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AGRIBUSINESS AND THE AGRICULTURAL ECONOMICS PROFESSION: RESEARCH AGENDAS IN AGRIBUSINESS

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Abstract

This paper presents a summary of work by various groups on the potential for agribusiness research by agricultural economists over the past decade. Methodology to establish research priorities in agribusiness are reviewed. This review leads to a consideration of the agribusiness research issues including: funding sources, identifying users of agribusiness research, data needs, and limitations of agribusiness research programs.

The final part of the paper presents a potpourri of suggested research initiatives in agribusiness research for agricultural economists. Research in these areas may be difficult for a number of reasons including: decreased reliance on economic theory as the sole paradigm, providing competitive advantage to a single agribusiness firm while balancing public and private needs and funding sources, and data confidentiality. Suggestions for outlets for academic research are presented.

INTRODUCTION

Appropriateness and direction of the agribusiness research agenda has been increasingly in the spotlight since the launching of agricultural economists into agribusiness research with Leo Polopolus' AAEA presidential address, "Agricultural Economics Beyond the Farm Gate." Some agricultural economists would argue that agribusiness research is not "new." In fact Davis and Goldberg described the sector in which most agricultural economists work as "agribusiness" nearly four decades ago. Many agricultural economists argue that they have addressed the management problems of agribusiness firms for four decades. However, there is increasing interest in describing and planning agribusiness research programs, particularly in agribusiness management. The development and success of *Agribusiness, an International Journal*, edited by Mike Woolverton (see Woolverton, Cramer, and Hammonds), clearly signalled an interest in agribusiness research. The January 1991 GAO report to the Secretary of Agriculture urged USDA agencies to become:

- a catalyst for the agribusiness industry, particularly the thousands of small and medium-size companies that are reluctant to take exporting risks or are unaware of global trading opportunities

- a researcher of new and innovative products that respond to market demands, and

- a technical service provider of information on quality standards, financing, and other trade services to reduce the risks of entering new markets.

Clearly, USDA has been challenged to expand their efforts in the agribusiness area.

In 1986, Litzenberg and Schneider presented a taxonomy of agribusiness research dating from the 1940s. The major emphasis was on applying production economics principles to agribusiness firms. However, recent interest in **agribusiness management** focuses on the basic science of the managerial process rather than on traditional production economics research using agribusiness firms as a arena.

Some agricultural economists have voiced concern about establishing research priorities for agribusiness research. This becomes more of an issue when agribusiness research initiatives compete for resources with more traditional agricultural economics research, as in recent "hard times," for state research dollars. Increasing interest in "outside" resources to support the research activities of agricultural economics faculty has led some to consider agribusiness management research. It would seem that agribusiness firms would support the research that would aid them in their quest for profits. This leads to a discussion of the appropriateness, usefulness and feasibility of agricultural economists' role in agribusiness management research.

Dobson and Akridge identified twelve measures of potential usefulness and feasibility of agribusiness research. Their research provided analytical evidence for rank ordering ten broad categories of research using these criteria. Care must be taken by agricultural economics departments because allocation of scarce resources to agribusiness research may displace funding for traditional research areas. In

1986, Babb identified production and operations management as an area where agricultural economists could feel comfortable and make contributions using analytic training available in current agricultural economics PhD programs. Babb also discussed the importance of a research program to support teaching programs in agribusiness. Many agricultural economics departments across the country have added, or are considering the addition of, agribusiness programs to their traditional curriculum offerings in agricultural economics.

RECENT HISTORICAL PERSPECTIVES

Efforts to identify research agendas have been made by a number of groups including: the Western Regional Coordinating Committee WRCC-72 (as well as other regional research projects), the International Agribusiness Management Association, and the Industry Committee of the American Agricultural Economics Association. A number of authors have offered agribusiness research agendas and relevant issues to be considered. These include: Litzenberg and Schneider in 1986, Sonka in 1988, Dobson and Akridge in 1989, and Mazzocco and Sonka in 1991. Mazzocco and Sonka analyzed agribusiness research agendas by discussing the nature of the outputs generated and the resources required for the research initiatives. Sonka and Hudson in 1990 presented an article outlining the issues important to research on the competitiveness of agribusiness firms. It is clear that many agricultural economists believe that the analytical and economic theory foundation of most agricultural economists provides adequate skills for agribusiness research. The uniqueness of the sector (see Sonka and Hudson 1989) requires familiarity with the existence of researchable problems in agribusiness management.

