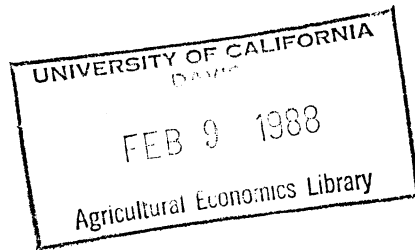


1985

Agriculture and Rural Areas Approaching the Twenty-first Century: Challenges for Agricultural Economics



Conference Papers

Agriculture — Economic aspects

American Agricultural Economics Association
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AN OVERVIEW OF THE CONFERENCE

R. J. Hildreth

Agriculture, the food system, and rural communities face a rapidly changing, and at times bewildering, array of problems as the twentieth century draws to a close. A few illustrations follow.

The emergence of a well-integrated, international economy opens new opportunities for farmers and rural people at the same time that it imposes constraints on policy makers and limits certain choices. The effects of high real interest rates and high value of the dollar on agriculture, the food system, and rural communities clearly demonstrate the importance of the fiscal and monetary policy. Rapidly changing communication technology, coupled with the computer revolution and its widespread acceptance, have brought us into the information age and created enormous new opportunities while at the same time creating the potential for serious social problems. Breakthroughs in biotechnology promise another technological revolution, opening new vistas while at the same time creating potentially serious adjustment. The interface between rural and urban communities is undergoing rapid change as the economics of industry and its location shift. And political and social change promises to transform the relationships among members of society and how we govern ourselves.

The purpose of this conference is to help the profession of agricultural economics better serve during this period of rapid transition. It seeks to redefine the issues we face as a profession and to point the way to a sharper, more relevant set of priority issues. We will attempt to do this by (1) characterizing the changing state of agriculture and the rural community; (2) assaying the changing state of economic logic and quantitative methods; (3) exploring how the analysis of problems of agriculture and the rural community can make a contribution to improvements in logic, data, and methods; and (4) identifying and defining significant problems of agriculture and the rural community and the issues needing attention by agricultural economics research, teaching, and extension.

The author is the Managing Director of Farm Foundation, and Chair, AAEA Committee on Issues and Priorities.

The conference will lead to the development of explicit statement of problems and priority issues. There is clearly a need for establishing new program thrusts, strengthening and improving existing programs, and reallocating resources, both within the profession of agricultural economics and between agricultural economics and other agricultural fields. First, it will be difficult for agricultural economics topics to be included in competitive and special grants programs unless there is a clear definition of the issues demanding priority. More generally, a sense of priority and relevance is needed if adequate funding is to be available for the profession's programs in the future. Furthermore, a sense of priority and relevance will assist individual agricultural economists in allocation of their time and energy to topics that are challenging as well as in the national interest.

The conference was planned by the AAEA Committee on Issues and Priorities over a number of years. Active involvement of all members of the Committee and interaction with the AAEA Board has led us to today's symposium.

The major starting point for our deliberations are twelve topic papers. They are:

- I. Technical Innovations with Implications for Agricultural Economics
- II. Domestic Food and Agricultural Policy
- III. Issues in World Agriculture
- IV. Quantitative Issues
- V. Issues in Natural Resource and Environmental Management
- VI. Developments in Economics of Importance to Agricultural Economics
- VII. Management Problems of Agricultural and Rural Firms
- VIII. Changes in Agricultural and Rural Institutions
- IX. The Macro-Economics of Agriculture in Rural America
- X. The Economics of Rural Areas
- XI. Improving the Socio-Economic Data Base
- XII. Human Capital for Agriculture

Three topic papers will be presented in concurrent sessions each half-day of the conference. The authors of the topic papers have received comments from a Review Panel. The Panel members will present their individual views after the presentation of the topic paper.

After the presentation of the topic paper and the Review Panel comments, three discussion groups will be held on each topic. These discussions are a very vital part of the process of moving toward a definition of priority issues. The individual participants in this conference will play a vital role in this process.

We ask each discussion group to (a) react to the paper in light of the emerging policy issues; (b) identify priority research issues without ranking them, noting the impact on research funding and comment on the issue of organizing research efforts; (c) identify priority teaching issues without ranking them, noting the impact on funding for teaching, and comment on issues of curriculum and organizing teaching efforts; (d) identify priority extension issues without ranking them, noting impact on extension funding and comment on issue of organizing extension effort. Each discussion group will focus on issues of research, teaching, and extension in their groups. It is the intention to provide for interaction among those with interest in research, teaching, and extension in every discussion group.

The review panelists will serve as rapporteurs for the discussion groups and will be responsible for writing up the major points of the discussion and turning it in to the topic chairmen by 7 p.m. each day. The topic chairmen will develop an integrated report of the discussion groups which will be turned in to a program coordinator.

