Figure 6 shows the percentages of facilities that anticipated a need to address succession planning in the future. Seventy percent of respondents stated succession plans would need to be addressed within the next 1 – 10 years, and 21% reported this issue could be addressed in the next 11 – 20 years.

![Graph showing percentages of facilities that anticipated a need to address succession planning in the future.](image)

**Figure 6.** Future succession planning. Adapted from SMAC, 2013 (Appendix B).

**Employees**

The number of employees by facility is shown in figure 7. Twenty-nine percent of those surveyed reported to have nine or more employees, while 26% had zero to two employees. Additionally, 21% had three to five employees and 24% had six to eight employees. During the interviews many processors stated they would be able to do more with more employees.

![Graph showing the number of employees by facility.](image)

**Figure 7.** Number of employees. Adapted from SMAC, 2013 (Appendix B).
**Inspection Status**

The percentages of inspection status is shown in figure 8. Forty-four percent of respondents were currently operating under Custom, 27% under State, 16% under USDA, and 13% under Retail Exempt.

![Bar chart showing inspection status](image)

*Figure 8.* Inspection status. Adapted from SMAC, 2013 (Appendix B).
Facilities

The 2013 data indicate that processing facilities were slightly older than those surveyed in 2000, as shown in figure 9. The most significant difference occurred in the facilities that were in existence longer than 50 years. The data from the 2000 MPCS showed that 20% of facilities were in existence longer than 50 years, compared to 41% in the current study. Six percent of the facilities in the 2013 study were in existence for 1-10 years, compared to 22% of in the 2000 MPCS. Unfortunately, no attempts were made to establish whether upgrades or additions were made nor the number of years a facility was owned by the current individual in either study. It is recommended to collect these data in future meat processor censuses to understand whether very small and small meat processors are reinvesting in their businesses.

Legal Structure of Business

The results from a comparison of the studies indicated that sole-proprietorship and corporations were the most popular forms of ownership (see figure 10). Forty-two percent of respondents from the 2000 MPCS and 26% of respondents from 2013 reported being corporations (a 38% decrease). Meanwhile, 42% of respondents from the 2000 MPCS and 34% of respondents from the 2013 study reported operating under sole-proprietorship (a 19% decrease). Also, LLC ownership became more popular with 15% of the respondents from 2013 operating under LLC, while only 5% operated under this type of ownership in the 2000 MPCS (a 300% increase). Thirty-one percent of respondents from the 2013 study were family-owned; however, “family-owned” was not an option provided in the 2000 MPCS study so there was no basis for comparison between the two studies for this business structure.
Comparative Analysis of 2000 and 2013 Meat Processors Survey Results (AURI 2014)

**Current Inspection Status**

After comparing both studies, it was apparent that significantly more respondents in the 2000 MPCS (42%) reported being in the Custom inspection status, while only 16% of respondents in 2013 were in the USDA inspection status. Meanwhile, none of the respondents in the 2000 MPCS identified themselves as being in the State inspection status, while 27% of respondents in 2013 reported being in the State inspection status. This can be attributed to the fact that Minnesota did not implement the State inspection program until 1999 (Slaughter, 2001). Prior to 1999 the only options in terms of meat inspection categories were either Custom or USDA. Therefore, for in the 2000 MPCS study none of the processors surveyed had changed to the State inspection status. It should also be pointed out that the Retail Exempt inspection status was not given as an option in the 2000 MPCS study.
When asked whether they were considering changing their inspection status, a large majority of respondents in both surveys responded no. This question was followed up by asking owners about their intentions to change to a different inspection status. Twenty-two percent of respondents from 2013 planned to change their inspection status to Custom. Further, an additional 22% of respondents planned to change their inspection status to USDA. More significantly, results from the 2013 survey indicate that 56% of the respondents planned to change to the State inspection status. Results from the 2000 MPCS survey indicate that 100% of respondents planned to change to the State inspection status. This again, can be attributed to the fact that Minnesota did not implement a state inspection program until 1999 (as previously discussed) and those processors surveyed in the 2000 MPCS had not yet converted to the State inspection status. In addition, it’s important to note that many facilities have multiple inspection statuses for different operations within their facility. For example, some facilities may only slaughter under Retail Exempt inspection, but process and sale product under State inspection.

Some processors reported issues with the inspection categories. This was heard repeatedly in the interviews and is summed up in one of the participant’s comments.

“We were E2, then got bumped down to Custom because he didn’t have an inspector for his area. So much more paperwork due to being licensed versus non-licensed. Can’t process downed cattle and deer like the non-licensed and they’re taking business. For example, because we can’t process downed cattle and deer, non-licensed people do it in their shops or garages and charge just as much as we would.”

![Figure 12. Owners considering changing inspection status. Comparison of the 2000 MPCS and the 2013 Meat Processor Survey.](image-url)
The format of the question in terms of reason for changing inspection status differed in each study. In the 2000 MPCS survey, the question was offered as an open-ended question where respondents could indicate the reason for changing their inspection status. The 2013 survey presented four specific options to the respondents as the reason for changing their inspection status (expanding facility, regulation changes, lack of business, or other). Therefore, the results from this question are not comparable between the two studies.

**Expansion**

Conversations with processors through the interviews shed more light on expansion plans. Several (17) processors indicated they were operating at maximum capacity, while others (20) stated they had the ability to process/slaughter more animals. The survey data showed a majority (61%) of processors did not currently have plans to expand their facilities. Thirty-nine percent of processors did have plans to expand. The interview data provided some reasons for not expanding included nearing retirement. One processor stated, “We’re getting older and it [meat processing] does not pay well.” Other reasons given were financial barriers, or simply because there was not a need. Several comments provide insight into the rationale for not expanding. Others were concerned about regulations. One processor summed it up by saying, we “…would like to but until regulations are less complicated, we won’t.” In contrasts, one processor indicated the ease of expanding amid regulations by saying, “Our facility was just expanded by building a new sausage kitchen. The USDA and the city were very cooperative.”

Data from the 2000 MPCS regarding expansion (see figure 14) indicated that 17% of respondents wanted to expand to accommodate further processing of the same species, while 13% of respondents wanted to expand to accommodate the processing of new species. However, the majority (70%) of respondents from the MPCS selected “other” when asked why they wanted to expand their facilities.
Figure 14. Intent to expand facility. Comparison of the 2000 MPCS and the 2013 Meat Processor Survey.

Figure 15. Reason for considering expansion. Adapted from SMAC, 2013 (Appendix B).
Figure 16. Reasons for considering expansion. 2000 MPCS.

Operations

Figure 17 indicates the busiest months for processors. In both studies, October, November, and December were easily the busiest months for the facilities. This can be attributed to the seasonality of hunting in the state of Minnesota as well as the busy holiday season (November and December). Figure 18 shows the slowest months of February, March, and April from both studies.

Figure 17. Busiest months. Comparison of the 2000 MPCS and the 2013 Meat Processor Survey.
Practice Co-packing

When survey respondents were asked whether their facility practiced co-packing or private labeling, the majority of facilities surveyed did not practice co-packing or private labeling (Figure 19). In fact, 68% of respondents in 2013 and 79% of respondents in the 2000 MPCS did not practice co-packing. There were subsequent questions asked in both studies in order to get a better handle on whether processors had a desire to co-pack. However, the approach that was taken in both instances was different, making it difficult to make a valid comparison.

Interview data from the 2013 study indicated that six practiced co-packing/private labeling either for themselves or others. Some comments provide insights on co-packing practices. One processor reported practicing private labeling for “all animals we slaughter/process, such as beef, pork, sheep, etc.” Another processor stated that he “does butchering for people taking meat to farmers markets.” “We do just about anything on request,” reported another processor.
**Comparative Analysis of 2000 and 2013 Meat Processors Survey Results (AURI 2014)**

**Figure 19.** Practice co-packing. Comparison of the 2000 MPCS and the 2013 Meat Processor Survey.

**Processing/Slaughter**

In both studies, the question of processing capacity of the current operation was asked of all respondents. In the 2000 MPCS study the question was asked as part of the census portion and therefore included processors of all sizes in Minnesota. As was previously stated, the 2013 study was limited to very small and small processors. Therefore the resulting values were much lower as compared to those in the 2000 MPCS. Limitations were indicated in the 2000 MPCS in that two sources of error were determined and caution was advised when reviewing information concerning processing capacity. Ultimately, these circumstances made it difficult to evaluate and compare data on processing capacities from both studies.

There were several comments made by processors during the interview process in 2013 that warrant some discussion. For the most part, those interviewed expressed little concern in terms of the specie slaughtered or processed and the impact on facility requirement. However, there were a few points raised in terms of facility and inspection requirements for venison processing and both halal and kosher processing. The majority of processors interviewed felt that current regulations did not impact the number of animals they slaughter or process. However, there was one processor who raised a concern that he is only able to slaughter a limited number of days per week due to lack of inspectors to cover the other days of the week. There were two processors who voiced concerns over not being able to process downed animals. Also, there was another processor who believed that the current regulations slow down their slaughtering process and subsequently leads to financial loss.

