A Profile of Pork Production in Iowa

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Summary and Implications

With the assistance of the Iowa Pork Producers Association and the Iowa Pork Industry Center, Iowa pork producers were surveyed to obtain information on the state of the industry. The survey also obtained information on producer interest in a producer owned marketing cooperative. This report focuses on the profile of the production industry.

Average age of the respondents was 45 years; they had been in pork production for 24 years. Most (82%) were independent pork producers, marketed pigs weekly, and obtained no more than one price bid for hogs. Approximately 60% of the respondents marketed between 1,000 to 3,000 market hogs annually; 88% knew the lean percentage of their hogs and only 11% had muscle quality information.

There is concern among producers about their future in the pork production industry. Approximately 4 in 10 felt their future was threatened. About an equal number felt optimistic that they could remain competitive and adapt to industry changes. Approximately half the producers felt shared marketing arrangements would increase their profit potential. One-third to one-fourth felt the following would improve their profit potential: networking to lower production costs, new product development, niche market creation, or foreign market expansion.

A majority of the producers (90%) was Pork Quality Assurance (PQA) certified. About one-third are manure application certified and/or Environmental Assurance Program (EAP) certified. A much smaller percentage (4%) is food safety certified, but they are very willing to make adjustments to become food safety certified.

The pork production industry has done an exemplary job on producer education programs such as PQA and EAP. Now it is time to inform the consumer about what has been accomplished. Consumers need to be informed as well, because there are some potential value-added opportunities with these certification programs. The industry needs to promote what it has accomplished and is accomplishing. This is valuable information in the domestic as well as foreign markets.

Introduction

During the winter of 1999 the Iowa Pork Producers Association (IPPA), Iowa State University Extension, and the Iowa Pork Industry Center sponsored a survey of Iowa pork producers. The purpose of the survey was twofold: to gain information from those who have an interest in a producer owned marketing cooperative and to provide a profile of the pork industry within the state of Iowa. Of the 4,350 surveys sent, 924 were returned, for a response rate of 21%. Of those responding, 748 (81%) indicated they still own and/or manage a hog operation that is currently producing hogs. Nineteen percent (176) indicated they are no longer raising hogs.

Results and Discussion

Age and Marketing

On average, producers were 45 years of age, and had been raising hogs for 24 years (Table 1). Almost 7 in 10 (66%) intend to continue raising hogs for 11 or more years. Additionally, pork production represents a major share of the farm revenue. Forty-eight percent reported 51% or more of their gross revenue is from hog production. Another 3 in 10 indicated that pork represented from one-fourth to onehalf of their gross revenue. The average number of hogs marketed for those with farrow-to-finish for 1999 was 3,626 and average anticipated marketings for 2,000 was 4,300. Those selling weaner pigs sold an average of 5,342 weaner pigs in 1999. Other producer characteristics are found in Table 1.

Approximately three-fourths (82%) of the respondents indicated their current operations were independent, involving no contract production. They owned the facilities and hogs. Twenty-three percent indicated they were in a family partnership and 9% indicated they own hogs produced in another's facilities. Other types of management included partnership with a nonfamily member (5%) and contract production (7%) where they owned facilities but not hogs. Pigs were weaned, on average, at 21 days.

Respondents were asked where they currently market their hogs. Forty-seven percent market with IBP, 31% with Swift, 27% with Farmland, 10% with Hormel, 10% with John Morrell, and 6% with Sioux Preme. This sum is greater than 100 because some producers market to more than one buyer. Thirty-three percent sell 26–50 hogs at a time, followed by 30% selling 51–100 at a time (Table 2). This represents truckload size groups or possibly hogs from several farms filling a load. Another 29% marketed more than 100 hogs at a time.

