Extension Response To Evolving Livestock Markets[1]

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Background

I joined the K-State agricultural economics department as an assistant professor and extension economist in 1986, shortly after the dairy buyout debacle. Although I have worked extensively with both hog and cattle producers, given Kansas' prominence in the cattle and beef sector, I have devoted more time and effort to issues facing the beef sector than any other component of the livestock industry. As a result, I'll focus my comments on the beef sector.

During the first half of 1986, cattle prices declined precipitously, due in part to concerns about rising slaughter levels attributable to the dairy buyout. The large impact the dairy buyout program had on cattle prices created some skepticism on the part of producers regarding price determination and price discovery in cattle markets. In fact, it was at this time that I first became aware of how few people actually understood the difference between price discovery and price determination. Unfortunately, many industry participants are still confused about this issue, witness recent discussions regarding the pros and cons of mandatory price reporting.

Although agricultural economics researchers spent considerable effort (and journal space) during the 1980s and 1990s debating whether a "structural change" in meat demand occurred, it was clear that the beef and cattle demand surfaces faced by producers were shifting down each year. The debate about structural change revolved around whether changes in relative prices and income (i.e., variables included in traditional demand models) explained the downward demand shifts or whether other factors, such as health concerns and changing consumer demographics, were affecting beef demand. But researchers debating the details sometimes forgot the important issue from the producers perspective, namely that aggregate beef demand was declining, instead of increasing as it had for much of the previous century.

As a result of these two forces of change, many of K-State's livestock marketing extension programs in the late 1980s and early 1990s focused on price determination, making producers aware of the factors causing supply and demand to shift and thereby leading to changes in beef and cattle price levels. At the same time, programs were also offered that encouraged producers to focus attention on the issue of declining beef demand. This was an important issue since at the firm level, when faced with a market environment where demand is declining over time, it is imperative that producers focus their attention on their own cost structure. From a macro perspective it was logical that,

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once producers understood that beef's demand decline was ongoing, they would seek more information regarding the cause of the demand decline and encourage the development of programs designed to stem the decline.

During the late 1980s, cattle feeders and packers began to change the way slaughter cattle were marketed. In particular, packers (especially Excel) began to contract cattle for purchase well in advance of slaughter. Most of the cattle were acquired via basis contracts that specified the delivery basis for the cattle when the contract was signed, but allowed the cattle feeder to "lock in" the futures price component of the cash price (cash price = basis + futures price) at a later date, typically any time prior to the delivery month. The advent of the forward contract market in the late 1980's led to concerns about the impact of these "captive supplies" on cash market prices. Cattle acquired by packers via forward basis contracts were referred to as captive supplies because, even though the final price for the cattle had not been determined, the acquiring packer was assured of receiving the cattle and did not have to bid for them in the cash market just prior to slaughter.

Pros and cons of marketing cattle via forward contracts were hotly debated in the industry and among agricultural economists. As a result, K-State launched a research project in 1990 that entailed gathering cattle marketing data from cooperating feedyards over a six-month period to ascertain what impact, if any, captive supplies had on cash market prices. Results indicated increases in captive supplies had a very small negative impact on cash market prices. Although the results suggested usage of captive supplies by packers had a negative impact on cash prices, they were a very small fraction of the estimates postulated by some vocal opponents of forward contracting. These results were broadly disseminated via publications and presentations and provided a more factual basis for discussing the impact of captive supplies on cattle markets. And subsequent research generally confirmed that captive supply variation had a small impact on cattle price level.

During the early 1990s, statements made by cattle producers made it increasingly clear that many cattle producers had a poor intuitive understanding of the factors that influenced cattle prices. But most cattle producers have neither the time nor the inclination to sit through what amounts to an abbreviated price analysis class designed to improve their understanding of the myriad forces that cause beef supply and demand to shift over time. Faculty in the department of agricultural economics at Oklahoma State University developed the *OSU Fed Cattle Market Simulator* which allowed students or producers to simulate a complete fed cattle/boxed beef market in the space of a few hours. Moreover, while participating in the simulation was educational, it was also fun, which made it more marketable to extension audiences. As a result, K-State adopted the *OSU Fed Cattle Market Simulator* for use in both classroom and extension programs in the mid-1990s. Over a period of several years workshops were conducted throughout the state with the goal of improving cattle producers understanding of both price discovery and price determination. Most participants left the workshop with an improved understanding of the distinction between price discovery and price determination as well as a better understanding of the factors that lead to supply and demand shifts and, hence, price changes.

By the late 1990s requests for information made it apparent that cattle producers and agribusiness personnel needed better access to livestock marketing information. Traditional means of disseminating information via printed newsletters, press releases (often appearing in farm publications several weeks after their release) and public presentations were still useful, but there was a growing demand for more rapid forms of disseminating information. As a result, the *K-State Livestock & Meat Marketing Web Sit*e was developed in 1998 to make livestock marketing newsletters, fact sheets, extension bulletins, data, and pricing information easily accessible to producers and agribusiness personnel.

Developing the web site had a big impact on livestock marketing extension at Kansas State. First, it broadened the reach of K-State's livestock marketing extension program by making information easily accessible throughout the U.S. (indeed throughout the world, as international newsletter subscriptions continue to grow). Second, it made information and data more easily accessible to interested producers. I find many of my phone calls (and e-mails) originate with the caller (correspondent) saying (writing) "I've been using your web site for the following and was wondering if ....". And, correspondingly, when answering phone calls one of my first questions to the caller is "Do you have Internet access?" Increasingly the answer is yes and I simply provide the caller with the web site address which enables them to download the information they are seeking.