**Source of Slaughter Animals**

Overall, facilities procured most of their animals for slaughter directly from producers (figure 20). In the 2013 study, 77% of facilities received their animals from producers, while 93% of facilities in the 2000 MPCS received their animals for slaughter from this source. This makes sense as all of the processors surveyed in 2013 and a majority of those surveyed in 2000 were classified as very small and small and these types of processors would typically procure most of their livestock directly from the producer for the custom slaughter operations. In the 2013 study respondents were asked to list a percentage for each of the sources of slaughter animals, therefore the percentages from 2013 do not add up to 100%.
Figure 20. Source of slaughter of animals. Comparison of the 2000 MPCS and the 2013 Meat Processor Survey.

**Meat Markets/Products**

As a general trend, the majority of facilities in both the 2000 MPCS and the 2013 studies marketed most of their products locally (figure 21). The 2013 data indicate that facilities are marketing 58% of products locally, while respondents in the 2000 MPCS marketed 63% of their products to this market. Many processors also marketed their products outside of their respective county, but within the state. In both 2000 and 2013, respondents marketed an average of 35% of their products within their state, but outside of their county. In the 2013 data, the processors surveyed produced value-added products as follows:

- Sausage (94%)
- Snack Sticks (87%)
- Bratwurst (85%)
- Jerky (83%)
- Hotdogs (79%)
- Bacon (77%)
- Dried beef (69%)
- Venison (69%)
- Marinated Products (56%)
- Salami (39%)
- Other (14%)
In terms of how products are marketed (figure 22), respondents in 2013 marketed 52% of their products as retail counter products, while approximately 33% of products in the 2000 MPCS were marketed as retail counter products. Marketing as wholesale and retail outlets both saw nearly identical results from 2000 to 2013 indicating that both are stable marketing outlets for processors. Thirty-five percent of respondents from the 2000 MPCS marketed their product as Custom; however, Custom was not an option provided in 2013 so there was no basis for comparison between the two studies for this marketing option.

Training

It is beneficial to understand the needs of the small meat processors in terms of training. This allows both AURI and MDA to better serve this population by planning and coordinating valuable educational and training
programs. Small meat processors are usually more apt to try new products and processing techniques. In addition, with rapidly changing regulations, it’s important that processors stay abreast of changes and how to appropriately incorporate them into their food safety plans. When analyzing information received through the 2013 interviews, it became apparent that views on training were mixed. Several processors indicated a review of the training would be beneficial while others were saying “they were always trying new things” and therefore more information was welcomed. Meat cutting training was indicated, citing that it was “hard to find employees with training and experience” and others wanted training on assistance in “implementing things faster – charting and documentation.” The majority of processors (17) reported having received the meat and poultry/poultry HACCP training course. Other processors indicated they did not need additional training or information.

Educational workshops was a theme from the interviews. Topics of interest included ingredients, processing/product development, HACCP regulations, packaging, merchandising, direction and control of pathogens, process control, CCP identification, labeling, and insurance. It was noted that workshops need to be conducted at conventions as “…we could not take off work to attend a workshop during the day…we only have three employees so we cannot be gone for a day.”

Regulations

The State inspection program was introduced in Minnesota in 1999. This new program allowed processors who choose to operate under State inspection to sell product in Minnesota that they process, whereas custom plants cannot sell any of the product that they process under the Custom inspection status. Therefore, processing under State inspection gives processors the opportunity to access a much broader market. However, along with this change in inspection status comes stricter regulations.

As processors change from Custom inspection to either State inspection or USDA inspection, there are several changes that processors will need to make in order to meet regulation requirements. Both State and USDA inspection require the facilities to be under continuous inspection. This means that anytime those State and USDA plants are processing an inspector is present. Further, a continuous inspection process means that inspectors will perform both ante mortem (prior to slaughter) and post mortem (after slaughter) inspection on every animal processed under inspection. Processors that operate under Custom inspection are required to meet the same regulations in terms of sanitation and construction as are State and Federally inspected facilities. However, those facilities that process under Custom processing are not inspected as frequently (not continuous) as State and USDA plants.

Constraints regarding regulations were reported through the 2013 interviews. There was an overall concern the recent changes in meat processing regulations resulted in more work for employees and owners. One processor summed up the problem by saying, “There is more paperwork due to HACCP. In fact, we have an additional employee just to fill out paperwork.” However, some processors said that regulation changes had benefitted the meat processing industry saying that regulation changes have, “…made it safer overall. Very positive impact.” Others were more concerned about competitors saying, “some processors don’t take care of meat. Changes have been beneficial because it requires them to be cleanly.” Others stated that regulation changes have “seemed to have benefited the industry by giving more accountability.”
Summary

This study highlighted the context and issues of very small and small meat producers in Minnesota. Primary findings from the 2013 data were that the majority of facilities are family-owned or sole proprietorship, and the majority of owners are over age 41, few succession plans are in place, and close to half of facilities are older than 40 years. Barriers exist for most owners regarding expansion due to the limited number of inspectors and inconsistent flow of demand including a steady supply of livestock from local producers. These barriers appear to also inhibit individuals who want to start a meat processing business.

This study used the 2000 MPCS as a benchmark for a comparative analysis on 13 data points. Due to increased regulatory environment, some words in the survey questions were changed, and therefore some results were not comparable due to the differences in the survey questions between the 2000 MPCS and the 2013 study. While the questions selected for this analysis had many similarities, some could have been interpreted differently by respondents and this could have resulted in some variation in responses to the questions. Moreover, given the difference in the population focus of the 2013 study, it was not possible to make direct comparisons with data on every survey question. The selection of questions and resulting data from the 2000 MPCS were those that were specific to Minnesota. Although there were some differences, the similarities were significant enough for the comparison, and subsequently shed light on trends that appear useful. The primary findings of the comparative analysis indicate:

- Two-thirds of owners are at or near retirement age.
  
  *In the 2000 MPCS only 29% of the facility owners were over the age of 50. In comparison the 2013 study showed that 65% were over the age of 50 and only 32% have an ownership succession plan in place.*

- Half of the facilities are over 40 years old.
  
  *The data from the 2000 MPCS showed that 20% of facilities were in existence longer than 50 years, compared to 41% in the 2013 study.*

- More facilities are in the State inspection program.
  
  *None of respondents in the 2000 MPCS identified themselves as being in the State inspection status, while 44% of respondents in 2013 reported being in the State inspection status. This can be attributed to the fact that Minnesota did not implement a State inspection program until 1999.*

- Over one third of the processors surveyed have plans to expand.
  
  *In the 2000 MPCS 30% had plans to expand. In comparison, in the 2013 study 39% had plans to expand and 83% indicated that a lack of space was the primary reason for expanding.*

- Fifteen percent of the facilities plan to change their inspection status within the next three years.
  
  *In the 2013 study 15% had plans to change their inspection status and of those 56% were planning to change to the State inspection program primarily due to facility expansion plans.*

- Regulation changes have resulted in more paperwork and documentation.
  
  *The 2000 MPCS respondents indicated that government regulations was the number one issue facing the meat processing industry, receiving 55 out of 180 responses. In the 2013 study this concern continued with 40% indicating that regulations had affected their ability to operate resulting in more paperwork, time consumption, more restrictions and financial loss.*

- A shortage of inspectors are limiting processing at some facilities.
  
  *In the 2013 study, a few facilities indicated that regulations and a lack of inspectors has limited their ability to slaughter/process animals.*
Recommendations

This comparative analysis presented insights from Minnesota’s very small and small meat processors. Findings suggest there are challenges and opportunities facing small processors. These insights provide valuable information for state agencies and other service providers as they strive to ensure programs and services have strong impacts. The recommendations include interventions worthy of further exploration.

Recommendation 1: Consistency in Supply and Demand

Profitability depends on consistent demand throughout the year. This is the primary factor in sustaining and growing very small and small processing facilities. Findings suggest seasonality, which causes wide swings from the busiest to slowest seasons, leading to erratic cash flows. This condition causes barriers to expansion and threatens the important infrastructure of local meat processing. Findings indicate that nearly 40% of processors are interested in expanding their operation (for reasons such as regulation requirement, desired change of inspection status, and/or lack of space) but indicate there are financial and regulatory barriers to doing so. The volatility of the supply feeding into meat processing facilities adds to the uncertainty that processors face as they rely mostly on direct-from-producer procurement (70%) of processors receive their animals from producers). Given the condition of seasonality and the need for consistent demand, the first recommendation is that MDA examine strategies for mitigating the high seasonality facing the very small and small meat processing industry.

Recommendation 2: Physical Plant and Capital Investments

Reinvestment to sustain or grow a business is essential. Buildings and equipment are essential components of a processing plant. Findings showed buildings are aging (over 40% were older than 50 years). What is not known is whether owners are reinvesting in building maintenance or in the necessary equipment to meet the market demand. Understanding the ways processors are reinvesting may also provide insight as to the type of state programs that are needed such as equipment loans or grants. The second recommendation is to collect reinvestment information on building upgrades, equipment, and other necessary investments that position processors for future growth in future meat processor censuses.

