# OBSERVATIONS ON CHANGES IN FACTORS INFLUENCING AGRICULTURAL ECONOMICS AND SOME IMPLICATIONS FOR THE PROFESSION

## J. Richard Conner

# INTRODUCTION

Last year in the inauguration of presidential addresses to the Southern Agricultural Economics Association (SAEA) Havlicek provided a revealing history, reviewed the state of our Association, and challenged us to consider additional activities and roles for SAEA. Havlicek concluded, in part, that the SAEA had developed into a highly respected professional association that in most instances is achieving its purposes and objectives.

While I believe these conclusions are still valid, I would like to go a step further and focus on the current state of the agricultural economics profession. In so doing, the purpose shall be to assess whether the forces directing the growth and development of the profession are changing and, if so, to ascertain the likely effects of these changes on the profession. Further, since the purpose of any professional association, SAEA included, is to serve its practitioners, insight may be gained relative to the need for changes in SAEA.

Before proceeding, a qualification is needed. Most of what I am going to say has been said previously; much of it by several individuals. While I have cited a few specific references, I recognize that there are many more who appropriately should be cited but are not in the interest of brevity.

#### Who and What Are We?

At the outset we should clarify the point of who and what we are. Agricultural economics is a profession and an academic discipline. Agricultural economics is an academic discipline in that it is a specialized field of knowledge and distinct area of in-

quiry (Swanson). As a discipline, agricultural economics is heterogeneous in that it is made up of a large number of areas of specialization, i.e., production economics, farm and agribusiness management, marketing, natural resources, rural and community development, agricultural finance, agricultural policy, etc.

The issue of our identity as a discipline is somewhat clouded, however, by the claims of some that agricultural economics is only a specialization or branch within the discipline of economics. Others embrace this concept by acknowledging that economics is the "parent" discipline to agricultural economics (Harl). Alternatively, it may be argued that some areas of specialization in agricultural economics are as close to other disciplines as to economics; e.g., management, finance, statistics, etc. With such a diversity of areas of specialization, it is safe to assume that few, if any, professional agricultural economists master the entire breadth of knowledge encompassed by the discipline.

Agricultural economics is also a profession in that it is a vocation or occupation requiring advanced training and mental as opposed to manual work (Webster). As professionals, we use knowledge of agricultural economics, and other arts and sciences, in our work; predominantly as researchers, educators, analysts, and administrators. Furthermore, we perform our work for a variety of employers: federal, state, and local government agencies; universities; commercial companies; and other agencies and associations both public and private. As a profession, agricultural economics is also characterized by a heterogeneous set of participants.

Our heterogeneity may be both our largest

J. Richard Conner is a Professor, Department of Agricultural Economics and Range Science, Texas A & M University. Presidential address presented at the annual meeting of the Southern Agricultural Economics Association, Biloxi, Mississippi, February 3-6, 1985. Invited papers are routinely published in the July SJAE without editorial council review but with review of the copy editor (as per Executive Committee action June 25, 1982).

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asset and our greatest liability. It is an asset because it helps produce graduates from our discipline who are adaptable to, and functional in, a large variety of occupational settings. It is a liability in that as a professional group we lack commonality, cohesiveness, and unity.

In considering the membership of our professional organizations (American Agricultural Economics Association (AAEA), SAEA, etc.), however, two factors of commonality emerge. First, for the most part, our professional organizations are made up of persons with at least one post-baccalaureate degree in agricultural economics. Second, most of our professional association members are employed by public institutions whose missions are public service, primarily through research and/or education (on-campus and/or extension).

# FORCES INFLUENCING THE PROFESSION

What are the forces that direct the growth and development of our profession? They are many and elusive, but I submit that for all practical purposes they exert their influence in primarily three ways: 1) through the employment markets in which individuals educated under our disciplinary banner must compete for employment; 2) through the clientele that we, directly and through our employers, are asked to serve and, in turn, the types of service that these clients ask us to provide; and 3) through our professional organizations and employers in the way that we are evaluated and rewarded for our performance.

