How Shifting Consumer Trends are Affecting Swine Production in North Carolina

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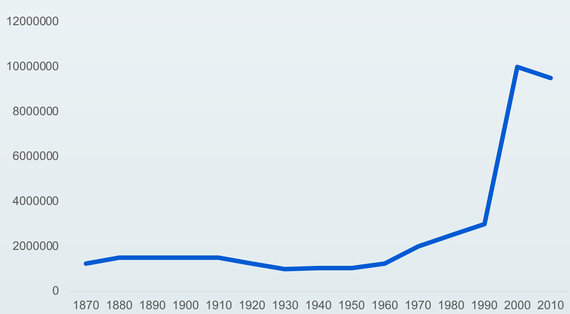
Abstract

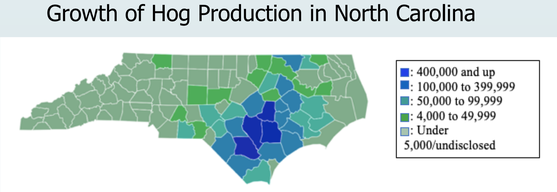
This thesis provides a look at consumer perceptions of swine production in North Carolina and hog producers' responses to recent concerns raised about swine production. The findings of this research, through 93 survey responses and nine interviews, suggest that there are several commonalities and differences that consumers and people in the hog industry have. There is a large divide between people in the industry and consumers, but this divide is likely going to reduce in the near future with new technologies and a push by the swine industry to reach consumers with new knowledge and awareness of sustainable technologies and methods.

Introduction

I grew up in Sampson County, North Carolina. Because it is one of the top three pork-producing counties in the State, it is often referred to by many as the "hog capital of North Carolina." My mother is a contract swine producer for Smithfield Foods, and, growing up, I was constantly surrounded by large-scale commercial swine production. I used to work on her farm when I was younger and got exposed to the inner-workings of swine production.



Growth of Hog Production in North Carolina



Inventory of Hogs by County in North Carolina

Methodology

My methodology utilized a mixed-methods approach to gain a deeper understanding into the future of sustainable large-scale commercial farming. I first examined qualitative responses about sustainability, financial practicality, and potential solutions about how the hog industry in North Carolina is developing. These results were acquired through interviews. The second part of my research focused on quantitative data using the survey that allowed hog producers, people associated with the swine industry, and consumers respondents to allocate percentages (out of 100%) to things that they value and trust, further determining where gaps and priorities lay.

There are large gaps in knowledge between consumers and those involved with the hog industry, leading to misinformation and uniformed buying practices of pork products. Large pork processors and companies are investing substantial resources and creating new technologies to become more sustainable. They have done research on how to make farms more efficient and sustainable, and are investing heavily into making changes to appease consumers. For example, pork processors and agricultural educational settings are looking into how to improve feed efficiency. However, consumers are largely unaware of these changes being made and are largely unable to access reliable, quick information about swine production.

With these new sustainable technologies and efficient ways of swine production, why aren't consumers hearing about them? What are these companies struggling to promote a more sustainable way of hog production to consumers? Why aren't swine production practices shared with the public to combat negative perceptions of swine production?

The following is the breakdown of my interview and survey responses:
9 interviews: 3 hog producers, 3 everyday consumers, and 3 people associated with the hog industry (non producers)
93 survey responses: 28 hog producers, 54 consumers, 5 listed under other, and 8 people associated with the industry (non producers)

Results

The overall results of my survey and interviews, which aimed to identify gaps between consumers and those associated with the swine industry, both surprised me and supported my initial findings that there were significant gaps between consumer knowledge and the sustainability efforts occurring in swine production. In the simplest form, consumers are highly uneducated about what happens on hog farms, but they are also largely kept from information about what they are buying and how it is processed. Consumers absorb a lot of their knowledge through media (Televised newscasts, Print, Online media news outlets, and social media), with minimal pushback from pork producers reaching consumers. In the surveys and interviews conducted, I aimed to find common ground between consumers and those associated with the industry, as well as trying to find gaps between the two and how to resolve those.

The first part is the commonalities found in the interviews conducted. The second part is the identification of significant gaps between consumers and those associated with the industry. The third part is the technologies and changes that those associated in the industry believe will satisfy consumers and bring the best results. The three sections work to answer the central question: what is the best way to meet consumers' interest in sustainability and communicate that progress to them, and what effect does it have on the swine industry?

Surprisingly, there were several beliefs that hog producers, those associated with the swine industry, and consumers all shared. These include: lack of knowledge from consumers, an increased desire for sustainability from all parties, and a lack of trust in the media's portrayal of hog production. The commonalities show where both consumers and those associated with the industry share similar beliefs to understand the most effective ways to reach consumers.

Commonalities: Lack of knowledge in interviews and surveys, distrust of media on swine production
Differences: Level of environmental effects, current sustainable technologies and initiatives available
Available, reliable technologies and new innovations: Feed efficiency, Methane capture biodigester technology, and Duke Energy & Biogas

Conclusion

Personal connections to the hog industry, an interest in sustainability, a gap in literature, and the immediate relevance of sustainability in agriculture led me to pursue the research questions: what is the best way to meet consumers' interest in sustainability and communicate that progress to them, and what effect does it have on the swine industry?

To understand the extent in which consumers were aware of sustainability efforts by pork processors and vice versa, I interviewed nine people total: three consumers, three people who were associated with the hog industry, and three hog producers and had 93 survey responses: 28 hog producers, 54 consumers, five listed under other, and eight people associated with the industry (non-producers). Through these interviews and surveys, I learned the knowledge gaps and congruences between people that have a connection to the hog industry and everyday consumers.

After conducting the interviews and survey, I looked for the commonalities and differences in answers between consumers and people in the industry. The commonalities were: 1) acknowledgement of a lack of information, 2) knowledge about hog farming, and 3) a general distrust for what the media is saying about hog farming. The differences were: 1) level of how hog farms affect the environment and 2) the technologies and initiatives in swine production. Through my analysis, I was able to use this information to create recommendations for the hog industry by being more transparent to consumers, educating consumers, and using geo targeting technology to position themselves well to consumers.

Acknowledgements

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