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"WHAT IS AGRICULTURAL ECONOMICS?"

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UNDERSTANDING HOW OTHER DISCIPLINES VIEW AGRICULTURAL ECONOMICS AND ECONOMICS

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I. The Issues

A. Economics is the one discipline that provides a coherent framework in which to integrate disciplinary data and models for benefit-cost analysis and integrated environmental impact assessment. But other scientific disciplines have been slow to understand and appreciate this unique integrative role of economics in interdisciplinary research, and the general value and role of economics in the conduct of policy-relevant scientific research. So how do other disciplines view economics if they don't view it in this way?

B. Before proceeding we might well ask, why do we care how other disciplines view agricultural economics and economics? The answer is that as the integrating discipline economists are the coordinators of interdisciplinary research and the uses of data from other disciplines. If scientists in other disciplines are going to be motivated to work with us, they have to believe that there will be enough value added to make it worthwhile.

C. Based on my personal experiences doing interdisciplinary work and collaborating with scientists in other disciplines, I think there are a variety of factors that we economists need to reflect upon as we try to understand how other disciplines perceive us.

II. The Image and Message Economists Present to Other Disciplines

A. Scientists in other disciplines don't perceive most economists as knowing much about other fields of science or being interested in working with them.

B. Scientists in other disciplines lump economics together with sociology, psychology

and political science and don't understand the differences across the various social science disciplines. Consequently, there is a lack of appreciation for the quantitative and methodological differences between economics and other "social sciences."

C. Academic economics presents the image of being preoccupied with theoretical constructs that are not relevant to the real world, and empirical analyses that are unreliable and unscientific.

III. Paradigm and Communication Problems

A. Scientists in other disciplines have a different understanding of "interdisciplinary" research. When two chemists in different branches of chemistry collaborate, that is considered interdisciplinary research. Thus there is a limited understanding of what it means to truly bridge distinct disciplines, e.g., when an economists works with a biologist or physicist.

B. The paradigm of economics as representing rational behavior subject to constraints is generally not understood by other scientists. The economic theory of value is not understood or appreciated. Consequently, there is widespread misunderstanding among scientists about the theoretical and empirical bases that economics provides for policy analysis, and about basic concepts of economics related to doing policy analysis. E.g., most scientists in other disciplines do not understand the logical basis for benefit-cost analysis, discounting, market failure, and non-market valuation. Nor do they understand that econometrics provides methods to conduct valid statistical analyses of nonexperimental data. Economists don't do a good job of communicating these ideas.

IV. Incentive Problems: So What Do We Do About It?

A. The disciplinary orientation of research universities creates disincentives for individual economists to invest in educating scientists about the value of economics.

There are public good problems and transaction cost problems. Efforts by organizations such as AAEA are needed, as are efforts by university administrators. Unfortunately, many of them don't understand the problem or the value of economics either, although this is slowly changing because of economic (budget) pressure and public criticism of the universities.

B. To solve the public good problem, public research institutions -- USDA, the land grant universities -- need to create incentives for economists to educate scientists about economics. This alone will help reduce the transactions costs that economists experience in trying to work with scientists from other disciplines. Also, there may be ways to improve institutions to lower transactions costs of collaboration, e.g., creation of problem-oriented research centers.