



Functional quality management systems for livestock producers

Abstract: Quality management systems programs were used to help farmers (niche market producers, a Midwest cooperative of pork producers, and other livestock producers) improve their management techniques and cost-control skills and increase market access.

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Q Will livestock producers adopt a systematic management approach of continuous improvement and document their production practices to refine their management and satisfy requirements of customers?

A Farmers react to market access requirements but are reluctant to develop and implement formal management systems without an immediate payoff. Early adopters of quality management systems will be better able to react to market opportunities than will those that have to adopt before they qualify.

Background

Customers, neighbors, and regulators are demanding more information from farmers. Producers are finding it difficult to keep up with expanding requirements for certification, documentation and regulation while also managing their operations for profit and sustainability. Quality management systems (QMS) are proven tools, offering farmers a systematic business decision analysis model applicable for use with branded programs that require age and source verification programs, feed ingredient limitations, animal welfare guarantees, and other label stipulations.

The original project intent was to develop a curriculum for educating livestock farmers about quality management systems and applying those systems. There were applications for production practices, product claims, business decisions, and environmental stewardship. Materials included practical templates for common standard operating procedures (SOPs) and documentation needs used to train extension educators, service providers and livestock producers. Initial objectives:

1. Hold a train-the-trainers session for Extension personnel who will be working with producers to develop the QMS systems.
2. Work with at least forty Iowa cattle and hog farmers who will attend training in QMS principles and develop a QMS for their farm's livestock enterprise.
3. One year after the training workshops, 25 Iowa livestock producers will use QMS principles in daily operations, annual planning and business evaluation decisions.

To achieve these objectives following some audience shifts and programming changes, the scope of work was narrowed to two main activities: curriculum and materials development and program delivery.

Approach and methods

The Iowa Pork Industry Center developed a Stewardship Management System (SMS) program (curriculum and manual) that taught producers how to develop a SMS for their farms, as well as Sow Group Tracker software to assist farm staff and produc-



ers with specific challenges they faced. The Iowa Beef Center prepared and delivered educational materials describing different market access or value-added programs and their requirements. The materials were made available to all IBC field staffers who work with producers. The Iowa Beef Center also developed a Management System Template, a one-page outline of QMS steps, and used it to train ISU Extension agricultural field staff.

Results and discussion

Niche Market Pork System

The project team met with Niman Ranch staff and producers to learn more about their production systems and challenges they face. They needed a tracking system that was simple and helpful for documenting management practices. Sow Group Tracker software, a spreadsheet-based planning tool, was developed to help identify breeding dates and the subsequent management dates based on the animal's life cycle. It prints a calendar identifying the management event dates and helps identify sows that are non-productive. The program helped the producers lower their costs of production by more efficiently managing their sow herd, labor, facilities and other resources.

Value Added Cattle Marketing

Packers are paying premiums for fed cattle that are in USDA Process Verified Programs (PVP) for age and source verification. Country of Origin Labeling (COOL) became mandatory September 30, 2008. The National Animal Identification System (NAIS) is a voluntary animal health surveillance program. Natural, grass-fed and organic beef programs are producing at higher volumes. All these programs offer opportunities for cattle that have some level of documentation to support claims made by the seller, but the many reporting requirements are confusing to most producers.

The Iowa Beef Center leveraged resources from this project and other similar work to prepare and deliver educational materials that describe different marketing access or value added programs and their requirements. These materials were available for all IBC staff who work with producers and were used in partnership with a northwest Iowa auction market operator to educate cow-calf producers about age and source verification. The training included generic documentation forms to help farmers prepare to work with a private sector firm.

Pork Producer Market Access

A cooperative of Midwest pork producers established and built a commercial scale packing and processing plant. A portion of the plant is owned by 40 small-scale producers from Iowa, Nebraska, Kansas, Missouri and Minnesota. All producers selling to the plant sign an affidavit stating that they are performing certain specified practices. The cooperative wanted to be sure it could verify the claims that the practices were being carried out, which was easy for the larger firms in the cooperative, but not so much for the smaller firms.

The Iowa Pork Industry Center leveraged resources from this grant to develop a Stewardship Management System (SMS), which includes a curriculum and manual showing producers how to develop a SMS for their farms. All 40 producers took the training to develop their SMS plans. The program focuses on continuous process

improvement and farmers are seeing cost savings benefits.

Management System Template

Farmers are grappling with increasingly complex issues in livestock production, compliance with regulations, and marketing access at a time of narrower profit margins. To help them cope on an individual basis, the Iowa Beef Center developed a Management System Template, a one-page outline of QMS steps. Agricultural extension staff members were trained in its use and shared it with producers. The template will not replace or compete with the formal PVP or QMS curricula, but rather it provided a point of entry to engage farmers in a QMS. The extension staff provided assessment tools for common challenges such as decreasing feed costs, improving low production rates, capturing greater fertilizer value from manure, and reducing health problems.

Conclusions

Investigators learned a great deal about the depth and scope of record utilization in the niche market production sector.

- There is a lack of understanding of the need for using organized management systems and the economic benefits generated by using these systems.
- Few niche market producers currently are using any computerized sow management system. However, with input costs rising quickly, there is more interest in monitoring and managing pig flow and cost structure. Farmers will need to transition from traditional production attitudes to more business-oriented operations.
- It is difficult for producers to alter their own practices. Policies and rules that create demand for training may change that. To make programs like this most effective, it is important to focus on educating farmers about systematic management. It is vital that the program offered to farmers be able to stand alone and be used because it is practical and makes economic sense.

Impact of results

Sixty-five individuals who were involved in the training programs received a direct benefit from market access and cost control. Other farmers will benefit from using these tools that already have been tested. Increasing the use of QMS (via training and guidance from knowledgeable extension staff) will help Iowa farmers address the growing expectations for documentation in livestock production.

Several of the farmers who participated commented that the quality management system gave them a framework to document that they were “doing the right thing.” The coordinator of the farmer-owned pork packer appreciated QMS because it provided him confidence and proof to answer customer’s questions regarding specific production practices.

Education and outreach

Educational materials developed in connection with this project included the Sow Group Tracker software, the Stewardship Management Systems Workbook, and the Management Systems Template.

Several educational programs were presented by the Iowa Beef Center in conjunction with this project. Among them were a PVP training session for 25 northwest Iowa beef producers, PVP training for feedlot managers, Stewardship Management Systems sessions for 41 producers, and Quality Management Systems instructions for ISU Extension staff in farm management, agricultural engineering, and beef, pork, and dairy production.

Leveraged funds

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