The challenges of agribusiness research have been considered recently by a number of authors. At the 1991 inaugural symposium of the International Agribusiness Management Association in Boston, university faculty, agribusiness industry representatives, and government officials from 23 countries came together to discuss agribusiness research and education objectives. At that conference Mazzocco and Sonka identified four characteristics of agribusiness research by stakeholder group: response time frame, nature of output, specificity, and quality definition. These characteristics are major considerations for developing an agribusiness research agenda.

Some synergism has developed among groups that have formed to explore agribusiness research opportunities. The WRCC-72 group has a major thrust in strategic management and competitiveness with

over half of the fifty-five active research scientists interested in this area. Sonka, and Hudson's 1990 article on competitiveness set a number of issues before the group at their 1990 annual meeting. Some researchers are interested in additions to the basic theory of strategic planning. The applied research article by Westgren, Sonka, and Litzenberg, "Strategic Issue Identification among Agribusiness Firms," is an example of explaining firm-level behavior due to differing strategic structures. Still others interested in this general area are inclined to produce case studies, text books, and extension publications to "deliver" managerial information. Obviously, many forms of output are relevant and desirable depending on the end users of the research activity.

Taken together, these articles lead us to these concerns: (1) Should (and can) agricultural economists contribute in agribusiness research, especially in agribusiness management research? (2) Who will be (could be) the users of agribusiness research and what will be the nature of the output? and (3) In what types of research might agricultural economists be involved? Clearly, the answer to the first question is YES; agricultural economists build on a rich history of serving the agribusiness sector. Agricultural economists are trained with analytical tools that enable them to be successful researchers in agribusiness and in agribusiness management. There may well be an opportunity, and even a need, to build new alliances with scientists from other disciplines. Business school faculty and agribusiness industry professionals are logical choices for these partnerships. The second question bears considerable discussion.

AGRIBUSINESS RESEARCH— NATURE OF OUTPUT

Discussion about agribusiness research ultimately centers on outputs. Where do we publish this research and who uses it. Mazzocco and Sonka identify a number of different stakeholders, some of whom are unfamiliar to most agricultural economists. Our primary focus is on research output that can be published in journals. However, developing articles for the *American Journal of Agricultural Economics* obviously differs from developing articles for other venues, including business journals. A recent article by Johnston, Parasuraman, Futrell, and Black in the *Journal of Marketing Research* analyzes the impact of organizational influences on a salesperson's organizational commitment. While that may seem very far fetched for mainline agricultural economists, input oriented agribusiness firms would likely be quite interested in lowering turnover of salespeople. Sales costs are a significant part of total costs for these types of firms, and decreasing em-

ployee turnover would directly impact profits. This particular type of research would be uncomfortable for most agricultural economists trained in production economics, but might be quite valuable to agribusiness managers. This type of research could easily be the focus of the coalition of an agricultural economist and a business school partner. This type of research could have direct application in the undergraduate curriculum or adult education, depending on the stakeholder or user of the research product.

Agricultural economists moving into agribusiness management research will have many new users to consider. *Agribusiness, an International Journal* was designed to be a professional outlet for agribusiness research. There are numerous business school journals that could be targeted for academic articles from agribusiness research projects. Basic methodological research is also needed. The outlets and users of agribusiness management research will not be the constraint for most agricultural economists. Rather, the limitations are much more likely to be in identifying an area of interest to the researcher that uses his/her skills and has good potential to serve one or more stakeholders. While an exhaustive list of these areas is beyond the scope of this article, a number of illustrative ideas are useful.

SUGGESTIONS FOR AGRIBUSINESS RESEARCH INITIATIVES

This section of the article will provide a number of general areas to stimulate the thinking of agricultural economists considering the development of an agribusiness research program. Following are a number of potentially interesting areas for agribusiness research initiatives.

• **Understand Managerial Behavior**—Agricultural economists have long been interested in the behavior of farm and ranch managers. An agribusiness research program would focus on the manager of an agribusiness firm where important considerations are the impact of consumer preferences, food safety and labeling, multi-national competition, and scanner data analysis.