Recommendation 3: Succession Planning

Succession planning plays a key role in sustainability of local processing. Determining whether a business will survive a transition to the next generation of owners is essential. From the findings, it is clear the sustainability of the majority of processors are at risk. The combination of a lack of succession planning, advancing ages of owners, and years until succession planning is needed is alarming. The majority of owners are 51 years of age or older (65%) and succession plans are not in place (68%). However, 70% of succession planning would need to be addressed in the next 10 years. One complicating factor in succession planning is many processors are family owned businesses (31%), are located on family farms which causes limited reuse/repurposing. This issue brings unique challenges because family businesses, by nature, mix business and family. “Family problems and decisions are mixed with business problems and decisions. Solutions to problems are rarely pure business or pure family in nature so attempts at complete separation are counterproductive.” (Erven, 2009). Future studies should include

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the type of property the business is located on to consider sustainability of processing facilities into the future. The third recommendation is that MDA examine approaches that other states/countries are employing to address succession planning and query the industry as to the most interesting and feasible approach.

**Recommendation 4: Encourage Start-Ups**

New owners of processing facilities are necessary for the longevity of the local processing industry. In working with the meat industry for the past 25 years, anecdotal evidence from AURI staff indicate barriers to startup including cumbersome regulations, associated paperwork and understanding processing and product development issues, how to improve the quality of products, and processing steps that are necessary to produce high value products⁹. These barriers threaten new entrants that are necessary to sustain and grow the small meat processing industry. The fourth recommendation is that MDA explore the development and implementation of a mentorship and incentive program for those interested in starting a processing facility. The incentive program is necessary to provide financial enticements. Mentorship is essential to guide new processors. A mentor program could be established where new processors are matched with meat processing veterans. This mentor program could especially come in handy when troubleshooting processing issues, addressing regulations, and implementing HACCP plans.

**Recommendation 5: Prioritize Training Needs**

Ongoing training is essential to ensure safety, legal compliance, and applying new processing techniques. Effective training takes into consideration processor’s availability to ensure the least amount of disruption to their business. Therefore, prioritization of training needs of the small meat processors is essential. The interviews yielded a wide variety of topics (HACCP, best practices, product/process development), but the most urgent and useful topics are not known. The fifth recommendation is to develop training plans that meet the needs of the small processors. This service would allow AURI and MDA to better serve this population by planning and coordinating targeted and effective educational and training programs. Continued collaboration with the MN Association of Meat Processors is also encouraged given that many very small and small meat processors appreciate the timeliness of workshops/training during their annual convention.

**Recommendation 6: Ensure adequate supply of state inspectors.**

Lack of inspectors is a barrier to expansion and new startups. Inspectors by category are needed to authorize facilities. In the 2013 data, of the processors who indicated an interest in expanding, 56% want to change to State inspection but cite the lack of inspectors as a barrier. This finding gives rise to an industry that may becoming atrophied. The sixth recommendation is to ensure there are enough state inspectors to cover expansions and new start-ups.

**Recommendation 7: Searchable Database**

Web access on processing options can provide needed information for local markets. This strategy could help mitigate seasonality issues stemming from consumer purchasing trends and local producer needs. The seventh

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recommendation is to create a web-enabled, searchable database of all very small and small meat processors in Minnesota. In addition to linking consumers, producers and processors, the database could provide consumers and producers access to information on processing options, food safety, and other useful information.

Recommendation 8: Ongoing Monitoring

Ongoing, frequent monitoring of the very small and small meat processing industry is necessary to proactively support this industry. It is important to monitor and track trends and to assess if interventions are having the intended impact on the industry. Examples of useful information are:

- pressing needs and constraints;
- seasonality issues;
- succession planning;
- reinvestment in facilities and equipment;
- proactively discover issues or trends as they emerge.

The eighth recommendation is twofold. First, repeat a survey or census every 3-5 years. Second, convene a series of focus groups (by inspection status) facilitated by AURI and MDA as a means to further explore the gaps in this study and implementation and prioritization of the recommendations from this study.

Very small and small processors are essential to Minnesota’s economic vitality through their services of providing local and highly specialized meat and poultry processing services. The findings and recommendations from this study are provided as a starting point in understanding this vital industry.
References


Erven, Bernard L. *Management Succession Issues in Family Business (Part I)*. Ohio State University.


Slaughter, Kara. (2001). *State Meat and Poultry Inspection for the State of Nebraska*. University of Nebraska Policy Center. [http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1096&context=publicpolicypublications](http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1096&context=publicpolicypublications)
Appendix A.

Interview Study Findings
State of the Small Meat Processing Industry in Minnesota

Research Study Results – January 2014

By:
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Marketing Advisory Center
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Managing Director: Jenna Radke
Executive Director: Michael K. Rich, Ph.D.
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Executive Summary

The following report is a compilation of information obtained by the Southwest Marketing Advisory Center (Advisor) for the Agricultural Utilization Research Institute (Client), in partial fulfillment of Client’s contract with the Minnesota Department of Agriculture (MDA), gathered through interviews with small meat processing facilities throughout the state of Minnesota regarding the overall state of the meat processing industry. The purpose of these interviews was to gain a better understanding of the state’s small meat processing facilities, including slaughter and processing capacities by species, demographics of ownership, opportunities for and barriers to expansion, the need for technical assistance, and the impact of recent regulation changes on the facilities’ operations.

The information gathered will be used to develop and refine a comprehensive set of survey questions, which will be distributed to all small meat processing facilities in Minnesota. Through conducting and analyzing the results of the interviews, Advisor was able to determine common themes within each inspection status. The questions were structured neutrally in order to gather unbiased responses from each processor interviewed.

Conclusions

- There was a near even division of responding processors who were operating at their maximum (17) and processors who had the capacity to slaughter and/or process more animals (20).
- Of the processors interviewed, most did not feel that the current regulations had any impact on the number of animals they slaughtered and/or processed.
- Overall, the processors interviewed did not feel that the specie of animal being slaughtered and/or processed had any impact on the facility requirements.
- A majority (26) of processing facilities interviewed were family owned.
- Nearly one-third (13) of processors interviewed had been in existence for more than 50 years.
- Twenty-seven of the processors interviewed produced value-added products.
- A majority (31) of processors interviewed did not practice co-packing/private labeling.
- Three-quarters of processors interviewed (28) did not have plans for expansion.
- The main factor contributing to their lack of interest in expansion was financial barriers.
- There was an overall feeling among respondents that recent regulation changes had resulted in more work for processors.
- There seemed to be an even split between processors who felt that regulation changes had benefited the meat processing industry and those who did not.
- A few processors interviewed felt that they had a need for additional training and information.
Detail of Findings

Methodology
Secondary research into Minnesota meat processing regulations was completed in order to gain insight into this industry. Secondary research is critical to the overall understanding of the entire research process and is essential to develop a knowledge base of this industry with which to begin intelligent probing of respondents.

A moderator’s guide was then prepared and used as a point of reference for the subsequent interviews (Exhibit 1). The moderator’s guide assures that basic subject issues are covered by aiding the moderator in maintaining the general direction of the discussions. In addition to the general discussion, specific direction taken with the interview is often dictated by the responses received by the interviewees. Preliminary calls were made to processors to test the moderator’s guide for clarity and conciseness. The moderator’s guide was sent to AURI and subsequently to MDA for approval before proceeding. Changes were suggested by both parties, so the moderator’s guide was revised and sent back for final approval.

Upon approval, Advisor began the interview process. Thirty-seven meat processing facilities were interviewed via telephone, while a total of 96 facilities were initially contacted. Over 10% of facilities from each inspection status were interviewed.

The resulting information gained from the focus groups indicated mixed levels of satisfaction with the recent meat processing regulation changes. A general consensus was made by processors that the regulation changes have resulted in more work for them, specifically in the area of paperwork and documentation. From the information provided by AURI and gathered through these discussions, it was clear that the survey questions should revolve around: 1) slaughter and processing capacity, 2) demographics of ownership, 3) plans and barriers for expansion, 4) the need for technical assistance, and 5) the impact of recent regulation changes on their facilities.

Demographics
In order to determine the validity of the sample results, it is important to understand the demographics of the respondents. Of the 37 interviews completed, 16 were performed with facilities in the Custom classification. Of the 137 processors in the Custom inspection classification, 53 processors were contacted. Of the 28 processors in the E2 inspection status, three interviews were completed, while attempts were made to complete five processors. Of the 25 processors in the Federal inspection status, three interviews were completed, while attempts were made to involve five processors. Of the 10 processors in the Retail Exempt inspection status, three interviews were completed, while attempts were made to contact four processors. Of the 50 processors in the Custom/Retail Exempt inspection status, six interviews were completed, while attempts were made to contact a total of 19 processors. Of the 11 processors in the E2/Custom inspection status, two interviews were completed, while attempts were made to complete interviews with three processors. Of the four processors in the Federal/Custom inspection status, one interview was completed, while attempts were made to contact three processors. Of the two processors in the Federal/Custom/Retail Exempt inspection status, one processor was interviewed, while attempts to contact both were made. Finally, of the three processors in the Federal/Retail Exempt inspection status, one interview was completed.