A majority (60%) of producers send hogs to market weekly (Table 2), whereas 34 percent marketed at least monthly. Only 2% marketed daily. The large number of producers marketing weekly can aid in the assembling and weekly marketing expectations of packers, as well as

assuring that hogs will reach market at the optimum weight because of these frequent marketings. It also helps in allowing for effective grouping or co-mingling of hogs to market in larger groups. Interestingly, 6% of the respondents indicated they were grouping hogs with other producers for marketing. Six in 10 producers indicated they had equipment for transporting their own hogs and hauled them an average distance of 24 miles. Of the respondents, 46% indicated they hire a hauler to transport their hogs to market. These hogs were transported an average of 77 miles.

Table 1.	Producer	characteristics.
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Table 1. Producer characteristics.	
	Mean
Age (n=731)	45
Years raising hogs (n=730)	24
Average number of hogs marketed in 1999	
Hogs slaughter farrowed (n=469)	3,626
Feeder pigs purchased (n=158)	3,159
Weaned pigs purchased (n=124)	3,740
Feeder pigs marketed that you farrowed (n=74)	1,533
Weaned pigs that were marketed that you farrowed (n=60)	5,342
Seed stock for breeding (n=54)	702
	Percentage
Years plan for operation to continue raising hogs (n=703)	
At least 2–3 years	12
4–5 more years	6
6–10 more years	16
11 or more years	66
Portion of gross revenue from hog production (n=727)	
None	1
1–25%	21
26–50%	31
51–75%	30
More than 75%	18
Pig weaning age – days	21

Table 2. Hog marketing and frequency.

Hogs Sold per Marketing	% of Respondents	How Often Market Hogs	% of Respondents
1–25	12	Daily	2
26–50	33	Weekly	60
51–100	26	Monthly	34
More than 100	29	Annually	3

The majority of the producers obtained no (30%) or only one price bid (37%) when selling their hogs. Twentyeight percent obtained two price bids, whereas only 4% obtained three or more bids. These findings indicate that producers rely heavily on the cash market or are under a price contract. Group marketing effort may assist in increasing the marketing alternatives used by the producers. Of the respondents 34% indicated they price some hogs on the day of sale. For these producers 68% of the hogs were priced at the day of delivery. The largest percentage of producers indicated they price some hogs from 1 to 5 days from delivery. Sixteen percent indicated they price some hogs more than 30 days prior to delivery. For these producers almost half (47%) of their hogs were priced more than 30 days prior to delivery.

Producers also were asked the percentage of hogs they have committed under written and/or verbal agreements, and the duration of these agreements for those using written agreements. Approximately 40% of the hogs are committed under this type of agreement. Six percent were committed under a 6-month written agreement, 5% under a 12-month agreement, 3% under an 18-month written agreement, and 18% under a longer agreement; an average of 6 years. For those indicating verbal agreements were used, a higher percentage of hogs were committed: 13% committed under a 6-month verbal agreement, 10% under a 12-month, 2% under an 18-month, and 4% under longer agreements.

Table 3 provides information on the distribution of projected number of hogs marketed in 2000. Approximately

60% of the respondents have between 1,000 and 3,000 hogs available annually. About 7% had more than 11,000 hogs they marketed annually. The average number of hogs available per producer is provided by region in Figure 1. The top five regions for hogs marketed are shaded. The concentration in northwestern Iowa is evident.

Size	Number of Producers	Average Number of Hogs Anticipate Marketing		
1,000 or under	71	616		
1,001–2,000	95	1,607		
2,001–3,000	76	2,726		
3,001–4,000	41	3,655		
4,001–5,000	32	4,741		
5,001–6,000	23	5,739		
6,001–7,000	14	6,829		
7,001–8,000	13	7,754		
8,001–9,000	3	9,000		
9,001–10,000	14	9,893		
10,001–11,000	3	10,667		
11,001 plus	29	31,869		
Total	414	1,567,567		

Facilities – Quality Measurements

Producers also were asked about the types of facilities they use. The average percentage of each facility used for the following production practices is included in Table 4. Hoop structures are used minimally by the respondents, primarily for finishing. Confinement with mechanical ventilation was the major type of facility used for breedinggestation, farrowing, and nursery. Confinement with natural ventilation was the facility most often used for finishing. Open-lots with concrete outside lots or confinement with mechanical ventilation was used by approximately onefourth of the respondents.