• **Develop Improved Decision Procedures and Analytical Tools**—Decision making and analysis in a modern agribusiness firm is multifaceted, complicated, sophisticated, and dependent on operational, financial, marketing, and planning activities. Managers are in need of improved decision-making tools.

• **Efficient Information Systems for Agribusiness Decision Making**—Computer technology makes information available to decision makers in enor-

mous quantities. Managers of agribusiness firms are in need of research to find the most important variables to track for efficient decision making. For example, research that would identify correlation of operational characteristics and financial success, stockholder approval and support, and managerial rewards would be of great value.

• **Analysis of Performance of Agribusiness Firms**—While much financial analysis is completed by accountants, analysis of alternative economic uses of financial and operational resources, job satisfaction by human resources, and efficient uses of natural resources are often unstudied. Normative and positive measures of agribusiness firm performance would prove useful.

• **Identification of Managerial Talent in Agribusiness Firms**—Managerial talent is often the limiting factor in agribusiness firms, especially in small firms. Recent economic constraints have reduced new hires. Many agribusiness firms are not well prepared for future managerial succession. Costs of training have increased until firms simply can no longer train a “class” of potential managers and then select.

• **Consumer Driven Research**—The impact of consumer choice on the success of agribusiness firms is dramatic. Managers are often poorly prepared to evaluate consumer reaction to new food and fiber products, packaging, advertising, and promotion plans. While some research has been done to identify the major contributors to the formation of consumer choice, much remains to be done.

• **Managing Innovation and Change**—Turbulence in the agribusiness industry due to technical innovation is significant. Biotechnology is providing many opportunities for agribusiness firms. Many of the basic economic questions such as how much to produce, how to price, and which combination of inputs to use need to be rethought.

• **Improving Competitiveness of Agribusiness Firms**—Improving the competitiveness of agribusiness firms may be more theoretical than practical and may be filled with political decisions as we learn to compete in a global economy. However, stockholders in private firms and watchdogs of public money are demanding evidence of improvements in competition. Agricultural economists have much to offer in these areas. However, there are significant pitfalls that should be considered.

PITFALLS CONFRONTING AGRIBUSINESS RESEARCHERS

Agribusiness research potential exists for many agricultural economists. Integration of traditional input supply and output processing, packaging, and

distribution into production agriculture requires consideration of the agribusiness sector for most agricultural economics research. However, not all, or not even most, agricultural economists should realign current research programs or initiate new agribusiness management research. There is a major pitfall for agricultural economists if they "follow the yellow brick road" by realigning research directions because of funding opportunities or if they compromise on research reporting because of the competitive advantage attainable by a particular firm. Public research must continue to benefit a broad spectrum of agribusiness firms.

Opportunities in agribusiness management research should not lead agricultural economists to abandon production economics as the basis of their research. Agribusiness management research may, however, require additional theoretical usage. Agricultural economists must be able to incorporate additional perspectives while retaining their strong position as economists. The importance of economic theory in agribusiness decision making is one of the important viewpoints that agricultural economists bring to agribusiness research.

Equally important is the need for agricultural economists to include a much broader scientific base than singular reliance on production economics. Myopic reliance on production economics as the only

paradigm will prove less than optimal for agribusiness management research. Agricultural economists must stand ready to embrace other researchers with the broad interdisciplinary view to attack problems in the agribusiness sector. These pitfalls, and a reluctance to broaden research perspectives are potentially debilitating for agricultural economists' research programs. However, the pervasive training in most modern PhD programs and the legacy of "meeting the challenge" bode well for the success of agricultural economists' involvement in agribusiness research.

SUMMARY

This paper has shown that the involvement of agricultural economists in agribusiness and agribusiness management research has been evolving over the past decade. Agricultural economists are well prepared for agribusiness management research, but formation of alliances with scientists who have other disciplinary expertise is likely required. Stakeholders, or users of agribusiness management research, will become more varied and probably include private agribusiness firms. Concerns about conflict of interest, public funding for private gain, and serious pitfalls that could materialize are important. Agricultural economists will likely continue to increase their activities in agribusiness management research.

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