A limiting factor with the phone interviews is the lack of control over how busy respondents were. For instance, several processors were too busy with their work to complete the interview. Another limiting factor was that many of the owners were out of the facility when contacted. For example, most of processors had to be called back numerous times in order to successfully connect with the owner when present at the facility.
Summary- Custom Respondents
(Includes: Custom; Custom/Retail Exempt)

A random sample of meat processing facilities in the Custom inspection status was selected to be interviewed. Of the 21 facilities interviewed, 17 facilities slaughtered animals, while three did not. One facility slaughtered animals, but not on the premises. Instead, they slaughtered the animals at a farm site. Among all 21 facilities; beef cattle, hogs, sheep, chickens, deer, buffalo, and goats were slaughtered. Of the 21 facilities interviewed, all 21 processed animals. Among all 21 facilities; elk, deer, beef cattle, hogs, bear, moose, caribou, sheep, chickens, buffalo, and goats were processed. Twelve of the facilities reported currently operating at maximum capacity, while nine had capabilities exceeding the number presently slaughtered and processed.

In general, the Custom facilities did not feel that recent regulation changes had affected their business. However, one facility owner noted that regulation changes had taken away business because he was unable to slaughter and process downed animals. Another facility owner reported that regulations changes had resulted in a substantial increase in paperwork and time spent documenting and tracking elements within the facility; elements such as inside temperatures. Many respondents felt that regulations changes had benefited the meat processing industry in terms of increasing the safety and cleanliness of the facilities.

Of the 21 Custom facilities interviewed, 17 reported being family-owned, while two were owned by an individual and two were owned by a group of individuals. Of those interviewed, one had plans to expand the facility, while 18 did not plan on expanding their facility. Two processors were undecided as to whether or not they would expand.

Overall, 16 of the processors felt that they had no need for technical assistance at this time. However, five processors felt that they would benefit from such assistance. One processor felt that his facility would benefit from new equipment, while another said a government program would help, but he did not believe in, “free money.”

Summary- E2 Respondents
(Includes: E2; E2/Custom; E2/Custom/Retail Exempt)

A random sample of meat processing facilities in the E2 inspection status was selected to be interviewed. Of the five E2 facilities interviewed, three reported slaughtering animals, and said that among the facilities combined, beef cattle, hogs, lambs, goats, deer, and elk were slaughtered. Among all five facilities combined, the same animals were processed and slaughtered. Three facilities reported that they were operating at their maximum capacity, while two reported that they would be able to do more, given more employees. Four of the facilities interviewed believed that regulations had any impact on the number of animals they could slaughter/process. One facility owner reported only being able to slaughter animals three days a week due to a lack of an inspector being available.

Overall, the E2 facilities interviewed felt that the recent regulations changes had caused more paperwork for the owners and employees. They also felt that regulation changes had caused more expenses for them in terms of the time spent filling out paperwork, documenting elements of their facility, tracking products, and performing testing. One processor thought that recent regulation changes had, in general, caused more hassle for processors, while another felt that they had a positive impact on the industry by making facilities safer and healthier overall.
All five facilities in the E2 inspection status were family-owned. Two of the E2 facilities interviewed had plans to expand their facility in the future, but were unsure whether or not the expansion would change their inspection status. One of the facilities with plans for expansion felt that there were financial barriers, while the other did not report any barriers.

One of the facilities interviewed felt that they had technical assistance needs in terms of training. They stated that classes or information about smoking techniques to better their products would be beneficial. Another facility stated that they are already receiving technical assistance from the University of Minnesota. Two facilities interviewed felt that workshops in processing and product development would be beneficial, while another felt that training or information regarding charting and documenting information would be appreciated. All others did not feel a current need for further training or information.

**Summary- Federal Respondents**
(Includes: Federal; Federal/Custom; Federal/Custom/Retail Exempt; Federal/Retail Exempt)

A random sample of meat processing facilities in the Federal inspection status was selected to be interviewed. Of the six Federal facilities interviewed, all six reported slaughtering animals, including, between the six interviewed; beef cattle, hogs, buffalo, elk, lamb, goats, and deer. All six facilities reported processing the same animals they slaughtered. Two facility owners felt that they were operating at maximum capacity, while four stated that they could slaughter and process more. Four processors felt that current regulations did not limit the number of animals they can slaughter and process, while two felt that regulations have negatively impacted that number.

Overall, processors in the Federal inspection status felt that recent regulations changes have resulted in more work and time spent filling out paperwork, documenting activities, and charting. Several of the processors reported having hired extra employees just to fill out paperwork.

Three of the Federal facilities interviewed were family-owned, while three were individually owned. None of the facilities interviewed had plans for expansion. One facility stated that they would like to expand, but they will not until regulations are less complicated.

None of the facilities interviewed felt that they had technical assistance needs, however they would benefit from additional workshops and training. One processor in particular strongly felt that all processors could benefit from training and workshops, and stated that there is always a need for information.

**Summary- Retail Exempt Respondents**
(Includes: Retail Exempt)

A random sample of meat processing facilities in the Retail Exempt inspection status was selected to be interviewed. Of the three Retail Exempt facilities interviewed, all three processed animals but did not slaughter. Among the three facilities; beef cattle, hogs, deer, chickens, lambs, and buffalo were processed. None of the facilities felt that they were operating at their maximum capacity. Also, none of the facilities interviewed felt that current regulations had an impact on the number of animals they process.
One processor interviewed felt that regulations changes had not impacted his facility very much at all, while another stated that due to the changes, they had to make pamphlets about each product and include nutritional information.

One of the Retail Exempt facilities interviewed was family-owned, while another was owned by an individual and the third was owned by a group of individuals. None of the facilities interviewed had future plans for expansion. However, one processor noted that he would like to, but cannot due to financial barriers.

All processors interviewed felt that they would benefit from further training and workshops. They felt that all the workshops suggested on the moderator’s guide would be beneficial, plus training on better food handling, merchandising, sanitation, and packaging.

**Summary of All Interviews**

- 17 processors interviewed felt that they were operating at maximum capacity, while 20 felt that they had the ability to process/slaughter more animals.
  - Many processors felt that they would be able to do more with more employees.
- Many processors interviewed did not feel that current regulations had an impact on the number of animals they slaughter/process. However, a few felt that the regulations did restrict the numbers.
  - One processor reported that because there is a lack of inspectors, he is only able to slaughter three days a week. He stated that he has had to turn away business because he cannot process downed animals.
  - Another processor stated “Current regulations definitely slow down slaughter. Our plant has room to slaughter more animals, but regulations slow it down, which results in financial loss.”
    - Additionally, another processor stated “Mad cow prevents taking downers.”
  - Another processor reported issues with being able to get an inspector on location, which results in having to turn away business.
- Overall, the processors interviewed felt that the specie being slaughtered/processed did not have an impact on the facility requirements.
  - One processor reported having to keep animals separate during slaughter.
  - Another processor noted that during venison season, he has to quit butchering hogs and beef cattle. They are also required to have an inspector on location every day they slaughter hogs and beef.
A processor felt that there was no difference, facility-wise.

One processor practiced halal processing for Muslims, as well processing kosher meat. Both have different requirements.

- Of the 37 processors interviewed, 17 reported having received the meat and poultry HACCP training course.
  - Of those who had received the training, most had completed it at an off-site location.

- Nearly one quarter of processors interviewed reporting having employees who had completed the meat and poultry HACCP training course.

- A majority (26) of all meat processing facilities interviewed were family-owned.
  - Six facilities were sole-proprietorship ownership.
  - Five facilities were owned by a group of individuals.

- Of the 37 processors interviewed, 13 reported having been in existence for 51 or more years. The existence of the remaining processors includes:
  - 41-50 years: one processor
  - 31-40 years: two processors
  - 21-30 years: eight processors
  - 11-20 years: eight processors
  - 1-10 years: three processors

- Twenty-seven of the processors interviewed produced value-added products, such as:
  - Bratwurst
  - Sausage
  - Summer Sausage
  - Bacon
  - Jerky
  - Hotdogs
  - Dried beef
  - Marinated products
  - Snack sticks
  - Venison products
  - Anything on request

- Of processors interviewed, six practiced co-packing/private labeling either for themselves or others.
  - One processor reported practicing private labeling for “all animals we slaughter/process, such as beef, pork, sheep, etc.”
Another processor stated that he “does butchering for people taking meat to farmers markets.”

“We do just about anything on request,” reported another processor.

A majority (28) of processors interviewed did not currently have plans to expand their facilities. Three processors did have plans to expand, while five were undecided.

“We’re getting older and it [meat processing] does not pay well.”

“Our facility was just expanded by building a new sausage kitchen. The USDA and the city were very cooperative.”

“…would like to but until regulations are less complicated, we won’t. Would love to expand, but too many guidelines and regulations. Have to mandate regulations more. HACCP is very good, but they have to figure out a way to mandate them.”

Several processors interviewed did not have plans to expand their facilities because they were about ready to retire.

Others stated that they were not planning on expanding because of financial barriers, or simply because there was not a need.

There was an overall feeling that the recent changes in meat processing regulations had resulted in more work for employees and owners.

“There is more paperwork due to HACCP. In fact, the facility has an additional employee just to fill out paperwork. Owner stresses cleanliness. However, some places do not. Therefore, some facilities do need stiffer regulations.”