Table 4. Average percentage	of facility typ	es used (n=639).
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		Open-lot with	Open-lot with	Confinement	Confinement	
	Ноор	Shelters or	Concrete	Natural	Mechanical	Not
	Structure	Pasture	Outside Lots	Ventilation	Ventilation	Applicable
Breeding-gestation	1	10	30	11	17	3
Farrowing	0	2	2	6	61	3
Nursery	<1	1	2	5	73	1
Finishing	7	1	27	35	27	<1

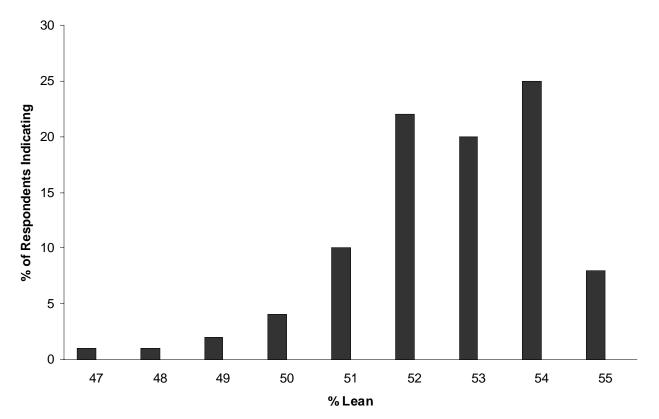
Eighty-eight percent of the respondents indicated they knew their hogs' average percentage lean. The percentage lean ranged from 47 to 55%, with an average of 53%. Percentage distribution of respondents in each range is indicated in Figure 2. Percentage lean did not differ between producers marketing to the different packers. Average percentage lean reported also did not differ significantly between grow-finish structures used. The average percentage lean reported for those finishing hogs in hoop structures, open lots with concrete finishing, confinement natural ventilation, and confinement mechanical ventilation was 53%. Likewise, for those finishing in open-lot structures with shelters or pasture the average percentage lean is essentially the same (52%).

Eleven percent of the respondents indicated that they have had muscle quality tests done on their hogs. This included ultimate pH, minolta color score, and water holding capacity. The industry is moving in this direction. More producers need to position themselves for these changes, as 89% indicated they have not had muscle quality tests conducted. Packers the were primary source of muscle quality tests because 56% indicated packers did the tests; the Iowa Pork Industry Center was next in line with 18%.

Figure 1. Average market hogs available per farm by region - 2000.

5,999	10,136	2,855	6,802	3,266	
(n=45)	(n=36)	(n=19)	(n=18)	(n=43)	
2,294	7,473	4,031	3,991	3,638	4,472
(n=18)	(n=20)	(n=29)	(n=29)	(n=36)	(n=39)
2,033 (n=9)	3,000	3,067 (n=6)	4,325 (n=14)	7,456 (n=48)	

Figure 2. Percentage lean range.



Management/Economics

Future in Pork Production

Participant attitudes towards current pork production enterprises were examined (Table 5). Producers were asked, "Thinking about the next 10 years, how do you feel about your current pork production enterprise?" The respondents were mixed in their answers, with 44% feeling their future in the pork production industry is severely threatened. Forty-one percent felt they can be competitive with the changes occurring in the pork industry, with 39% feeling optimistic that they can successfully adapt to the changes in the industry. Among the respondents, 17% were interested in expanding their operation, while 17% were considering the option of exiting the industry.

The attitude toward being an independent producer is lessening over time. For this survey, 40% of the respondents indicated it was important to be an independent producer free of contractual arrangements. One fourth of the respondents indicated they were already in a contractual arrangement. Another 49% were willing to explore a contractual arrangement.

