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FOR SUSTAINABLE AGRICULTURE

Business organization and coordination in niche hog marketing

Abstract: Niche hog marketing enterprises face a unique set of challenges. This study considered five critical management issues, and analyzed the workings of two niche pork markets in Iowa. Issues of market timing, product quality, process verification, business organization, and sharing of returns are discussed.

Question & Answer

Q: How can an Iowa niche hog farmer be more successful?

A: This project showed that the business organization and coordination of a niche market are crucial to its success. Issues that need to be addressed are market timing, product quality, process verification, business organization, and sharing of returns. A strategy for all of these should be established before the business venture is initiated. This will assist in the success of the business.

Objectives for this project were to:

- Utilize pork carcass quality measurements and determine the potential for using carcass measurements such as pH, Minolta (color), etc., as factors to predict eating quality of pork,
- Evaluate issues of timing, pork quality, process verification, business organization, and sharing of returns for two niche pork production and marketing organizations in Iowa, and
- Work with a pork niche marketing organization to develop a system to assist in tracking pig deliveries, product shipments, etc.

Background

Organizing the production and marketing of niche pork products is a complex task requiring coordination among numerous businesses and individuals. For successful market development and retention, it is necessary to be able to measure product quality and then pay producers according to the value of their product. This is especially important for the producers of products with special or value-added attributes.

Five issues were identified as important in achieving efficient management for niche pork enterprises: timing, quality, process verification, business organization and sharing of returns. Two niche pork production and marketing organizations (with significant differences in their orientation) were analyzed to evaluate these issues. Pork quality and traceability also were addressed.

Approach and methods

Work on the project was divided into five parts:

1. Measuring and predicting pork quality. Information on factors that impact pork eating quality, such as flavor, juiciness, tenderness, and texture was collected from a niche marketer. Data on pH, Instron (star probe for tenderness), drip loss, marbling, and Minolta were available to determine the ability to use measures such as pH in predicting eating quality.
2. Information on sample sizes needed to accurately predict pork quality
3. Summary of comments from interviews held with niche pork producers

Principal Investigator:
James Kliebenstein
Economics
Iowa State University

Co-investigators:
Brent Hueth
Agricultural and Applied Economics
University of Wisconsin-Madison

Maro Ibarburu

Economics
Iowa State University

Budget:
\$19,544 for year one
\$39,707 for year two

4. Comparative analysis of two Iowa niche pork marketers

5. A document to assist niche marketing organizations in tracking pig deliveries and product shipments, pricing, etc.

Results and analysis

Pork quality in a free range pork production system was assessed. There was a positive relationship between pH and eating quality. Results showed that using pH as a predictor of quality was moderately reliable (30 to 40 percent). Combining pH with two other variables—Instron (tenderness) and marbling—improved the predictability of eating quality up to 50 percent.

Knowing the sample sizes needed to accurately predict pork quality is important because it is not cost effective to take quality measurements on all pork carcasses. Analysis of data showed that about 57 percent of the hogs would need to be measured to achieve an acceptable accuracy level, and the cost would be about \$0.97 per hog with this level of testing.

Interviews held with niche pork producers showed that for the most part, the producers interviewed were quite satisfied with the organization of the niche marketing group. Common concerns for both producers and marketing coordinators related to market timing. While the organizations were strongly rooted in loyalty and trust, there was a recognized need for instruments that would allow for better market planning. This would involve knowing the number of animals in the production system, and when they will reach market weight and be ready for delivery. It also would be necessary for the organizations to be able to take delivery of the pigs at that time.

Producers sought a stable market over time, which improved their ability to plan and reduced price and income variability. They were willing to forego higher returns over time as a trade-off for more stable returns. Producers felt that being part of a niche pork marketing organization allowed them to remain in pig production.

Results of a comparison of two pork niche firms focused on coordination issues that are somewhat unique to niche

marketing. Longer-run planning and coordination of supply and demand are somewhat more difficult than in the more traditional commodity markets. This is due to production uncertainty and the relatively low level of liquidity in specialty markets. Both firms in the study struggled with this issue, and neither has come upon a solution. However, both firms have indicated an interest in developing a firmer commitment from and to growers, perhaps with some form of delivery contract for future deliveries.

Quality assurance and process verification were managed somewhat differently across the two firms. In case of quality assurance, much of the difference can be attributed to the nature of the product that is marketed. In one case, breed is the essential product being marketed, and given that there tends to be much less variation in carcass attributes within breeds than across breeds, there is less need for individual carcass variation as a way of evaluating grower performance. Neither firm opted to use formal third-party verification of process attributes (e.g., hormone and antibiotic free). This suggested that the extra benefit from process verification, beyond what can be obtained from reliance on reputation mechanisms, may be small in comparison with the cost of implementing such a system.

One of the firms studied uses a sophisticated, quality-based compensation system to pay growers, while the other offers direct profit-sharing by producers. This outcome is to some extent related to a formal separation between the production and marketing operations of the firm where quality incentives are used. The difference in the structure of compensation arrangements also may have something to do with the relative size of the organization.

Impact of results

Results have been adopted by the niche pork production operations. It has been used in pricing hogs and determining factors such as pH, etc. in determining premium herds. Another operation has used results in tracking inventory and pricing the carcass components. Work is continuing on identifying factors that impact pork quality, such as seasonality, distance shipped, etc.

Education and outreach

There has not been any outreach focus specific to this project. However, the information has been extended in

many meeting-type settings where the project received attention as part of the meeting. These events included general marketing meetings, niche production meetings, pork production meetings, and professional agricultural economics meetings.

Leveraged funds

In addition to the funds from the Leopold Center, funds also were provided by Practical Farmers of Iowa and the Center for Agriculture and Rural Development (CARD). Additionally, funds were received from the ISU Economics Department.

**For more information, contact James Kliebenstein, Economics,
174 Heady Hall, Iowa State University, Ames, Iowa 50011; (515)
294-7111, e-mail jklieben@iastate.edu**