“Time consuming—every morning, there are employees who spend 15-30 minutes doing things to chart things, follow regulations. Lots of writing things down, monitoring. Had to hire people just to help with paperwork.”

Regulation changes “…have not helped. More restrictions, more paperwork. It takes more time, so we can’t get as much done.”

“We were E2, then got bumped down to Custom because he didn’t have an inspector for his area. So much more paper work due to being licensed versus non-licensed. Can’t process downed cattle and deer like the non-licensed and they’re taking business. For example, because we can’t
process downed cattle and deer, non-licensed people do it in their shops or garages and charge just as much as we would.”

- “Different regulations for smaller and larger companies would be great.”

- “Less business because of stricter regulations.”

Some processors felt that regulations changes had benefited the meat processing industry.

- Regulation changes have “...made it safer overall. Very positive impact.”
- In regards to benefiting the industry: “Privately ‘no’ [regulation changes have not benefitted private processors] especially those who are self-employed but for those that have bigger facility it has benefitted them and was a must for them.”
- “Some processors don’t take care of meat. Changes have been beneficial because it requires them to be cleanly.”
- “Good industries didn’t need more regulations because they’re doing fine. It’s the poorer ones that need the regulations in order to do better.”
- Regulation changes have “seemed to have benefited the industry by giving more accountability.”
- Regulation changes have caused “more work, but will probably be beneficial in the long-run in keeping things safe.”
- These changes “help keep track of things better.”

Some processors felt that they had training and information needs.

- “A review of training would be beneficial.”
- One processor felt that additional training or information would be beneficial because “they’re always trying new things.”

Others felt that they did not have training or information needs.

- “No-all [information is] available. Lots of training through Minnesota Meat Processors.”
- “Meat cutting training for employees. Hard to find employees with training and experience.”
“Yes- [classes in] implementing things faster-charting and documentation.”

“More information on what’s needed from the company.”

The following are comments processors made about the idea of having educational workshops:

“Processors would benefit from hands-on training workshops. For example, a workshop about ingredients.”

A workshop in “processing/product development- so many things have changed.”

“Sanitation courses. Packaging courses.”- He said he would do more if he had a kill floor.

One processor suggested a merchandising workshop.

Another processor stated that he would like to “learn more about how much he needs to be insured and not be wasting money being over-insured.”

A processor felt that educational workshops would be beneficial “but only if they provided these workshops at the convention. We could not take off work to attend a workshop during the day... some larger businesses might be able to but we only have three employees so we cannot be gone for a day.”

During the interview, we provided a list of the following workshops to the interviewee and asked them to choose which would be most beneficial. The list is as follows:

- Processing/Product development
- HACCP Regulations
- Detection and control of pathogens
- Process controls
- CCP Identification
- Labeling

Six facilities felt that a workshop regarding processing and product development would be beneficial.

Two facilities felt that a workshop in CCP identification would be beneficial.

One facility felt that a workshop reviewing HACCP regulations would be beneficial.

One facility felt that all workshops listed would be beneficial.
Moderator’s Guide- Meat Processing Facility Owners

The purpose of these interviews is to gain a detailed assessment of the current status of the meat processing industry and specifically, the meat processing industry in the State of Minnesota.

Name: ___________ Processor Called: ___________________ Date: ________________

Personnel Talked To: _______________________________ Inspection Status: __________

*We need to gather information concerning each facility specifically...*

What would be the best way to gain the following information...I will ask as a direct question...

1. Does your facility slaughter animals?
   a. If yes, what types of animals?

2. Does your facility process animals?
   a. If yes, what types of animals?

3. Approximately how many head of each specie does your plant slaughter per year?

4. Approximately how many head of each specie does your plant process per year?

5. What is the maximum capacity of your plant in relation to what you’re currently slaughtering?

6. What is the maximum capacity of your plant in relation to what you’re currently processing?

7. Do the current regulations have an impact on the number of animals your plant slaughters?

8. Do the current regulations have an impact on the number of animals your plant processes?

9. Does the specie of animal being slaughtered have an impact on the facility requirements? (i.e. deer and wild game vs. cattle and hogs)

10. Does the specie of animal being processed have an impact on the facility requirements? (i.e. deer and wild game vs. cattle and hogs)
11. Have you taken the meat and poultry HACCP training course?
   a. If so, what was your preferred method of receiving training? Why?

   ______ Off-site  ______ Web based/Internet  ______ Printed Materials

12. How about your employees?
   a. Did they receive the same preferred method of training?

13. How many didn’t receive the training?

14. Is your facility family-owned, owned by one individual, or owned by a group of individuals?
   a. Is there a succession plan in place for ownership? If yes, what is it? If no, is it due to any of the
      regulation changes?

15. How long has your facility been in existence?

16. Does your facility produce value-added products? Value-added products are new products created from
    processing, repackaging, or adding special features to existing products.
    a. If yes, what kind of value-added products?

17. Does your facility practice co-packing/private labeling? In other words, do you contract out the production
    of certain products to other manufacturers?
    a. If yes, what products?

18. Do you have any plans to expand your facility in the near future?
    a. If so, do you foresee any barriers to expansion? Will an expansion change your inspection status?

19. What types of technical assistance would help your present operation?

20. In the past, how have the changes in meat processing regulations implemented in (year) affected your
    facility?

   a. What kind of regulation changes were made?

   b. Do you feel that these changes have benefited the meat processing industry? Why or why not?
c. Have these changes caused any difficulties for the typical meat processor in MN?

d. In general, how much have these changes cost the typical meat processor in MN?
   i. How extensive were the changes?

21. What particular regulations do you feel have affected your facility the most?

   a. Why?

   b. Do you feel that this is true for other meat processing facilities?

22. Do you feel that you have training or information needs? Is so, what kinds?

   a. Do you feel that this is true for the typical meat processor?

23. Would you and other meat processors benefit from additional educational workshops?

   a. Which workshops would be most beneficial?

   _____ Processing/Product development       _____ HACCP Regulations
   _____ Detection and control of pathogens    _____ Process controls
   _____ CCP Identification                    _____ Labeling

   .
Appendix B

Quantitative (Survey) Study Findings
State of the Small Meat Processing Industry in Minnesota

Research Study Results – January 2014

By:
Southwest Minnesota State University
Marketing Advisory Center
Account Executive: Maria Gilland
Managing Director: Jenna Radke
Executive Director: Michael K. Rich, Ph.D.
Comparative Analysis of 2000 and 2013 Meat Processors Survey Results (AURI 2014)
Executive Summary

A total of 67 recipients returned completed surveys for a return rate of 24% (Exhibit 4). Evidence suggests that a majority of the smaller operations are involved with custom slaughter and processing, often in addition to their primary function. Of those surveyed 83% of facilities interviewed produce value-added products, while 32% practice co-packing/private labeling. Thirty-nine percent of respondents had plans to expand their facilities in the next five to ten years. Among those respondents who had plans for expansion, 58% felt that there would be barriers to accomplishing that objective. The most common barrier indicated was financial, at 57%, followed by regulations, at 51%.

Of the facilities interviewed, 74% of respondents reported having an owner between the ages of 41 and 60. Thirty-two percent of facilities surveyed had succession plans in place.

Among those respondents who felt that technical assistance would be beneficial to their operations, 47% felt that help with product development would be most useful. Additionally, 44% felt that financial assistance would be beneficial.

On average, the meat processing facilities surveyed had the ability to process (per year) 561 hogs, 440 cattle, 378 deer, 26,000 poultry, 241 sheep and/or goats, and 224 other animals, including elk, buffalo, and other types of wild game.

Conclusions

- On average, meat processing facilities surveyed had the ability to process (per year) 561 hogs, 440 cattle, 378 deer, 26,000 poultry animals, 241 sheep and/or goats, and 225 other animals.

- Of those surveyed 83% of facilities produced value-added products.

- Thirty-two percent of respondents practiced co-packing/private labeling.

- Thirty-nine percent of facilities surveyed had plans to expand in the next five to 10 years.

- Of the facilities with plans for expansion, 58% could foresee barriers to the process, primarily financial.

- Of those facilities that could foresee barriers to expansion, 57% stated that there would be financial barriers, while 51% felt that there would be regulatory barriers.

- Among those surveyed, 74% reported having owners between the ages of 41 and 60.

- Thirty-two percent of facilities surveyed had succession plans in place for ownership.

- Of those surveyed, 47% of facilities felt that technical assistance in the area of product development would benefit their facility, while 44% felt that financial assistance would be of greatest value.
**Detail of Findings**

**Purpose**

Client desired a detailed assessment of all federally inspected, state equal-to, and custom exempt meat processors in Minnesota, including slaughter and processing capacity by species, demographics of ownership, opportunities for and barriers to expansion, and the need for technical assistance. It is important for the State to understand this information to assist in determining needs and priorities for future services and funding opportunities that it provides to meat processors.

**Methodology**

Secondary research was completed in order to gain a better understanding of the meat processing industry in Minnesota. Secondary research is critical to the overall understanding of the entire research process and is essential to develop a knowledge base with which to begin probing respondents.