Neither time nor my limited capabilities permit an exhaustive treatment of all the forces of change impacting our profession. Nevertheless, in the remainder of our time this morning I would like to explore a few of the changes that I perceive to be manifesting themselves through each of these three areas of influence (see Harl for a treatment of other "challenges to the profession").

#### **Employment**

First, let us look at the employment market. The forces that drive our profession are significantly embodied in the employment market for persons educated under our disciplinary banner. The discipline, as prac-

ticed in our educational institutions, produces agricultural economists at the bachelors, masters, and Ph.D. levels who possess knowledge that, hopefully, can be effectively, if not efficiently, used by employers.

At the B.S. level, and to some degree at the masters level, our graduates primarily compete with graduates from other disciplines in the college of agriculture on the one hand, and graduates from the college of business on the other. Their uniqueness is largely that they take more technical agriculture courses than the college of business students and more economics and business courses than the other college of agriculture students. Their advantage is that thus equipped they effectively compete with students from both colleges for many of the jobs traditionally available to only business college or technical agriculture graduates. Thus, most of the jobs that our B.S. graduates take are jobs that are often filled by graduates from disciplines other than agricultural economics. Consequently, their job description or title is not that of agricultural economist. Instead, their position title is most likely manager, sales representative, market analyst, loan officer, etc. In actuality, most do not become members of the agricultural economics profession even though they receive their B.S. degree in the discipline of agricultural economics.

In recent years, many, if not most, of our academic institutions have acknowledged the demand for graduates with training in economics, business management, finance, and marketing as it relates to agriculturally oriented industries by offering degrees in "agribusiness." Some have changed the name of their disciplinary department to include "agribusiness." This trend has also manifested itself via the development of postbaccalaureate academic programs, such as Master of Agriculture or Master of Agribusiness degree programs. These masters level programs are designed to provide additional education in economics, marketing, management, finance, quantitative analysis, etc., for persons interested in using these skills in industry or employment other than in the research-education-service areas that require more intensive training in the scientific method. Like their counterparts at the B.S. level, however, graduates of these degree programs generally take positions that are predominantly not titled "agricultural economist."

This trend is resulting in more of our B.S. and M.A. agricultural economics students receiving less training in technical (production) agriculture and more training in business management, marketing, accounting, finance, and methods of quantitative analysis. An important challenge to our profession stemming from this trend is to provide professional educators who can understand and impart to these students the large array of knowledge and skills that their agri-industry employers will expect them to be capable of using.

This is not a challenge to be taken lightly. because most of our agricultural economics teaching positions are filled with Ph.D. agricultural economists whose academic training has traditionally emphasized scientific research. Because of this emphasis on scholarly inquiry, few of our Ph.D. agricultural economists gain much knowledge of operational procedures and problems of commercial agribusiness through employment or consultancies with such companies. Alternatively, recruiting Ph.D. level agricultural economics students from such companies has likewise not been very successful because the individuals who are capable of Ph.D. work are usually those who must sacrifice significant salary losses if they turn to an academic career.

One way in which our professional organizations might better serve those among us responsible for training students in agribusiness is to explore ways to facilitate interaction and communication between agribusiness companies and those in our profession who must educate their future employees. Recent action by the AAEA to appoint an Agribusiness Committee to facilitate interaction between agribusiness and the agricultural economics profession seems to be a step in the right direction. Is it not also time for the SAEA to at least investigate the possibilities? Activities which SAEA might consider include an exclusive agribusiness symposium where agribusiness people are asked to communicate their needs in employee training. Another alternative would be to encourage development of industry internship programs for professional agricultural economists similar to those commonly designed for students.

### Clients and Service

The clients that we are asked to serve, and the types of service that they ask us to provide, have substantial influence on the rate and direction of our profession's growth and development. Our current composition as a profession; i.e., the relative influence of the various areas of disciplinary specialization, types of work we perform, etc., is largely a result of the influence of these forces during the past several years.

