AGRICULTURAL ECONOMICS 1950-2000*

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In the past 25 years, agricultural economists have made significant progress, but have experienced substantial turmoil and great anxiety. These years have been a period of great introspection during which we have asked: "What are the fundamental purposes of our profession?" During this quarter century, rural America's practical problems important to our profession have changed rapidly. This rate will likely quicken in the future. Increasingly, we and our institutions will be challenged to "keep up" and to adjust. How well we respond and serve society will depend greatly on (1) our ability to preceive and to anticipate important issues, and (2) the flexibility of ourselves, our discipline, institutions and funds to accommodate to continual and increasing change.

THE PAST TWENTY-FIVE YEARS

What kind of world existed 25 years ago? The United Nations had been born as a hope for world peace and American food had become an instrument of international diplomacy and reconstruction. Total net income of farm operators had reached nearly $18 billion in 1948, only to drop $5 billion the next year. Hostilities broke out in Korea in 1950. Materials became scarce and prices shot up. The Department's Bureau of Agricultural Economics (BAE) released a study titled "Agriculture's Capacity to Produce: Possibilities Under Specified Conditions." [14].

As the war babies began to crowd the schools, many Americans moved into suburbs while farm people began a mass exodus from the farms. "Vertical integration" and "agribusiness" became terms discussed in many professional meetings and on mainstreets of rural America.

Conflict also developed between the U.S. Department of Agriculture's Bureau of Economics (BAE) and its critics. The BAE had reorganized in 1939 to do planning, as well as to gather statistics, perform economic research, and provide program analysis helpful to others making planning decisions. At least one farm organization feared that the Bureau would become a rival representative of the farmer. Also, controversy existed over whether the Bureau should have conducted and published a study about low-income people in Coahama County, Mississippi [1, pp. 19-28].

Despite the turmoil and frustrations that the Bureau's 1953 dissolution caused the profession, the 1950s brought increased appropriations for economic research, especially marketing studies, and for economic and statistical analysis. Studies emphasized increased efficiency of marketing and, later, expanding demand through market development. Increased support permitted the building of departments of agricultural economics throughout the country and contributed significantly to the profession's success in quantifying important demand relationships of the economy and in developing production economics. It was during this period that the pioneering work of the 1930s on benefit-cost analysis was expanded greatly.

Farm production received considerable attention in the 1950s, especially in universities. These efforts effectively contributed to public dialog and to eventual decisions on farm policy related to price-depressing farm surpluses.

* Presented at the Southern Agricultural Economics Association Annual Meeting, New Orleans, Louisiana, February 3, 1975. Deputy Administrator, Economic Research Service, U.S. Department of Agriculture. This paper draws freely on a continual exchange with colleagues in the Economic Research Service, other agencies of the U.S. Department of Agriculture and throughout the profession.

Social-related research remained suspect, however; and work focusing on living levels of low-income people received criticism. Such research was restricted in the Department, and our colleagues in universities appear to have followed USDA's example. The conditions of braceros, migrant workers, and other disadvantaged groups were largely ignored by the profession.

Interests of the 1950s continued into the 1960s. Agricultural economists focused on commodity surpluses, price stability, continued decline in farm numbers, and the economics of production by the firm. They also did significant work in estimating supply and in developing models to effectively consider direct and indirect effects of changes in demand, supply, and related policies.

We as a profession remained largely oblivious to important economic relationships that are more generally accepted today. We largely neglected, for instance, potential effects of international trade on farm income and consumer prices and effects of racial discrimination and other forms of inequality on some farmers and farmworkers. We also did not realize, or generally chose to ignore, that technology had pervasive impacts on income distribution and that farm technology influenced the magnitude and characteristics of urban problems. Our shift toward research on the economics of "inequality" developed slowly [2], [3]. Within influential elements of the larger society, however, inequality of economic opportunity was becoming a major social issue.

Rural development as a subject area received a boost in the Economic Research Service, when the Economic Development Division (EDD) was set up in 1965. However, a significant part of EDD's budget came from the Office of Equal Opportunity transfer funds. These disappeared later, and our related work was cut back [1, pp. 31-35].