A moderator’s guide was then prepared and used as a point of reference for the subsequent interviews (*Exhibit 1*). The moderator’s guide assures that basic subject issues are covered by aiding the moderator in maintaining the general direction of the discussions. In addition to the general discussion, specific direction taken with the interview is often dictated by the responses received by the interviewees. Preliminary calls were made to processors to test the moderator’s guide for clarity and conciseness. The moderator’s guide was sent to AURI and subsequently to MDA for approval before proceeding. Changes were suggested by both parties, so the moderator’s guide was revised and sent back for final approval.

Upon Client’s approval of the moderator’s guide, Advisor began the interview process. Thirty-seven meat processing facilities were interviewed via telephone. A total of 96 meat processing facilities were initially contacted. Over 10% of facilities from each inspection status were interviewed.

The resulting information gained from the interviews indicated a mixed level of satisfaction with recent changes in meat processing regulations. A general consensus was made by processors that the regulation changes have resulted in more work for them, specifically in the area of required paperwork and documentation. From the information provided by AURI and gathered from the interviews, it was clear that the items on the survey instrument should focus on: 1) slaughter and processing capacity, 2) ownership demographics, 3) plans for and barriers to expansion, 4) perceived need for technical assistance, and 5) the impact of recent regulation changes on their facilities. These priorities also more than comply with the specifications stated in the contract executed by AURI with the MDA.

Based on the responses elicited from the interviews, a survey instrument was created (*Exhibit 2*). After the creation of the survey instrument, it was tested for clarity and conciseness. Once the test participant had completed the survey, they were interviewed to determine if the questions were being interpreted correctly. Two hundred eighty-nine copies of the final survey instrument were mailed in addition to a cover letter explaining the purpose of the study to the recipients. Follow-up phone calls were made to encourage responses from processors in the custom inspection status, which is the largest of all statuses included in this study. All returned surveys were entered in SPSS (Statistical Package for Social Sciences), which is a statistical analysis program, enabling the analysis of a large number of survey instruments and the interrelationship between questions. The 67 returned surveys represent a response rate of 24%. All target
numbers for sub-classifications were successfully met. Once the data was tabulated, both frequencies and cross-tabs were completed. Only those cross-tabs that were shown to be statistically significant are discussed in this report.

**Demographics of Ownership**

In order to determine the validity of the sample results, it is important to understand the demographics of the respondents. Of those surveyed, 44% were currently in the custom inspection status, 27% were in the state inspection status, 16% were in the Federal inspection status, and 13% were in the retail exempt inspection status (*Exhibit 3*).

Concerning the number of individuals employed by each facility, 29% of respondents had nine or more employees. Twenty-six% of respondents had 0-2 employees, 21% had 3-5 employees, and 24% had 6-8 employees (*Exhibit 13*).

Thirty-four percent of facilities surveyed operated under sole proprietorship, while 31% of facilities interviewed were family-owned. Approximately 26% of facilities described themselves as corporations, while 15% were limited liability companies (LLC) (*Exhibit 8*).

Twenty-three percent of facilities surveyed had operated under their respective form of ownership for 11-20 years, while 21% of facilities surveyed had operated under their respective form of ownership for 1-10 years. Fifteen percent of those surveyed had operated under their respective form of ownership for over 50 years (*Exhibit 9*).

Of those surveyed, the owners of 47% of respondents were between the ages of 51 and 60. Twenty-seven percent of respondents reported having owners between the ages of 41 and 50, while 13% of respondents reported having owners between the ages of 61 and 70. Five percent of facilities surveyed had owners over the age of 71 (*Exhibit 10*).

Regarding ownership, 32%, of facilities surveyed reported having no succession plan in place (*Exhibit 11*). However, a majority (70%) of respondents said that the succession issue needs to be addressed within the next 1-10 years, while 21% felt that it should be addressed in the next 11-20 years (*Exhibit 12*).

Of the facilities surveyed, 42% of respondents had a net annual income (before taxes) between $0-100,000. Sixteen percent of respondents reported an annual income between $100,001-200,000, while an additional sixteen percent reported an income of $1,000,001 and above. Ten percent of respondents had a net annual income between $200,001-300,000 (*Exhibit 14*).

**Demographics of Facilities**

Regarding the existence (regardless of ownership) of the facilities surveyed, 48% had been in existence for over 50 years, while fifteen percent had been in existence for 41-50 years (*Exhibit 6*). Thirteen percent of facilities had been in existence for 31-40 years. Concerning the age of the facility, 41% of facilities surveyed were over 50 years old (*Exhibit 7*). Nineteen percent were between 11 and 20 years old, while 16% were between 31 and 40 years old.

A limiting factor with the mail surveys is the lack of control over which individuals return the survey and under what conditions the survey was completed. Although the surveys were distributed to all small meat processing facilities in Minnesota, specific types of facilities are more prone to return them. For instance, generally those with stronger views on the material covered by the survey are more prone to complete and return the instrument. As a result, some skewing could be present in results.


Response Data

Products Produced

A majority, 83%, of facilities surveyed produce value-added products (Exhibit 23). Of the facilities that produce value-added products, 94% produced sausage, 87% produced snack sticks, 85% produced bratwurst, and 83% produced jerky. Meanwhile, 79% produced hotdogs, 77% produced bacon, 69% produced dried beef, and 69% produced venison (Exhibit 24).

Of those facilities surveyed, 32% practice co-packing or private labeling (Exhibit 21). Among those facilities that practice co-packing or private labeling, 48% reported having excess capacity to devote to the practice (Exhibit 22).

On average, 54% of products produced by the facilities surveyed are marketed as retail counter products, while the remaining products are marketed as wholesale, retail outlet, food service, or other, including custom processed for specific producers (Exhibit 49).

Expansion

Concerning future plans, 39% of facilities had plans to expand in the next 5-10 years (Exhibit 16). Of those facilities with plans for expansion, 83% said that it was due to a lack of space, while 35% wish to change inspection statuses (Exhibit 17).

Regarding the facilities that had plans for expansion, 58% expected there to be barriers (Exhibit 18). Fifty-seven percent of facilities with plans for expansion expected financial barriers, while 51% anticipated regulatory barriers (Exhibit 19).

Of those surveyed, the most popular type of expansion would be to increase the size of the facility as reported by eighty-seven percent of respondents with plans to expand their facilities (Exhibit 20). Meanwhile, 26% of facilities with plans for expansion would expand to increase the frequency of operation and 22% would expand to have the capability to process and/or slaughter more species of animals.

Technical Assistance Needs

Of those surveyed, 47% of facilities felt that product development assistance would help their present operation, while 44% felt that financial assistance would benefit them (Exhibit 45). Twenty-six percent felt that their facilities would benefit from educational programs and food safety/regulatory programs, respectively.

Additionally, if grant funds were available to help offset the cost, approximately 74% of facilities surveyed would purchase new equipment (Exhibit 15). The most popular item that facilities would choose to purchase, given grant funds were available, is a smokehouse with humidity control (34%), followed by a vacuum stuffer (30%).

Education and Workshops

When asked what workshops were needed to assist small meat processing facilities in being more competitive, 55% of respondents felt that workshops were not necessary (Exhibit 40). However, of those who felt a need for them, approximately 28% felt that a workshop in the area of processing and product development would be helpful. Twenty-six percent of respondents saw a need for a workshop regarding HACCP regulations.
A majority (60%) of respondents had taken the meat and poultry HACCP training course (Exhibit 41). Of those who had taken the course, 44% received training at an off-site location, while 29% took it online and 27% utilized printed materials (Exhibit 42). Additionally, 25% of respondents reported that their employees had received the training (Exhibit 43).

Impact of Regulation Changes

Of those surveyed, 40% of respondents felt that recent changes in meat processing regulations had affected their ability to operate (Exhibit 34). Among those who were impacted by regulation changes, 97% felt that they had more paperwork to do, while 73% felt that the changes had resulted in more time consumption in order to satisfy the requirements (Exhibit 35). Sixty-eight percent felt that there were more restrictions.

However, although many facilities felt that recent regulation changes had a negative impact on their ability to operate, there were facilities in every inspection status that had seen positive effects from the changes (Exhibit 36). A majority of respondents (52%) felt that regulation changes had resulted in better documentation of their products and facility. Also, 48% of facilities that indicated regulation changes had impacted their ability to operate felt that the changes did a better job in tracking their products.

One of the positive impacts that experienced by many facilities throughout all inspection statuses was an increase in accountability (Exhibit 37). In fact, 75% of processors in the Federal inspection status felt that their accountability had increased due to regulation changes. Additionally, 67% of processors in the retail exempt inspection status felt an increase in accountability.

Overall, facilities surveyed did not feel that recent regulation changes had an influence on the species they were able to slaughter/process (Exhibit 38). Eighty-seven felt that regulation changes did not affect the species that they were able to slaughter/process. Of the 13% that did feel that regulation changes affected the species that they slaughtered/processed, 63% had to halt processing certain species, while 37% had to adjust their facilities to accommodate certain species (Exhibit 39).

