THE ROLE OF THE AGRICULTURAL ECONOMIST IN INDUSTRY

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Agricultural economists are employed by agri-business firms that vary widely in size, structure, and enterprise.

A survey of 25 firms discloses that:

The principal activities of these professionals are forecasting and general economic analysis. Although not specifically defined by each firm, the latter may be described as including a wide range of subject areas involving consulting, impact, policy, etc. Long-range planning and operations research were less frequently identified as functions performed.

The Master's degree predominates among firms surveyed, with Bachelor's and Ph. D.'s about equally represented. Based on recent hires among the firms surveyed, however, a trend toward Ph. D.'s seems to be developing. Perhaps reflecting the preponderance of Master's degrees, most firms utilize a more descriptive, subjective type of analytical approach, as opposed to quantitative, model-oriented analysis.

Based on the responses of the firms reporting, extension economists are not a heavily-used resource. Most indicated contact as being "occasional", or "infrequent".

Analytical results are presented orally and in memo form, as well as in more formal reports. Where reporting method was ranked,

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oral presentation was indicated as primary. Considering the close relationship between most agricultural economists in industry and operating personnel, it is not surprising that communication was an area identified as needing more emphasis in academic training.

Of the 25 firms responding to the survey, Purdue, with 14 mentions, was most often identified as doing the best over-all job of preparing graduates for careers as agricultural economists in industry. Oklahoma State was a distant second with 4.

These are the "facts", and occasionally, there is more. I'd like to explore some possible additional observations that might be made, based on my knowledge of the firms, the people responding, and many members of their staffs.

First, if this survey had been conducted 10 years ago, many firms would not have had even one agricultural economist functioning as a professional analyst. In other words, the agricultural economist in industry has "come into his own", and gives every indication of remaining as a key contributor to corporate activities.

It can be argued that this phenomenon is the result of a combination of many forces, not the least of which is corporate affluence, making it possible to afford a resident "seer". To the extent that many earlier Agricultural Economics majors gravitated to operational positions, the way

may have been paved for the entrance of others in staff positions. The general expansion of college and university training following World War II can be credited with spawning a variety of management training programs which, in turn, called attention to the need for more than just "line" personnel. Obviously, there are many other reasons for the increasing numbers employed by industry, but it appears that the agricultural economist has become, and should continue to be, a prominent feature in decision-making in agri-business firms in the U.S., and will likely be found in increasing number in firms abroad.

There are no corporate structures that seem to have a "corner" on agricultural economists, as private or publicly-held firms and cooperatives all utilize their services. Nor is there any discernible difference in the utilization of agricultural economists by kind of firm. The extent to which commitment is made, however, is observed to be directly related to the training of the top management. For example, if an analyst has moved up through the ranks to an operational position, there is a tendency toward larger, more sophisticated departments providing analytical service.

Based largely on personal knowledge, but supported by the survey, I believe those holding only a Bachelor's degree will soon become a definite minority. In fact, it is not unreasonable to predict that with few exceptions, new entrants will have at least a Master's, and many more will hold a Ph. D. Bachelor's programs in general fail to provide the specialization in courses necessary to permit identification with analysis

as a vocation. Those with only a Bachelor's who become involved in this area will probably gravitate to the position from some other starting point.

The use of extension personnel as sources of information or counsel varied largely with the orientation of the person heading the analytical department. If, for example, the Director of Economic Analysis was a former extension economist, frequent contact was noted. Likewise, if the firm was a cooperative, more frequent extension use was noted. Privately-held firms used extension personnel least often.

Although the complaint was not universal, and not necessarily unique to large or small firms, communications was mentioned as a deficiency by nearly half the respondents, and qualifies as worthy of comment. Writing skills are generally not required beyond freshman rhetoric courses. Some agri-business curricula include speech, business letter, and report-writing courses, but most Agricultural Economics majors have a tendency to look upon such courses as "non-essential". Experience confirms that communications courses cannot afford to be left in the elective category, and should not be limited to a 3-credit-hour contribution. This same criticism could likely be leveled at any field of specialization, but without the ability to communicate, a large percentage of technical talent goes begging, and once the graduate leaves the classroom, it becomes more difficult to compete with the daily routine.

One of my colleagues described the communication problem as one

of "clarity of thought". He suggested that the fault may not be that undergraduates are ill-prepared, but that during the graduate program, so much emphasis was placed on highly detailed theory and research that communicating skills may have atrophied through disuse. If this be correct, a refresher within the graduate program may be in order.

By contrast, most respondents reported that graduates were receiving enough theory, and considered their mathematical training to be adequate to good. There were, however, a sufficient number of responses indicating deficiencies in quantitative expression to justify a brief comment. Math, through calculus, and a couple of statistics courses, are probably sufficient to handle requirements of most firms. Anyone needing more is likely being utilized as a technician rather than as an economist. On balance, most schools seem to be doing satisfactorily in preparing students for business requirements in non-communication skills.

There seems to be no particular correlation between the size of firm and the number of professionals employed. One firm with less than 6,000 total employment had 12 agricultural economists engaged in economic analysis, whereas another firm with more than 40,000 employment had only 2.