The closing session on Friday morning is entitled, "Synthesis, Priorities, and Implication for Action". A synthesis of teaching issues, extension issues, and research issues will be prepared. Discussion of these reports, and implications for action will be a significant part of the conference

The Issues and Priorities Committee will meet Friday afternoon to begin the process of drawing together the ideas developed in the conference. Emery Castle will take the leadership in drawing this material together. A report to the Board will be made in a few months after the close of the conference.

In addition to the topic papers, distinguished social scientists from the fields of agricultural history, political science, and sociology will present their views of issues facing agricultural and rural areas as well as the contributions to be made by agricultural economics.

A publication of the topic papers, review panel comments, and other social science papers will be developed and sent to members of the Association who have registered for the conference. In addition, distribution is planned of an executive summary and conclusions from the conference with regard to priority issues. This summary will be reviewed and approved by the AAEA Board, thus making it a statement of the Association.

It is the plan and desire of the Committee and the Board to arrive at a clear statement of priority issues facing agriculture in rural areas in the future and the challenges and opportunities for agricultural economics teaching, extension, and research to deal with these issues. The involvement of each one of you in the discussion groups will be important, along with the activities of the committee and our Association Board.

I cannot close these statements without an expression of great appreciation to the members of the Committee, the AAEA Board, and especially to the Cooperative Research Service/USDA, and the Economic Research Service/USDA, for their financial support in planning, conducting, and publication of the conference.

THE CHANGING ROLE OF AGRICULTURAL ECONOMICS

by Orville G. Bentley

Ladies and gentlemen, it is a pleasure to be on the campus of Iowa State University again, and to be introduced to this distinguished body by a long-time colleague and compatriot of the agricultural committee circuit, Dr. Jim Hildreth, of the Farm Foundation.

It is especially gratifying also to bring greetings from the Secretary of Agriculture, John Block, and your colleagues at the USDA on the occasion of the 75th Anniversary of the American Agricultural Economics Association.

On their behalf, and for myself, I extend heartiest congratulations to the members and to the Association for past achievements. Our best wishes to you as you move ahead to a promising future and the centennial celebration of the Association 25 years from now.

Creative institutions are essential to the conduct of our daily affairs. They are symbols of collective efforts, reflecting the capacities and the personal commitments of the people who created them. To make a lasting contribution, a professional society should be an agent for the intellectual development and continued growth of its membership. Moreover, it should provide continuity, and a sense of belonging for its membership. Much has been achieved, but yet much remains to be done, and it is in that framework that I am sure the American Agricultural Economics Association approaches its future.

Over the years it has been my privilege to have worked with many talented and dedicated people. Among them were outstanding leaders prominent in the history of your Association -- Ray Penn, Don Paarlberg, Earl Butz, Earl Heady, Carroll Bottom, Joe Ackerman, Emery Castle, and of course your Nobel Laureate, the world renowned Theodore Schultze. But there were many more. I recall with affection as I speak today, the commitment and support that I received from the department heads of Agricultural Economics at Ohio State University, at South Dakota State University, the University of Illinois, and program leaders from the Economic Research Service and the private sector.

In addition, there is a long list of distinguished scholars from your profession who have advised on program activities and served as outstanding members of various committees that I have been privileged to chair.

But however pleasant it is to reminisce about the past, the challenge is to look ahead, and a 75th anniversary is an appropriate time to do so.

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It is quite unnecessary to say to this group that "Agriculture is going through another transition." The changes are far reaching, with implications for agricultural policy, agricultural credit, shifts in production trends and consumer demands, resource allocations, competition for world markets, and a sharp increase in the availability of new technologies that will likely bring profound changes to the food/fiber system from production through utilization. Moreover, as change takes place in the agricultural sector, the obvious linkage to the economy in general will occur, with spin-offs leading to changes in the political, social and international sectors.

Unfortunately, and perhaps fortunately, there are no easy prescriptions nor foolproof models to suggest a risk-free course of action for the future. The demands on the intellectual and professional leadership of the food and agricultural system will be great in the years ahead. Sound-thinking, incisive, penetrating analyses and intellectual rigor will be at a premium as we face the difficult choices among policy options and economic production and marketing strategies.

These tough decisions will spell challenge to the agricultural economics profession, especially the young men and women who will carry leadership responsibilities in the future. We will all have to devise new approaches to problem solving, drawing heavily from every resource available. In fact, the multidisciplinary approach will likely be more the modus operandi of the future than it has been in the past. You have the training and experience to look at issues in a comprehensive manner, a skill of tremendous use to decision makers in agriculture, whether it be at the farm level or by national policy leaders.

As teachers, research scholars, and extension education specialists, our particular responsibility is for developments in science and education, in both the public and private sectors. Our challenge is to develop a team effort, mobilizing the best talent possible to answer the pressing questions that lie ahead for the clientele we serve. This means we are talking about universities, government-supported scientists and educators, and the leadership from all sectors of private industry.

