Alternative swine cost of production project

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Alternative swine cost of production project

Abstract
Pork producers interested in niche market production need information on the costs of alternative operations. Records from current niche producers were collected and analyzed.

Keywords
Business management, distribution and marketing, Hoops and alternative livestock systems, Niche meat, dairy and poultry

Disciplines
Agribusiness | Agricultural and Resource Economics | Agricultural Economics | Animal Sciences
Abstract: Pork producers interested in niche market production need information on the costs of alternative operations. Records from current niche producers were collected and analyzed.

Question & Answer
Q: Can niche marketing be competitive and can the producer’s cost position be improved?

A: Yes, niche production can be competitive. The cost structure of many niche operations can be improved through continued sharing of information and by implementing ideas and technologies coming from low-cost producers.

Background
The Pork Niche Market Working Group (PNMWG)* determined that information regarding the cost of production in alternative swine systems would be valuable because:
1) New and existing producers would better understand what it takes to produce pork sustainably,
2) Existing producers would have a benchmark with which to measure their progress, and
3) Cost of production information is needed for producers to receive operating loans.

The PNMWG and the Leopold Center elected to fund this project that would gather and analyze production data from niche pork producers to help assess the risks and potential profits when considering niche pork ventures. Two other purposes for the study were to:
• Generate cost and efficiency numbers for business plans for niche pork producers and
• Help producers improve management and efficiencies in their operations.

Approach and methods
A letter requesting participation in the program was sent to more than 250 niche swine producers through Niman Ranch, Organic Valley, and Eden Farms. Included with the letter were a survey on production and herd and health practices and technologies in use on their farm, and a form for entering simple financial and production data for inclusion in the ISU Extension Swine Business Records program.

Key variables were management techniques and technologies effective in reducing production costs and/or increasing herd health. Fourteen operations submitted information from the 2002 production year. Twelve included survey information on practices and technologies; eight included cost of production data that were complete enough to be part of the cost summary. These data were analyzed by the principal investigator.

Results and discussion
Because of the limited number of producers involved, the data gathered should be considered preliminary and caution should be used in applying the results.

Principal Investigator:
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Iowa State University Extension
Swine Field Specialist
Cherokee

Budget:
$7,500 for year one
General information: The genetic makeup of the hogs in the data set was predominantly Duroc, with 77 percent having some crossbred Duroc lines. Thirty-eight percent had some crossbred Chester. The nutrition programs generally used grain, soybean meal, and premix to formulate their rations.

Management systems cited included 70 percent that used all-in/all-out for farrowing while half used all-in/all-out for their nurseries and finishers. Sixty-two percent of the operations used some sort of pasture farrowing. Typical health problems listed were Ileitis, Salmonella, E.-coli, SIV, general scours, and Erysipelas. Various non-antibiotic products and technologies were used to treat illnesses. None of the operations used antibiotics except to treat seriously ill animals.

Cost of production:
Feed costs: An average feed cost for the six farrow-to-finish non-organic operations was $21/cwt with a range from $15/cwt to $27/cwt. Herds feeding organic feedstuffs averaged close to $39/cwt because of higher costs for organic feed.

Non-feed costs: These include operating expenses such as utilities/fuel, veterinary bills, bedding, repairs, variable and fixed capital costs, fixed expenses of depreciation, taxes, insurance, and labor expenses. Non-feed costs averaged $17/cwt for eight operations that provided reasonably accurate data. The range of non-feed costs was considerable, from $9 to $24/cwt. for the eight operations tracking non-feed costs. Data from individual producers revealed great variations in some non-fee cost components.

Labor costs: Producers were asked to estimate the number of hours they worked with their herds. Using these estimates and a wage rate of $8/hr, labor costs were calculated at nearly $7.50/cwt. Another way to view labor is to calculate the number of hours required to produce 100 pounds of pork. The average of estimates for the farmers in this study was close to one hour per cwt produced. The niche market operations were more labor intensive than conventional operations (estimated at around one-half hour per cwt of pork produced in the late 1990s).