Capacity

After calculating the average for all meat processing facilities interviewed, it was determined that, on average, small meat processing facilities have the capacity to process (per year) approximately 561 hogs, 440 head of cattle, 378 deer, 26,000 poultry animals, 241 goats and/or sheep, and 224 other animals, including elk, buffalo, and other wild game (Exhibit 25).

On average, the processors surveyed obtained 77% of animals they slaughtered and 68% of animals they process direct from producers (Exhibit 45).

Operation

Certain seasons are slower than others for small meat processors, as demonstrated by elicited responses. In this study, it appeared that late fall/early winter was the busiest season, overall (Exhibit 30). Of those surveyed, approximately 76% felt that November was one of their busiest months, while 75% felt that December was one of their busiest months. Approximately 55% of respondents reported that October was among their busiest months.

In contrast, it appeared that early spring was the slowest season for most small meat processors in Minnesota (Exhibit 30). Of those surveyed, approximately 63% of respondents felt that March was one of their slowest months,
while 46% felt that February was among their slowest months. Additionally, 44% marked April and 30% marked January as being among their slowest months.

In addition, there are also certain days of the week that facilities operate under continuous inspection (of those facilities that require continuous inspection) (Exhibit 5). Of those surveyed, approximately 67% reported that they are continuously inspected on Mondays and 44% reported that they are continuously inspected on Tuesdays. Approximately 39% of respondents indicated they were under continuous inspection on Thursdays.

Markets Served

On average, the meat processing facilities surveyed marketed 58% of their products locally and 35% outside of their respective counties but within the state (Exhibit 47). Less than one percent marketed their products internationally. Of those facilities that marketed their products internationally, the majority (63%) were within North America, while 25% were marketed to other locations, including Trinidad and Hong Kong (Exhibit 48).
Comparative Analysis of 2000 and 2013 Meat Processors Survey Results (AURI 2014)
Exhibit 4- Response rate according to inspection status.

Exhibit 5- Which days of the week does your facility slaughter under continuous inspection?
Exhibit 6- How long has your facility been in existence (regardless of ownership)?

Exhibit 7- How old is your present facility?
Exhibit 8 - Define the ownership of your facility.

Exhibit 9 - How long has this plant operated under this form of ownership?
Exhibit 10 - What is the age of the owner of your facility?

Exhibit 11 - Is there a succession plan in place for ownership?
Exhibit 12 - In your estimation, in how many years will this succession issue need to be addressed to ensure continuation of the operation?

Exhibit 13 - How many individuals are currently employed by your facility?
Exhibit 14- What is the approximate annual net income (before taxes) of your facility?

Response Data

Exhibit 15- If grant funds were available to offset a portion of the cost of new equipment, would be more likely to make a purchase?
Exhibit 16- Does your operation plan on expanding in the next 5 to 10 years?

- Yes: 39%
- No: 61%

Exhibit 17- If yes, why?

- Lack of space: 83%
- Wish to change inspection status: 35%
- Other: 17%
- Regulation requirement: 9%
Exhibit 18- Do you foresee any barriers to the expansion of your facility?

Exhibit 19- If so, what would they be?
Exhibit 20- What type of expansion does your operation plan on making?

- Size of plant: 87%
- Frequency of operation: 26%
- Types of species: 22%
- Other: 22%

Exhibit 21- Does your facility practice co-packing/private labeling?

- Yes: 32%
- No: 68%
Exhibit 22- If yes, does your facility have excess capacity to devote to this process if you choose to pursue it?

Exhibit 23- Does your facility produce value-added products?
Exhibit 24- If so, what products does your facility produce?

Exhibit 25- What is the approximate annual processing capacity of your facility (by species)?
Exhibit 26- Is your facility certified regarding the following classifications?

- Organic: 6%
- Halal: 3%
- Kosher: 1%
- Other: 1%

Exhibit 27- Do you have any plans to change the inspection status in the next three years?

- Yes: 15%
- No: 85%
Exhibit 28 - If yes, to what?

- State: 56%
- Custom: 22%
- USDA: 22%

Exhibit 29 - Why will you be changing the inspection status?

- Expanding facility: 60%
- Lack of business: 20%
- Regulation changes: 10%
- Other: 10%
Exhibit 30- Which are your three busiest months and three slowest months?

Exhibit 31- Have you changed the number of days you operate?
Exhibit 32 - If so, when did that change occur?

- Within the past year: 50%
- Within the past five years: 50%
- Within the past ten years: 0%
- 15 or more years ago: 0%

Exhibit 33 - What was the reason for the change?

- Lack of business: 0%
- Regulation changes: 20%
- Unavailability of inspector: 40%
- Other (increase business): 80%
Exhibit 34- How have past changes in meat processing regulations affected your ability to operate?

Exhibit 35- Have any of the regulations created a negative impact on your ability to operate?
Exhibit 36- Have any regulations had a positive effect on your operation?

Exhibit 37- Impact of regulation changes on accountability according to inspection status.
Exhibit 38- Do current regulations influence the species that you process at your facility?

- Yes: 13%
- No: 87%

Exhibit 39- If yes, what influence have regulations had on the species that you process?

- Halt processing certain species: 63%
- Adjust facility to accommodate certain species: 38%
Exhibit 40- Which of the following workshops are needed to assist your organization in being more competitive?

Exhibit 41- Have you taken the meat and poultry HACCP training course?
Exhibit 42- If so, what was your preferred method of receiving training?

![Bar chart showing the preferred methods of receiving training: Off-site (44%), Web-based/Internet (29%), Printed materials (27%).]

Exhibit 43- Have your employees taken the meat and poultry HACCP training course?

![Pie chart showing 25% of employees took the training, and 75% did not.]

Comparative Analysis of 2000 and 2013 Meat Processors Survey Results (AURI 2014)
Exhibit 44- If so, how many have taken the course?

- 0-2: 6%
- 3-5: 28%
- 6-8: 67%

Exhibit 45- What types of technical assistance would help your present operation?

- Product development: 47%
- Financial assistance: 44%
- Educational programs: 26%
- Food Safety/Regulatory: 26%
- Business planning: 23%
- Additional training: 21%
- Other: 2%
Exhibit 46- What percent the animals you slaughter and process are obtained from the followed sources:

- Direct from producers: Slaughter 77%, Process 68%
- Other: Slaughter 7%, Process 9%
- Local stockyards: Slaughter 0%, Process 1%
- Livestock broker: Slaughter 0%, Process 0%

Exhibit 47- What percent of your product is marketed:

- Locally: 58%
- Within state: 35%
- Midwest: 5%
- Nationally: 3%
- Internationally: 0%
Exhibit 48- If you market internationally, what percent of your product is marketed to:

- North America: 60%
- Other: 20%
- Asia: 10%
- Central America: 5%
- South America: 5%
- Europe: 10%

Exhibit 49- What percent of your products are marketed as:

- Retail counter product: 60%
- Wholesale product: 10%
- Retail outlet product: 10%
- Other: 5%
- Food service product: 5%
1. Do you currently own or operate a meat processing facility in Minnesota? (Check one)
   - Yes
   - No (Skip to question number 48)

2. How long has your facility been in existence (regardless of ownership)? (Check one)
   - 1-10 years
   - 11-20 years
   - 21-30 years
   - 31-40 years
   - 41-50 years
   - 51+ years

### Section 1: Questions about your facility

3. How old is your present facility (if more than one structure, the average age of total facility)?
   - 1-10 years old
   - 11-20 years old
   - 21-30 years old
   - 31-40 years old
   - 41-50 years old
   - 50+ years old

4. What types of equipment does your facility currently have available? (Check all that apply)
   - Bacon Press
   - Batter/Breader Machine
   - Bowl Chopper
   - Clipper
   - Colosimo Press & Dies
   - Cube Steak Tenderizer
   - Drying Cabinet
   - Emulsifier
   - Massager
   - Meat Grinder
   - Modified Atmosphere Packager
   - Multi-needle Injector
   - Patty Machine
   - Peelers (specify type)
   - Piston Stuffer
   - Roll Stock Packager
   - Shrink Tunnel
   - Smokehouse w/ Humidity Control
   - Smokehouse w/o Humidity Control
   - Smokehouse w/ Liquid Smoke
   - Vacuum Mixer
   - Steamed Jacketed Kettle
   - Stitch Injector
   - Vacuum Stuffer
   - Vacuum Tumbler
   - Vertical Chopper
   - Other (specify)

5. If grant funds were available to offset a portion of the cost of new equipment, would you be more likely to make a purchase? (If no, skip to question number 7)
   - Yes
   - No

6. If yes, which of the following equipment would you purchase? (Check all that apply)
   - Bacon Press
   - Batter/Breader Machine
   - Bowl Chopper
   - Clipper
   - Colosimo Press & Dies
   - Cube Steak Tenderizer
   - Drying Cabinet
   - Emulsifier
   - Massager
   - Meat Grinder
   - Modified Atmosphere Packager
   - Multi-needle Injector
   - Patty Machine
   - Peelers (specify type)
   - Piston Stuffer
   - Roll Stock Packager
   - Shrink Tunnel
   - Smokehouse w/ Humidity Control
   - Smokehouse w/o Humidity Control
   - Smokehouse w/ Liquid Smoke
   - Vacuum Mixer
   - Steamed Jacketed Kettle
   - Stitch Injector
   - Vacuum Stuffer
   - Vacuum Tumbler
   - Vertical Chopper
   - Other (specify)