YEARS OF INTROSPECTION

The fact that our work has contained a strong concern about equity despite a slow adjustment to the social issues of the 1950s and 1960s partially accounts for our profession's anxiety in past years. Our research on fair returns to agricultural resources exemplifies this concern. Yet, as economic returns to agriculture increased, it became obvious that programs we devised and endorsed were enriching the more prosperous farmers and not the ones who needed help the most. Did our work, then, truly contribute to equity for farmers? Our concern mounted as largescale farmers and agribusiness seemingly showed their independence from our services. Assumptions underlying our continued existence, the "theology," if you will, that farmers depended on our analysis and outlook, began to fade [9].

But it was not simply the wishes of individual agricultural economists that brought about the "mix" of work in the profession. Little money was provided for social and economic research on low-income people. After 1965, for example, mounting costs of the Vietnam war curtailed support for programs to upgrade rural environment, provide for rural development, and overcome rural poverty [1, p. 35].

Our profession's self-criticism has taken two forms. Hathaway [10], Bishop [3], and Bawden [2] argued that a larger share of staff and funds should focus on economic problems of the majority of the rural population. Others have contended that what research we did could have been done better. Brinegar, Bachman, and Southworth suggested that we did not effectively evaluate the role of U.S. agriculture in the world economy or the goals of farm policy [6]. Bonnen said we were doing too much applied work [4]. For Mueller, our efforts have been fragmented [13]; Bressler argued that our overly ample descriptive work lacked rigorous analysis and pieces of our work were not additive [5].

Recent adjustments in farm prices and changes in domestic agriculture and international trade have engendered questions about our productivity and effectiveness from people both within and outside the discipline. They say we lack truly international and national models of our food and fiber system, including its interrelationships with the rest of the U.S. economy [8]. Hightower and others have also attacked the entire agricultural establishment for overlooking rural poor and urban Americans alike [11].

THE NEXT 25 YEARS

Two years ago, Bawden described the 1960s as the "Decade of Awakening," and stated that the next 10 years would be decisive for the work of our profession [2]. Several shocks have added to the awakening he observed. Rising energy costs and unemployment, and roller coaster-type changes in farm prices concern us all. Large increases in world agricultural and related trade and continuing starvation abroad brought close to us

through television makes the future yet more uncertain.

As noted already, turmoil and change, implicit to this past period of introspection, have caused us anxiety. For organizations or individuals, it is not exactly comfortable to ask:

How useful is the data base that has been serving us for 30 years?

Was our research done so that others can do theirs in an additive manner?

What are the distribution effects of our work? Would other work contribute more to society?

Answers come hard. Changes in approach and decisions to reallocate are some of the toughest around—whether they relate to our personal lifestyle or our national economy. Such decisions are hard for organizations too; perhaps more so.

Today we face a world filled with crises that challenge us to make these decisions. Recall that in the original Greek, "krisis" means decision. And as Ralph Waldo Emerson reminds us: "This time like all times is a very good one if we but know what to do with it" [7].

What we do next year, the next, and into the future is crucial, especially since the practical problems of rural America will be changing at an accelerating rate. We must build flexibility and adaptability into our decisions so we can adjust research with relative ease as the practical problems change.[1] Otherwise, we will not know what to do. Or we will know what to do but be unable to carry it out because of organizational arrangements or failure to prepare for new and different problems. Yet there will be need to avoid constant organizational shifts.

Other types of changes, both national and international, affect our work too. Attitudes toward land use and rural living have changed dramatically. Our economy interfaces closely now with international markets for agricultural products. Farm product stock levels are low. Energy costs have jumped abruptly. Similarly, the international and domestic policy framework for agriculture is shifting rapidly. All these events point to instability as a continuing prominent concern. This has serious implications for what work we do and how we do it.