Productivity measurements: Producers in the study reported an average of 6.7 pigs weaned per litter, and 10 pigs weaned per breeding female per year. Death loss for the pigs averaged 19 percent, which needs to be addressed in the operations at the high end of the averages.

Breakevens and labor costs: The average breakeven point for producers included in this study (with labor valued at $8/hr) was $38/cwt. The breakeven point for low-cost herds was $30.50/cwt and $43/cwt for high-cost herds. However, $8/hr is not likely to attract new farmers to use alternative systems; a higher return to labor is necessary.

Feed costs: These were relatively low in 2002 with Iowa corn selling for just under $2/bushel and soybean meal for less than $150/ton. Given these modest feed costs, it is important to realize how increases in feed prices can alter the costs of production. As feed costs increase by $10/ton, the cost per cwt increased by $1.50, meaning that feed efficiency is critically important.

Other productivity factors: Productivity on a per sow basis is less important with alternative systems for two reasons. First, sow herd costs are a relatively small percentage of total costs, with finishing costs comprising nearly three-fourths of the total costs. Second, most operations using alternative systems have low overhead, which means they have more room with more sows with relatively low added expenses. On the other hand, productivity on a whole operation basis (sow herd plus the grower and finisher phases) is more important with alternative systems because unused capacity is very costly. An operation that produces 1,000 head generates $15,000 more profit than the same operation producing only 750 (mainly because fixed costs for the operation remain constant).

Conclusions
These are some ideas and concepts advanced by the project:

- Producers are hesitant to share production and financial information through the mail with someone unknown to them.
- Some niche market producers need to upgrade their record-keeping systems so they are usable for management assessments as well as taxes.
- Records that were received show that niche production can be competitive with commodity production especially given the premiums niche pork producers receive.
• Areas for concern in the competitiveness of niche marketing enterprises include productivity, mortality, morbidity, labor efficiency, bedding cost, transportation, and not enough income to make a living.
• Areas of advantage for niche market producers include facility cost, capital investment, feed cost, medicine expense, and sometimes operating cost.
• Overall the cost of production for niche markets is not much different than that of commodity pork with an extreme range in cost of production for both methods.
• Ideas and technologies (supported by solid data) from the low-cost operations need to be shared more within the niche pork groups.
• Many producers were surprised to see what is and isn’t important after sharing their data.
• Improved production can be purchased, but sometimes at a huge price in terms of cost of production.
• Many antibiotic substitute products are on the market including probiotics, acidifiers, and others. Some work inconsistently, while others are partly effective. Sustainable pork systems should rely more on management strategies to increase herd health (such as all-in/all-out), cleanliness and hygiene, and less on the purchase of unproven health products.
• Some operations (which ultimately achieve higher performance at a lower cost) are managed in such a way that “miracle” products and inputs are rarely needed, or only needed for a short time.

Impact of results
Producers who participated in the project and discussed the results are now aware of management tactics that may increase their chances of success in niche market production. One possibility is the technique of “all in and all out,” which means that pigs are produced in groups and one group is completely finished before another group comes in. This option looks promising for niche marketing operations that need to keep pigs healthy without the use of antibiotics. Continuous flow operations are more likely to experience multiple disease problems that are incompatible with a sustainable operation.

Some smaller herd owners are looking at seasonal production, farrowing just once or twice a year to break up disease cycles and improve herd health. Other producers are considering how to formulate lower cost rations that are more suited to sustainable production.

Education and outreach
Results from the project were shared with the Pork Niche Market Working Group, Niman Ranch growers, and participants at the Practical Farmers of Iowa annual meeting. A workshop at which the material was presented took place at the Practical Farmers of Iowa cooperator meeting. Some information was shared at two December 2003 regional meetings on niche production.

For more information, contact
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