Most recently livestock producers, aware that cash market volume has been declining, have started to ask questions about alternative ways to establish base prices in contracts. Although this concern was first expressed by hog producers shortly after USDA changed the way hog prices were reported in the Iowa-S. Minnesota market, it was clear that cattle producers were facing a similar problem. As a result, a project (still ongoing) was launched to examine alternative sources for external reference prices to use when establishing base prices in cattle and hog contracts.

What Should We Do?

There is a common theme in the background I just provided. *Successful extension programs focus their attention on answering questions posed by industry participants.* To the extent that K-State has had a successful livestock marketing extension program over the last one and one-half decades, it has occurred because, first, we listened to industry participants to determine what questions needed to be addressed. Second, when needed, research programs were developed to try and address the questions posed by producers. In this regard, integration of research and extension staff is critical. Finally, results were disseminated back to clientele groups via publications and presentations.

Information presented to extension audiences must be research based and the quality of the analysis must be such that it will pass muster in a peer review process. In other words, the analysis must be of the same caliber that would be employed when preparing a manuscript for publication in a peer reviewed journal. Logically, it simply means that if today's agricultural producers are going to make investment decisions (and given the scale of many livestock operations those investments will be large) based on our analysis, they deserve the best analysis we can provide.

Lawrence indicates that our traditional research process, including grant applications, working with graduate students, and publishing in peer reviewed journals, is too slow to meet the needs of today's extension clientele. He's only half-right. In some instances our traditional process is too slow. But before we abandon the process, it's important to examine why it's too slow. In many instances, it's because communications between traditional extension and research faculty have broken down to the point where the research process does not start until the questions are already stale from the clientele groups perspective. If faculty with primary extension responsibilities make an effort to communicate research needs to research faculty, and research faculty spend time with extension faculty identifying researchable topics, it will dramatically speed up the process and allow us to properly address the questions posed by our constituents. This will, over time, lead to a blurring of the distinction between research and extension faculty as clientele groups no longer restrict their contacts to faculty with extension appointments and extension faculty become more involved in research but, as one of my colleagues is fond of saying, "that's a good thing."

The evolving model of extension is different than the traditional model. In the traditional model, researchers devoted most of their time to conducting research on campus with the expectation that extension economists would "deliver" the research to extension audiences via presentations and extension publications. But this sequential model is no longer valid. Sophisticated livestock producers making large investments need and expect access to the best available information. The evolving extension model is one where extension clientele and faculty interact using modern technology (especially the Internet) to seek out available information, ask and answer questions, and quickly share publications (sometimes work in progress), data, and results. We are still learning how to best use this evolving extension model, but it is becoming increasingly clear that researchers and extension specialists need to consider a more "team oriented" approach to answering questions, planning research and disseminating results. In other words, in the future research and extension need to be even more integrated than in the past.

The Agenda

Schroeder and Ward, in their introduction to this session, pose a number of good questions regarding the direction both livestock marketing research and extension should take in the future. Answers to their questions will be debated by agricultural economists, but I at least have some thoughts to consider in response.

First, I suggest that agricultural economists spend time listening to their clientele to determine what topics need to be addressed. In other words, give sophisticated livestock producers and buyers the opportunity to help prioritize research and extension programs.

Second, as Schroeder and Ward have already pointed out, cash market activity has been declining for a number of years. The underlying forces behind this decline are myriad, but agricultural economists' decisions regarding what to study are not one of them. In other words, cash livestock markets will continue to decline in importance, regardless of what agricultural economists do. Our focus should be on helping people deal with this change, not trying to prevent it.

Third, it's apparent that livestock producers and buyers will be in need of more information regarding the efficiency of low volume cash markets and the viability of alternative pricing mechanisms. Therefore, the agricultural economics profession should focus more attention on these two topics. This undoubtedly means examining use of prices at wholesale and retail levels as possible substitutes for current cash market quotes and it also entails another look at the role of futures prices in a world of diminishing cash markets. Given the changes taking place in futures markets, it might mean looking at developing new futures contracts to deal with new risks faced by buyers and sellers.

Fourth, the role of agricultural economists will change. In the future, there will still be a need for agricultural economists to examine broad industry trends, forecast supply changes, analyze meat demand, and develop livestock and meat price forecasts. But the number of agricultural economists focusing their attention on these issues will be small. To a large extent, this change has been underway for a number of years. Today there are about a dozen university economists in the U.S. that spend a significant portion of their time developing their own analysis, writing newsletters and making presentations on these topics. Furthermore, the number of extension economists engaged in "Livestock Situation and Outlook" work will continue to decline. As a result, economists working in this area will have a broader impact than in the past as they service a clientele that knows no borders.

Other agricultural economists will likely find themselves fulfilling more of a consultants role, at least part of the time. *In fact, agricultural economists will have to spend a portion of their time on consulting type projects or they will quickly find they are not knowledgeable enough about the problems facing producers to even discuss them in front of an extension audience*. This marks a shift from the traditional agricultural economics extension role, but I think it is a shift that will have to be made if we are to stay relevant to our clientele in the future.

Finally, more consideration needs to be given to the evolving extension model. In the future, the lines between extension and research will become increasingly blurred and the need for a more team oriented approach to problem solving will become more apparent. In some cases teams will be housed at a single university, but in many cases teams (by necessity) will be housed at several institutions. The future success of research and extension could well depend on how successful we prove to be at forming and managing these teams.

The livestock sector's demand for economic information, and help in solving the types of problems agricultural economists are trained to address, is higher now that it has ever been. Moreover, demand for agricultural economists willing to tackle the problems faced by producers is likely to grow over time as both producers and buyers realize they need help in analyzing their individual situations and making decisions. But to meet our clientele's needs we need to shift our focus and learn to operate in a new environment. As a profession, I think we're up to the challenge and I look forward to the upcoming decade.

References

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