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Summary and Conclusion

Information is provided on pig production efficiency for niche pork production. Information from 18 niche pork producers is included in the analysis.

The average female breeding herd size was 61 females. The average feed efficiency was 4.63 pounds of feed per pound of production, although the average for the top 6 herds was 4.20 and the average for the bottom 6 herds was 5.25. Average labor use was 1.02 hours per hundred pounds of pork produced. About one of every five pigs born alive died before weaning. Another 10 percent died from weaning to market. Breeding herd death loss was in the 2.5 to 7 percent range.

The information summarized here shows striking differences in many areas between the top 6 and bottom 6 producers. The areas with the largest differences are places with the most potential to help producers improve. Educational programming that targets these areas is being developed to help these producers make changes to improve their operations, which in turn will improve the position of this sector of the industry.

Introduction

In recent years the production of niche pork has been expanding in response to growing demand for products with specific attributes, such as pork from animals produced without antibiotics, using bedded pens and with outdoor access. This growth has occurred, in many situations, from the ground up. Entrepreneurial producers have identified unmet market demands and opportunities for new products. These producers then set out to develop products to satisfy this demand and marketing systems to get these niche products to the consumer.

However, information on the production performance of niche pork production systems is limited. As demand expands for niche pork, accurate information on production needs to be available for producers to evaluate opportunities in niche pork production. Additionally, niche pork producers do not

have sufficient information to benchmark their own operations and evaluate how they are performing and where they can look for improvements. For those thinking about entering niche pork production, information needed to develop expected production levels is limited.

Given the lack of information, a project was undertaken to obtain production, information for niche pork production. This information is needed to assist niche pork producers in determining their production potential and assist them in improving their production efficiencies. In turn, this will improve niche pork production and lead to increased returns and improved survivability of niche pork producers.

Materials and Methods

To obtain niche pork production efficiency information, a focus was placed on working with niche pork producers in establishing production and financial record systems for their pork production operations. Project staff included several Iowa Farm Business Association consultants, and area extension swine specialists in Iowa and Nebraska. These staff worked with participants to establish and maintain the record system in 2006, 2007, and 2008. They also worked with producers in providing year end summaries and analysis. The specialists' direct contact provided uniformity to data recording and analysis. A report was prepared for the 2006 results, and 2007 results.

This report provides a summary of the production performance for participating niche pork producers for the year 2008. There were 18 niche pork farrow-to-finish producers who completed records for 2008. These 18 operations were typically 'natural' producers, meaning their pigs were raised without antibiotics using bedded pens with outdoor access.

Results and Discussion

Production Efficiency – Feed and Labor

Production efficiency for feed and labor is provided in Table 1. The average number of breeding females was 61 for all 18 farms, while the average for the top 6 herds was 66 and the average for the bottom 6 was 59.

Table 1 shows that total feed used per hundred pounds of pork produced averaged 463 pounds for all producers, but 420 pounds for the top 6 herds and 525 pounds for the bottom 5 herds. Thus, the top herds averaged 105 fewer pounds of feed per hundred pounds of pork produced compared to the bottom herds. These data suggest that there is ample room for improvement in managing feed fed and feeding technologies.

Iowa State University Animal Industry Report 2010

Labor use was higher for the bottom group than the top group. Total labor use per breeding female per year for the top group was 23 hours as compared to 28 hours for the bottom group. Given the increased production efficiency of the top group, the difference in average labor use per hundred pounds of pork produced is even greater between these groups: .78 hours per hundred pounds for the top farms and 1.69 hours per hundred pounds for the bottom farms. This represents more than double the amount of labor.

Pig Production Efficiency

Additional production efficiency information is provided in Table 2. Birth to weaning death loss averaged 18 percent of pigs born alive for all producers, and 20 percent for the top group and 20 percent for the bottom group. Thus, about one of every five pigs that were born alive did not make it to weaning. Note: a 2004 survey conducted as part of another project found that 61% of niche pork farmers said crushing was the top reason for death loss of pigs before weaning. Other top reasons were poor milking sows and scours in young pigs. It appears that addressing these causes of pig death losses in the farrowing phase is one key for improving the performance of these systems.

Pig death loss from weaning to market was quite high as well for all groups. It was 10 percent for the average herd; 8 percent for the top group and 8 percent

for the bottom group. Pig death loss is a big problem for niche pork producers. Breeding herd death loss was in the 2.5 to 7 percent range: 4.3 percent for all herds, and 2.4 percent for the top herds and 7.0 percent for the bottom herds. The top herds on average weaned about .5 more pigs per litter (6.77) than the bottom herds (6.24). On average the number of litters weaned per breeding female per year was 1.50, with this number being 1.80 for the top operations and 1.16 for the bottom operations. Also, the top herds averaged 11.9 pigs per sow per year while the bottom herds averaged 6.4 pigs per sow per year, which is a difference of 5.5 pigs, or about 50 percent less. This difference is dramatic. In general, pigs per sow per year is low across all groups. One explanation for the low pigs per sow per year numbers is that preweaning mortality is large in pen farrowing systems; pen breeding results in more open sow days; born alive can be lower because of gestation sow condition. Additionally, environment and later weaning age, typically more than the six week minimum in most systems, limit litters per sow in a year.

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**Table 1. Feed and Labor Production Information of Niche Pork Production – 2008
Sorted by Return to Capital, Unpaid Labor and Management.**

Item	Group		
	Average	Top Farms	Bottom Farms
Number of Producers	18	6	6
Hundred Pounds of Pork Produced	1553	1790	1234
Average Female Inventory	61	66	59
Number of Market Hogs Sold	517	621	367
Average Market Hog Weight, Lb.	269	263	275
Pounds of Feed Per Cwt. Produced	463	420	525
Hours of Labor Used Per Cwt. Produced	1.02	.78	1.69
Hours of Labor Used Per Breeding Female Per Year	23	23	28

Iowa State University Animal Industry Report 2010

**Table 2. Pig Production Efficiency of Niche Pork Production - 2008
Sorted by Return to Capital, Unpaid Labor and Management.**

Item	Group		
	Average	Top Farms	Bottom Farms
Number of Producers	18	6	6
Pig Death Loss, Birth to Weaning (% of Farrowed Live)	18	20	20
Pig Death Loss, Weaning to Market (% weaned)	10	8	8
Breeding Herd Death Loss (% of Breeding Herd Maintained)	4.3	2.4	7.0
Number of Pigs Weaned Per Litter	6.70	6.77	6.24
Number of Litters Weaned Per Female Per Year	1.50	1.80	1.16
Pigs per Sow Per Year	9.3	11.9	6.4
Litters Weaned Per Farrow Pen Per Year	4.1	4.9	3.5
Pigs Weaned Per Farrow Pen Per Year	28	36	21