7. Do you foresee any barriers to the expansion of your plant? (If no, skip to question number 9)
   - Yes
   - No

8. If so, what would they be? (Check all that apply)
   - Financial
   - Regulations
   - Number of employees
   - Local Gov't Cooperation
   - Other (specify)
   (City, county, township)
9. Define the ownership of your facility: (Check all that apply)
   - Family-owned
   - Partnership
   - Limited Liability Corporation (LLC)
   - Sole proprietorship
   - Corporation
   - Other

10. How long has this plant operated under this form of ownership?
    - 1-10 years
    - 11-20 years
    - 21-30 years
    - 31-40 years
    - 41-50 years
    - 51+ years

11. Is there a succession plan in place for ownership?
    - Yes
    - No

12. In your estimation, in how many years will this succession issue need to be addressed to ensure continuation of the operation?
    - 1-10 years
    - 11-20 years
    - 21-30 years
    - 31-40 years
    - 41-50 years
    - 51+ years

13. Does your operation plan on expanding in the next 5 to 10 years? (If no, skip to question number 16)
    - Yes
    - No

14. If yes, why? (Check all that apply)
    - Lack of space
    - Wish to change inspection statuses
    - Regulation requirement
    - Other

15. What type of expansion does your operation plan on making? (Check all that apply)
    - Size of plant
    - Frequency of operation
    - Types of species
    - Other

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Section 2: Products and Services

16. Does your facility practice co-packing/private labeling? (If no, skip to question number 18)
    - Yes
    - No

17. If yes, does your facility have excess capacity to devote to this process if you choose to pursue it?
    - Yes
    - No

18. Does your facility produce value-added products? (If no, skip to question number 20) Value-added products are new products created from processing, repackaging, or adding special features to existing products (i.e. marinated products, snack sticks, sausage, jerky, etc.)
    - Yes
    - No

19. If so, what products does your facility produce? (Check all that apply)
    - Bacon
    - Bratwurst
    - Dried Beef
    - Hotdogs
    - Jerky
    - Marinated Products
    - Salami
    - Sausage
    - Snack sticks
    - Venison
    - Other

20. What is the approximate capacity of your facility by species (number of head)?
    | Specie          | Number of Head |
    |-----------------|----------------|
    | a. Cattle       |                |
    | b. Hogs         |                |
    | c. Sheep & Goats|                |
    | d. Poultry      |                |
    | e. Deer         |                |
    | f. Other(specify): | Number: |

21. Approximately how many head, by species, does your facility process per year?
    | Specie          | Number of Head |
    |-----------------|----------------|
    | a. Cattle       |                |
    | b. Hogs         |                |
    | c. Sheep & Goats|                |
    | d. Poultry      |                |
    | e. Deer         |                |
    | f. Other(specify): | Number: |
22. Is your facility certified regarding the following classifications? (Check all that apply)
   - Organic
   - Halal
   - Kosher
   - Other 3rd party certifications (specify): ______________________

23. What percent of the animals you slaughter and process are obtained from the following sources?

<table>
<thead>
<tr>
<th>Source</th>
<th>Slaughter</th>
<th>Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Stockyards</td>
<td>________%</td>
<td>______%</td>
</tr>
<tr>
<td>Livestock Brokers</td>
<td>________%</td>
<td>______%</td>
</tr>
<tr>
<td>Direct from Producers</td>
<td>________%</td>
<td>______%</td>
</tr>
<tr>
<td>Other (specify)</td>
<td>________%</td>
<td>______%</td>
</tr>
<tr>
<td>Total</td>
<td>100 %</td>
<td>100 %</td>
</tr>
</tbody>
</table>

Section 3: Inspection Status

USDA – continuous inspection program, USDA mark of inspection is applied to this product

State E2 – continuous inspection program, State mark of inspection is applied to this product

Custom Exempt – product produced is marked NOT FOR SALE

Retail Exempt – no mark of inspection is applied

24. Initially, what was the inspection status of your facility? (Check one)
   - Custom
   - State (E2)
   - USDA
   - Retail Exempt

25. Under which inspection status does your facility currently operate? (Check one)
   - Custom
   - State (E2)
   - USDA
   - Retail Exempt

26. Do you have any plans to change the inspection status in the next three years? (if no, skip to question number 29)
   - Yes
   - No

27. If yes, to what? (Check one)
   - Custom
   - State (E2)
   - USDA
   - Retail Exempt

28. Why will you be changing the inspection status? (Check all that apply)
   - Expanding facility
   - Regulation changes
   - Lack of business
   - Other __________________

29. Which of the following are your three busiest months and three slowest months (Check three in each row)

<table>
<thead>
<tr>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
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<tr>
<td>Busiest</td>
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<tr>
<td>Slowest</td>
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</tr>
</tbody>
</table>

30. Which days during the week does your facility actually slaughter under continuous inspection? (Check all that apply)
   - Mon
   - Tue
   - Wed
   - Thu
   - Fri
   - Sat
   - Sun

31. Have you changed the number of days you operate? (If no, skip to question number 34)
   - Yes
   - No

32. If yes, when did that change occur? (Check one)
   - Within the past year
   - Within the past five years
   - Within the past ten years
   - 15 or more years ago

33. What was the reason for the change?
   - Lack of business
   - Regulation changes
   - Unavailability of inspector
   - Other _______________
Section 4: Regulations

34. Have past changes in meat processing regulations affected your ability to operate? (If no, go to question number 37)
   □ Yes □ No

35. Have any of the regulations created a negative impact on your ability to operate? (Check all that apply)
   □ More paperwork □ Financial loss □ More restrictions □ Time-consumption □ Change in inspection status
   □ Other ______________________

36. Have any of the regulations had a positive effect on your operation? (Check all that apply)
   □ Cleanliness □ Documentation □ Accountability □ Tracking products □ Safety
   □ Other ______________________

37. Do current regulations influence the species that you process at your facility? (If no, skip to question number 39)
   □ Yes □ No

38. If yes, what influence have regulations had on the species that you process? (Check all that apply)
   □ Have had to halt processing □ Have had to process fewer species □ Have had to adjust facility to accommodate for certain species

Section 5: Education and Training

39. Which of the following workshops are needed to assist your organization in being more competitive?
   (Check all that apply)
   □ Processing/Product Development □ HACCP Regulations
   □ Detection and Control of Pathogens □ Process Controls
   □ CCP Identification □ Labeling
   □ None □ Other ______________________

40. Have you taken the meat and poultry HACCP training course? (If no, skip to question number 42)
   □ Yes □ No

41. If so, what was your preferred method of receiving training?
   □ Off-site □ Web based/internet □ Printed Materials

42. Have your employees taken the meat and poultry HACCP training course? (If no, skip to question number 44)
   □ Yes □ No

43. If so, how many have taken the course?
   □ 0-2 □ 3-5 □ 6-8 □ 9+

44. What types of technical assistance would help your present operation? (Check all that apply)
   □ Financial assistance □ Additional training □ Educational programs □ Product Development
   □ Food Safety/Regulatory □ Business planning □ Other ______________________

Section 6: Markets Served

45. What percent of your product is marketed:
   Locally (within your county) _______%
   Outside of your county but within the state _______%
   In the Midwest _______%
   Nationally _______%
   Internationally (Where?) _______%
   Total _______ 100%
46. If you market internationally, what percent of your product is marketed to:

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>____%</td>
</tr>
<tr>
<td>Asia</td>
<td>____%</td>
</tr>
<tr>
<td>Central America</td>
<td>____%</td>
</tr>
<tr>
<td>North America</td>
<td>____%</td>
</tr>
<tr>
<td>South America</td>
<td>____%</td>
</tr>
<tr>
<td>Other (specify)</td>
<td>____%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

47. What percent of your products are marketed as:

<table>
<thead>
<tr>
<th>Market Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale Product</td>
<td>____%</td>
</tr>
<tr>
<td>Retail Outlet Product</td>
<td>____%</td>
</tr>
<tr>
<td>Retail Counter Product</td>
<td>____%</td>
</tr>
<tr>
<td>Food Service Product</td>
<td>____%</td>
</tr>
<tr>
<td>Other (specify)</td>
<td>____%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Finally, a few questions about you...

48. How many individuals are currently employed by your facility?

- [ ] 0-2
- [ ] 3-5
- [ ] 6-8
- [ ] 9+

49. What is the age of the owner of your facility?

- [ ] 20-30
- [ ] 31-40
- [ ] 41-50
- [ ] 51-60
- [ ] 61-70
- [ ] 71+

50. What is the approximate annual net income (before taxes) of your facility?

- [ ] $0-100,000
- [ ] $100,001-200,000
- [ ] $200,001-300,000
- [ ] $300,001-400,000
- [ ] $400,001-500,000
- [ ] $500,001-600,000
- [ ] $600,001-700,000
- [ ] $700,001-800,000
- [ ] $800,001-900,000
- [ ] $900,001-1,000,000
- [ ] $1,000,001+