Because of our particular responsibility, it seems that the matter of planning and projecting future directions for science and education takes on added significance. One of the prime reasons for this statement is that the potential changes that can be brought about as a result of developments in biotechnology and the application of new developments in molecular biology to agriculture will bring a series of changes comparable to those that we experienced through the development of hybrid seeds, improved rations for livestock and poultry, and the introduction of the chemical age in the early post-World War II era.

Now, what about our institutions?

There is no doubt that our research and educational institutions will make adjustments based on their appraisal of academic needs and new breakthroughs in science. Moreover, interaction with the clientele these institutions serve will guide program directions in research, extension education and teaching. But as these demands for research and education grow, facing budget restraints, the planning process takes on added significance.

The reason for this can be described in various ways. The common jargon these days is to talk in terms of "strategic planning," which is, in fact, an exercise in looking at long-range goals and directions that institutions are going to

take. The process itself is important to the esprit de corps of the staff in research and educational institutions.

But the benefits go far beyond the institutional context. In a highly decentralized Federal-State research system there is a need to develop a broad consensus on issues, and to set priorities for allocating resources to agreed-upon program objectives. While we say it often, we must continue to recognize that the Federal-State system derives its strength and vitality in part from its diversity and flexibility. Yet this very strength makes it more difficult to develop a conceptual framework for programs that result in a rigorous approach to solving problems and in defining future directions that our activities should take.

This diversity is greatly increased on a national and international scale. Hence, there is a critical need for building a program consensus that has substantial input from the grass roots level.

The system is complex and sometimes difficult to understand, even for those who are a part of it, whether they are at the institutional level, or think of themselves as individuals on the scientist or administrative level.

Planning is critical to developing understanding at the national level, both in the executive branch of government and in the Congress. It calls for a continuing effort on the part of the leadership in our system, whether at the University, the Agricultural Experiment Station, the Cooperative Extension Service, or at the National Program level.

There are pragmatic reasons for planning and program evaluation efforts that fall outside the development of both "tactical" and "strategic" plans. And everyone isn't necessarily concerned with the work of the individual institutions, nor with activities such as those carried out by the Joint Council on Food and Agricultural Sciences, or the Users Advisory Board. But -- whether from the public or private sector -- each of you contributes in your own way, primarily through identifying problems, the commitment of resources, and the dedicated effort on the part of scientists in utilizing their expertise in research and extension programs and in teaching students at the graduate and undergraduate levels.

It is axiomatic that change is a part of progress. Yet it is sometimes difficult for us to recognize the magnitude of outside forces having a profound effect on developments likely to occur within the agricultural system.

A complete list of changing conditions that will influence developments in agriculture would be very long, but such a list would include these considerations:

* Profitability in the Agricultural Sector

With falling exports, lower land values, and high interest rates relative to inflation, the nation's farm sector is experiencing a very difficult time.

* Water Quality and Management

Thirty-four states have identified agricultural nonpoint source pollution as a major cause of water contamination. In the arid west, water management issues have reached a critical stage.

* Opportunities in Biotechnology

The potential payoffs of this research are considerable and include possible breakthroughs such as pest- and drought-resistant plants, plants that produce their own fertilizer, and vaccines that simulate the natural immunity of animals.

* Trained Personnel

Changing issues and opportunities in agriculture require new skills (i.e., molecular biology and systems analysis) and expanded appreciation of our interconnected world.

* Diet and Health Issues

Diet, nutrition standards, and physical well-being are pervasive points of discussion among the U.S. citizenry. Improved linkage between changing human nutrition requirements and productive research could have great payoffs for the agricultural industry.

These five items are the top priority issues recently identified by the Joint Council on Food and Agricultural Sciences for FY 1987. The Council prepares an annual priorities report as a guide for those policymakers who develop the Federal budget and for others in science and education who seek guidance concerning important national problems facing the food and agricultural system. A longer term look at the most urgent problems needing solutions is presented in the five-year plan. The Council is working on an update of that plan now.

Input for the annual priorities report is received from a broad spectrum of performers and users of agricultural research. Members of the Joint Council represent land-grant universities, the Users Advisory Board, Federal agencies, nonland-grant universities, etc., and they obtain input from organizations that represent the many components of this decentralized system.

These priorities are having an influence on decisions made in Washington -- at least in areas where they are compatible with administrative and congressional policy preferences. The funding of the competitive grants program in FY 1985 is an example of this impact.

Agricultural economics has a prominent place in the five priorities identified for FY 1987. The profitability issue needs a major input of ideas from your profession. What are the implications of current market and financial trends on the future farm economy in the U.S.? For example, options for farmers, characteristics of successful operators, and consequences of less government involvement.

At the May, 1985 meeting of the Joint Council, Michael D. Boehlje, Iowa State University, Leo E. Lucas, the University of Nebraska, and Harold D. Guither, University of Illinois/Economic Research Service, discussed what is being done at this time and some options for the future. The good work being done by these people and others should be continued and expanded.

Another dimension of the declining profit picture is identifying alternative opportunities for farmers who must find another line of work, i.e., training needs, other business opportunities, relocation, etc.