For example, despite our progress in quantifying relationships of importance to rural America and the entire food and fiber system, we have depended more than we like to admit on trend analysis and simple comparisons to experience in previous years. So long as change was minimal, the approach served us reasonably well. But it will no longer fulfill people's expectations that our profession should forecast the nearby and project the future under alternative policy and economic conditions. We need models to evaluate the price, quantity, and income effects of prospective market conditions for many commodities—grains, cooking oils, and sugar to name a few. Methods to anticipate effects on farmworkers of changing economic and policy settings are also needed. Cotton and cattle—dizzying changes there illustrate other challenges. Further, rural outmigration has been slowing down, perhaps reversing. But future shifts in rural populations are extremely uncertain; we do not know what changes in energy prices and prospective instability of conditions in rural and urban America will do to population patterns.

Of course, adjusting to change is not new. Glen Johnson reminded us in 1971 that the issues of concern to us have always shifted over time [12]. However, the rapidity of adjustment needed today is new and it affects organizations, as well as the work we do.

In meeting the challenge to keep up, our concepts of education and training are likely to be severely tested. Midcareer opportunities and experiences in which people learn new skills and prepare for different activities must become more common. People will move from one type of work to another within individual disciplines and, in some cases, from one discipline to another. Should these approaches to education and training not develop, the result will be high rates of obsolescence and research irrelevant to current and future problems.

Research approaches we use will differ somewhat in the future too. Multiple-objective concepts, recently included in water resource planning, will need to be included increasingly in our analyses. Similarly, conflict issues among rural people — in use of land, for one — will become more important. To further complicate our approaches, political and often equity considerations will increasingly favor rural and urban groups over commercial farmers. We seem to be fast approaching a time when the dichotomy between

[1] I use the term "practical problems." As Glen Johnson uses it: "problems . . . which private and/or public decisionmakers cannot avoid . . ." [12, p. 729].

rural development and our "other" work will lessen. Surely questions on commercial agriculture should not be ignored when doing research on natural resources, communities, and rural people. The reverse too. Equity questions must be investigated in research involving commercial agriculture.

There is another dichotomy which must give way and eventually disappear. To a significant extent, a false dichotomy has existed between skills and used in economic work related to U.S. problems and skills needed for research on problems of foreign countries or concerns that are international in context. Economists are more frequently getting involved in both settings. The objectives are twofold: greater flexibility in carrying our domestic and international work and increased professional development of researchers.

One of the most significant needs in international development work is analysis which will help policymakers of Lower Income Countries (LIC) choose among differing ways to organize resources to meet their people's needs. Such analysis is admittedly difficult and, in some cases, sensitive, but potential payoffs to the LIC are large. Further, research and techniques developed for small, low-income farmers in developing countries may well be applicable to some of their counterparts in the United States. Conversely, research and technology developed for America's small, low-income farmers, at some of the 1890 land-grant institutions, for example, could be adaptable to overseas problems.

While there will remain a need for some research by individuals, future research will emphasize multifield and multidisciplinary work more. The scope of problems we face, especially those considering both direct and indirect relationships, dictates teamwork. Often, individual researchers lack needed skills, experience, and time to produce up-to-date work that incorporates material from many disciplines and fields.

Saying that multifield and multidiscipline approaches will be used increasingly in the future implies more team efforts within ERS and with people in other agencies of the Federal Government and in universities. ERS has made some progress—much more is needed. Our river basin planning assistance program is one way we have confronted practical problems by joining economic expertise with other disciplines. Elsewhere, ERS staff members have joined the Cooperative State Research Service in reviewing projects of land-grant colleges and universities. University personnel have also joined our staff in reviewing selected research projects and in planning work.

There is no one answer to questions about cooperation between ERS and universities. We look forward to identifying a larger number of instances in which we and the universities share interest in the same real-world problems and where combined and coordinated resources could be effectively focused on these problems.