I perceive that there are several changes occurring in this area of influence that are likely to significantly alter our profession; particularly those of us in farm management and/or production economics. First, the clients who we serve are changing, or at least their relative influence is changing. As was mentioned earlier, most of us are employed by public institutions. As such, our salaries and support come largely from state and federal taxes. In keeping with our employers' missions of public service, we, as professionals, are expected to serve the public through service to our institution, our specific clientele groups, and our profession or discipline. One factor that is changing the relative influence of our various clientele groups is the trend toward a larger proportion of our institutional employers' funds coming from state as opposed to federal sources. Under the banner of accountability, this trend is resulting in increased emphasis on work that is directly relevant to more specific clientele groups within the individual states. Conversely, state taxpayers are more reluctant to support efforts that are targeted at more general problems.

The trend toward a larger proportion of state as opposed to federal funding and the resulting emphasis on specific, within-state clientele is partially responsible for the development of a trend toward a more heterogeneous clientele within the United States agricultural sector. The trend toward client heterogeneity is also partially due to several other trends; two examples of which are the trend toward fewer, but larger, firms and the trend toward increased instability in product and factor markets.

The type of service that is being demanded by this more heterogeneous clientele is for more individualized applications of diagnostic and analytical techniques. This is in contrast to the more traditional services which were largely characterized by generalized problem diagnosis and prescriptive solutions that were deemed relevant for a large number of firms within a region and/or a commodity subsector.

These changes in clientele and types of service requested have already impacted our profession in several ways. One of the most significant is our increased involvement in multi- and inter-disciplinary research and education efforts (Swanson). These integrated projects and programs are necessitated by our clientele groups' need for assistance in assimilating and integrating the large quantities of information required for the firm to efficiently use its specific resources to achieve its individual goals and objectives. If we as agricultural economists ignore the demand for this type of service, it will surely be provided by another source. Examples of this happening can be seen in the disciplines of forestry and range science which now have "forestry economics" and "range economics" as areas of specialization within their disciplines.

Another significant impact of the increased requests for more individual application of diagnostic and analytical techniques is the need to teach the use of these techniques to clients other than university classroom students. Many of these clients are ill prepared in the sense of training in theory and quantitative analytical methods but, nonetheless, they want to know how to use these techniques. In pursuing this task, we must develop delivery systems that are better suited to the job at hand than the traditional one-half day meeting or seminar in which the talks are presented by several lecturers in a "scatter gun" fashion.

The microcomputer and the ensuing demand for diagnostic and analytical software are simultaneously part of the problem and part of the solution. The microcomputer has made it possible, at least conceptually, for any firm, regardless of size, to afford the use of diagnostic and analytical techniques which, heretofore, were only practical for large companies and institutions. The problem, of course, stems from the need to adopt the diagnostic and analytical techniques for use on micros in a large number of specialized applications. This requires not only adopting the techniques but also educating the client in how to apply and interpret the results from their use.

The next step in providing the client with this individualized service will likely involve the use of computer based "artificial intelligence" and/or "expert" systems. These systems will allow the client access to the expert's knowledge about very specific cir-

cumstances without requiring the client to achieve the degree of understanding necessary to read about it in a book. Likewise, these systems will alleviate the "expert" from tying up his/her time by directly consulting with each individual client about the specific situation (Helms).

As professionals, our challenge is to adopt and use this technology as efficiently as possible in servicing our clientele. To do so, however, will force us to become very familiar with the manner in which our clientele perceive problems and make decisions. It will also require that we develop new skills in the development and dissemination of these new services.

In recognition of the need to assist those professional agricultural economist who must provide this type of service, the SAEA last year began publishing articles related to the development and use of microcomputer software. Given the rapidity with which this new technology is developing, it is likely that the SAEA should be looking for additional ways to assist our professionals in their quest for education in the possibilities for adoption and use of these techniques; particularly in extension and teaching. One way this might be facilitated is through the sponsorship of short courses and/or workshops taught by representatives from the computer industry and/or those among us who are "early adopters" or "innovators" in the use of this technology.

#### **Evaluation and Rewards**

Participants in any vocation or occupation are influenced by the manner in which they are evaluated and rewarded for performance. One characteristic of a profession, however, is that it encourages peer evaluation among its participants and thus fosters commonality in evaluation criteria. Furthermore, because we as professionals have demonstrated our willingness to submit to and participate in peer evaluation, many of our employers rely on these peer evaluations as the primary basis for allocating rewards for performance. In cases where factors other than peer evaluations are used, the criteria for evaluation of performance are usually much the same as those used for peer evaluations. The point is that we as professionals, through our evaluations of each other's performance, have a significant influence on our profession's composition and character.