The growing shift from the Bachelor's to advanced degrees for new hires for analytical positions reflects a greater awareness of the value of both maturity and additional training. Successful completion of at least a Master's degree identifies the candidate as one who is capable of

independent research as well as one who is more likely to find challenge and satisfaction in research. This is not to say that those with only a Bachelor's cannot "find happiness" and be successful as researchers, but other things being equal, the odds favor the holder of the advanced degree.

As a consequence, institutions and departments should review their programs to ensure that options are available which more nearly prepare a graduate for an industry position. I should point out that differences of opinion exist as to the purpose of education, and in particular, advanced study. It is not suggested that universities become "vocational schools" for industry. But, as an increasing percentage of graduates find their future in industry, the question of "how well are they prepared?" should at least be asked.

In the opinion of more than 50 percent of the respondents, one university was doing a better job than most. Even discounting the possible "alumni" bias, 40 percent of the respondents identified Purdue as one of the two schools doing the "best job" of preparing Agricultural Economics graduates for careers in agri-business. I suggest it may be advisable to look at their program.

Claud Scroggs is presenting a paper that treats, in depth, the relationship between industry and extension agricultural economists. I do not wish to intrude on his subject area nor to take a position based on limited research, but would like to offer a couple of personal observations.

Some extension economists enjoy a wide industry acceptance, while others do not. Those that do, tend to "tell it like it is", whereas those that don't, generally serve up "warmed over" USDA statistics and E.R.S. rationalizations.

Those same individuals that are most often part of industry programs are also heavily booked for producer meetings. I consider this something more than coincidence. I believe the producer, like we in industry, wants something more than the last Feed Situation rehashed. So there is no misunderstanding, this is not a criticism of E.R.S. or the Outlook and Situation staff -- we respect them and read their material from cover to cover. But, when it has been thoroughly digested, it is not uncommon to hunger for a different course, if not a new chef.

This leads me to the observation that extension economists are not "in the hip pocket" of industry, as implied in Hard Tomatoes, Hard Times, or if they are, no more so than they are in alliance with the producer whom they also serve.

Because he has recently retired after 30 years on the extension staff at the University of Illinois, I consider it appropriate to identify L. J. "Larry" Simerl as one of those who served his constituency capably, conscientiously, selflessly, and always left his readers and his audience feeling just a little bit smarter when they finished his letter or he finished a speech.

When I was on the Industry Committee of the Association, we

attempted to develop a program of professional exchange between industry and academia. Although no formal procedure was or has been established, I am personally very enthusiastic about the concept. I am pleased to note the increasing number of firms taking advantage of the opportunity to utilize sabbatical talent. This sort of program represents a mechanism of communicating directly the role of the industry agricultural economist, as well as assisting in curricular overhaul.

A final observation: both schools identified as doing the best job of preparing graduates for industry careers have staff members who have been in industry positions or have spent sabbaticals with industry. Perhaps it's just coincidence, but I think not.

When I was asked to accept this assignment, I did so with the proviso that I'd "get a little help from my friends". The response was outstanding by statistical standards: 84.4%. Although it may not have been entirely representative, I consider the sample to be a good cross-section of agri-business firms, and to effectively portray the broad range of activities in which agricultural economists in industry are involved.

Perhaps the questionnaire limited respondents to answers that mirrored my own views; however, I was very much impressed with the coincidence of agreement with the "biases" I have held for so long. It is encouraging that others concur that some changes are needed and that those of us who are industry professionals need to make known the deficiencies and be willing to work toward their elimination.

It is clear that industry has a need for Agricultural Economics majors, and based on personal knowledge, that need is growing. This suggests that institutions training students for careers in industry need to become attuned to the particular demands placed on the industry economist. I have no illusions about revamping graduate programs as a result of this presentation, nor do I presume that my views are necessarily shared by all of my industry counterparts. But, considering the near-unanimous identification of forecasting as a primary activity, a personal observation may be in order. Forecasting in agri-business firms encompasses a broad range of subject areas, and involves both simple and complex techniques. Some firms lack facilities to utilize a strict econometric approach, so less sophisticated tools should be made available. I find methods learned 30 years ago to be applicable today, yet many graduates are lost unless they have a computer terminal at their disposal.

To recap: agri-business firms are employing increasing numbers of Agricultural Economics majors for professional analytical positions. Although the majority currently employed hold only a Master's degree, Ph. D.'s are becoming more numerous.

The emphasis placed on forecasting suggests the need for some specific training in addition to fundamental backgrounding in sector interrelationships. Give students a problem -- make it real -- something they can relate to -- they'll be forever in your debt!

The business world is not static. No matter how sophisticated

the model, there are unexpected, exogenous shocks lurking around every corner. Impress this upon the student, and he'll be less likely to be disappointed with an industry career. Equip him with both "hand tools" and "power equipment".

Insist on maintaining high communication standards. It isn't enough that the graduate know what he's doing; can he show or tell others? I am told that many doctoral committees are surprised by the relative difficulty that some candidates have in expressing research objectives, methods and results. Perhaps the program needs a better balance.

Industry is certainly not blameless in this problem of preparing students for careers in industry. It has been easy to criticize, but far more difficult to become involved in corrective action. There is a wide range of opportunity for those of us in industry to take part in this process, including professional exchange, internships, active Institutional Membership in AAEA, a willingness to acknowledge academic viewpoints as well as our own, and perhaps most importantly, open up and maintain clear channels of communication!

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