Research of the next 25 years will also carry a strong streak of practicality. We must feel an obligation to work on major national issues that private and public decisionmakers cannot avoid. To do such work requires flexibility, effective dialog among researchers and administrators, and joint decisions as to what work will or won't be done. We cannot afford the ineffectiveness of administrators handling all decisions regarding priorities and overlooking the innovative ideas and work of other staff members. Neither can we afford the luxury of individual researchers choosing and pursuing interests that do not coincide with those jointly decided upon. But on occasion these joint decisions will and should call for one-person research efforts having broad and perhaps unspecific objectives. Balance is extremely important; appropriate ones will be found only by trial and error. Intrinsic to an approach which copes with changing problems through joint decisionmaking is the need for evaluation of research efforts and analysis of priorities in a national framework. Then planned change can be carried out rather than unrestrained change dictated by reactions to past events.

In summary, the need to anticipate important issues is great. Crucial, too, is the call for flexibility—in ourselves, the discipline, institutions, funds—to tackle the practical problems of today and tomorrow. Though many of these needs are obvious and simple, meeting them becomes no less easier or necessary. Emerson's challenge to the Phi Beta Kappas of 140 years ago speaks to us all.

> *Will we know what to do?*
>
> *Will we as individuals and organizations discern the meaningful issues on the horizon?*
>
> *Will we learn how to effectively link the outstanding skills of research and managers so that we and our organizations are flexible enough to work on the important*

problems—the ones public and private decisionmakers cannot avoid?

Will we know how to bring this flexibility about?

Will we participate in team efforts involving other disciplines, fields, and institutions?

Will we obtain the training and experiences essential to fulfill the fundamental purposes of our profession?

If the answers are positive, this decade, as Bawden suggested for the 1960s, will in fact be a decade of awakening. The agricultural economics profession will contribute to rural and urban Americans in a manner unknown to date.

REFERENCES

[1] Baker, Gladys L. and Rasmussen, Wayne D. "Economic Research in the Department of Agriculture." Economic Research Service, U.S. Department of Agriculture. Unpublished paper.

[2] Bawden, D. Lee. "The Neglected Human Factor." *American Journal of Agricultural Economics,* 55: 879-887, December 1973.

[3] Bishop, C. E. "The Urbanization of Rural America: Implications for Agricultural Economics." *Journal of Farm Economics.* 49: 999-1008, December 1967.

[4] Bonnen, James T. "Some Observations on the Organizational Nature of a Great Technological Payoff." *American Journal of Agricultural Economics.* 44: 1279-1294, December 1962.

[5] Bressler, R. G. "Agricultural Economics in the Decade Ahead." *American Journal of Agricultural Economics.* 47: 521-528, August 1965.

[6] Brinegar, George K., Bachman, Kenneth L., and Southworth, Herman M. "Reorientations in Research in Agricultural Economics." *Journal of Farm Economics.* 41: 600-619, August 1959.

[7] Emerson, Ralph Waldo. In oration given before Phi Beta Kappa at Cambridge, published in the *American Scholar,* August 1837.

[8] Fox, Karl A. "An Approach of Deficiencies in Food Price Forecasting for 1973, and Recommendations for Improvement." Unpublished paper dated November 29, 1973.

[9] Gray, Roger W. "Agricultural Economics: An Orientation for the 1970's." *Food Research Institute Studies,* 12: 169-175, 2, 1973.

[10] Hathaway, Dale E. "The Implications of Changes in the Economy for Work in Agricultural Economics." *Journal of Farm Economics.* 44: 1241-1248, December 1962.

[11] Hightower, Jim. *Hard Tomatoes. Hard Times. The Failure of the Land Grant College Complex.* Agribusiness Accountability Project. Washington, D. C., 1972.

[12] Johnson, Glenn L. "The Quest for Relevance in Agricultural Economics." *American Journal of Agricultural Economics.* 53: 728-739, December 1971.

[13] Mueller, Willard F. "An Economist Looks at the Next Fifty Years of the Profession." *Journal of Farm Economics.* 42: 1007-1018, December 1960.

[14] U.S. Department of Agriculture. "Agriculture's Capacity to Produce." *Bureau of Agricultural Economics,* AIB No. 88, June 1952.