Table 5. Attitudes towards pork enterprise (n=466).

Item	% of Respondents
I feel my future is severely threatened.	44
Am optimistic that I can be competitive.	41
I am optimistic that I can successfully adapt.	39
I am interested in expanding my swine operations.	17
I am seriously considering exiting pork production.	17

Table 6. Strategies for increasing pork producer profit potential.

Item	% of Respondents
Earn more profits through shared marketing arrangements.	47
Increase profits through lowering input costs through networking arrangement.	30
Invest in new products and brands targeted towards institutional and/or retail markets.	28
Invest in expansion of products and brands targeted towards foreign markets.	24
Purchase of packer or processor.	22
Create local niche markets, or specialty markets for restaurant and institutional markets.	25
None of these. For the small independent producer, I sense profitability in pork	20
production as a thing of the past.	

Producers provided a range of responses when asked about strategies they felt would be useful in increasing their profitability. Approximately one-half (47%) of the respondents felt shared marketing arrangements would increase their profit potential (Table 6). Approximately onethird (30%) felt lower production costs through networking would be useful. Another one-fourth felt development of and targeting of new products (28%), creation of niche markets (25%), or development of foreign markets (24%) would be useful in increasing their profitability. Approximately 1 in 5 felt purchasing a packer or processor would expand their profit potential. Twenty percent of the respondents indicated they are presently involved in a longterm marketing contract. For those in a marketing contract arrangement, 87% of the hogs produced were covered by the contract. Approximately one-third (31%) had a cost plus pricing arrangement, whereas 29% had a ledger pricing arrangement (Table 7). About one in five had a window contract (21%). Respondents felt the contract reduced their market price risk (91%), it improved their access to capital

(75%), and increased their average selling price (84%). Thirty-one percent felt they had not been treated fairly by the packer since signing the contract.

Management attributes of producers are provided in Table 8. Ninety percent of the respondents are PQA certified. Approximately one-half (53%) provide bedding. Approximately one-third have their manure application certification, are Environmental Assurance Program (EAP) certified, have a manure management plan on file with the Department of Natural Resources (DNR), and do not use meat and bone meal in feed. Ten percent indicated they do not use antibiotics. Only 1% were organically certified. The industry has a large number of producers that are certified for a number of programs such as quality assurance and environmental assurance. Those not certified indicated an interest in becoming certified. This interest also held true for areas where very few were certified, such as food safety and Salmonella certified. In summary, producers are, or are willing to become, certified.

Management/Economics

The pork production industry has done an exemplary job on educating the producer. The job in educating the consumer about these programs remains to be done. There are some value-added opportunities here. The industry needs to inform the consumer about what has been done in an attempt to capture the value of what has been created. The industry needs to promote what it has accomplished and is accomplishing. This is valuable information in the domestic as well as foreign markets.

Acknowledgements

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Table 7. Type of long-term marketing price arrangement.

Pricing method	% of Respondents
Cost plus pricing	31
Ledger	29
Window contract	21
Flat price	8
Other	22

Table 8. Management attributes of producers (n=457).

	Would like to			
	Currently	Participate/Willing to	Not	
Management Attributes	Have or Do	Make Adjustments	Interested	
	(%)	(%)	(%)	
PQA certified	90	9	1	
Bedding provided	53	9	34	
Bird-proof buildings	36	42	17	
Manure application certification	35	47	12	
EAP certified	32	54	7	
Manure management plan on file with DNR	30	45	19	
No meat and bone meal in feed	30	51	14	
Nonconfinement raised	28	18	47	
Outdoor/pasture raised	14	10	67	
No antibiotics used*	10	65	19	
Food safety certification	4	80	9	
Salmonella certification	3	80	9	
Organically certified	1	47	43	
Trichinae and Toxoplasma certification	1	73	15	

*Antibiotic use may be allowed at certain dose levels and/or at certain ages.