A significant question then is "what are we making ourselves into?" One way to answer this question is to examine the criteria that we use in evaluating our peers. While these criteria should, and do, to some degree, vary with the type of employer, specific job description, etc., the trend in recent years has been to rely more on the quantity of presentations and publications as the primary evaluation criterion. More specifically, the trend has been to favor publications in scholarly journals and to weigh some scholarly journals as more prestigious than others. This trend toward the use of publications in scholarly journals as the predominate criterion for evaluation promises to impact our profession in a way which cannot be remedied by simply expanding the size or number of such outlets. This is because these publications are largely communications among ourselves and consequently the work that is most often published is discipline oriented and related to theory and methods as opposed to work related to real world economic problems of significance in agriculture and related sectors. The result, of course, is to encourage our professional participants to produce discipline oriented work which, realistically, must come at the expense of work designed to directly service our clientele groups and/ or our institutions.

Before proceeding further, let me note that this is not intended to disparage discipline oriented work. Instead, it is a plea for recognition of the potential for the continued pervasive use of our own evaluation criteria to produce an introspective imbalance in the orientation of our profession. In light of the changes taking place in our clientele, the kinds of service we are asked to provide, and the employment market for our B.S. and M.A. graduates, such an introspective orientation could be particularly detrimental to our profession.

Considering the heterogenous nature of our discipline and profession, it seems inappropriate that we all be evaluated primarily on the criterion of service to our discipline through scholarly publications. Just as no one can master the entire body of knowledge encompassed in our discipline, no one can excel in all of the various types of services that we as professionals are asked to perform.

As a profession, our challenge is to seek a better balance in the criteria we use in our peer evaluations. In so doing, we must recognize that the criteria by which performance should be evaluated must account for not only the quality and quantity of the service being provided, but also, the appropriateness of the specific type of service for the target clientele group.

One way in which our professional associations can help to foster more balance in our evaluation criteria is through a professional awards program. Among our national and regional professional organizations, the AAEA, and to some degree the Western Agricultural Economics Association (WAEA), have programs that seek to recognize superior performance in providing the relatively wide variety of types of service that our professionals are asked to perform. In so doing, however, there is no doubt that there is room for improvement in the breadth of the programs and selection procedures which are used. Currently, the SAEA does not have an awards program. Over the next few months. however, we will be investigating the question of whether and what types of awards programs the SAEA should initiate. Hopefully, in so doing, we can help to bring attention to the need for balance in our professional performance evaluation criteria.

#### **CONCLUSIONS**

Our profession is comprised of a diverse group of participants employed in the provision of a wide variety of services to an increasingly heterogeneous clientele. To help maintain our professional standards of quality and to improve our ability to serve, we must continuously strive to enhance our knowledge and skills. However, just as none of us can master the entire breadth of knowledge encompassed by our discipline, none can excel at providing all of the types of service that are demanded by the wide spectrum of clientele that the profession is expected to serve.

As a professional organization, one of our challenges is to strive to facilitate as much enhancement of our professionals' knowledge and skills as may be deemed important to significant numbers of our members, while

<sup>&</sup>lt;sup>1</sup> Harl expressed a similar concern, but supported it with a somewhat different line of reasoning.

simultaneously striving to not proliferate our programs to the point that none of them are effective.

To meet the challenges to our profession, we must constantly be alert to changes in the forces that impact our profession through the employment markets for our graduates and through our clients and the types of service that they demand. Our failure to recognize, interpret, and react with appropriate performance to these changes can lead to significant losses in the demand for our professional services. One way in which we

can exert control over, as opposed to a reacting to, the forces which influence our profession is to do a better job of developing evaluation criteria appropriate to the specific types of service that we as professional agricultural economists are expected to provide. Through the development and use of better criteria in our peer evaluations, we can also promote their use by our employers. The overall effect should be to enhance the development of agricultural economics into a profession which is more alert and responsive to society's needs.

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