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RESEARCH NEEDS IN AGRICULTURAL ECONOMICS FROM THE EXTENSION PERSPECTIVE: ATTITUDES VS. AN INVENTORY OF NEEDS

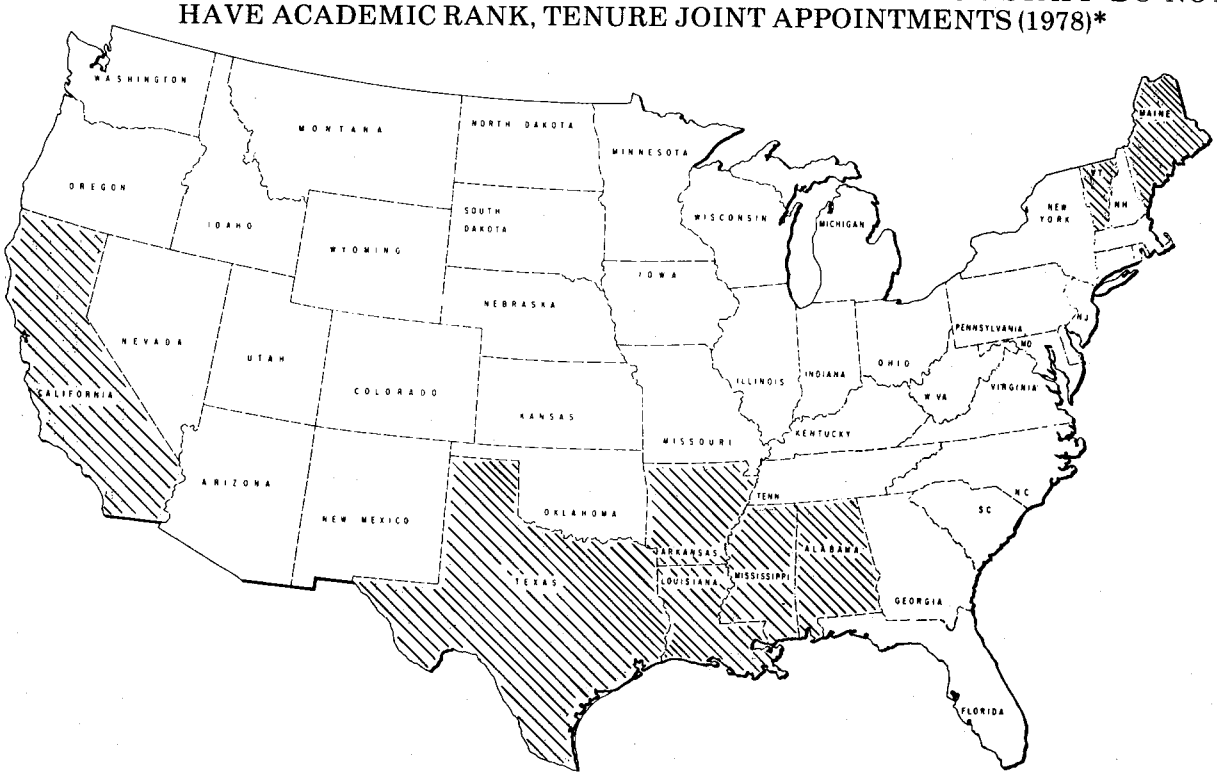
J. Michael Sprott

It would be presumptive of me to inject an Alabama bias into the rank ordering of research needs which should be addressed by the agricultural economist; I prefer to address the issue of how priorities will be set and how the use of the research will be brought about.

These topics have received much attention over the last decade, in the journals of both the Southern Agricultural Economics Association and the American Agricultural Economics Association [1, 2, 4, 5, 9, 11, 12, 16-18, 20, 22-24, and 27].

Adding new light to these issues is complicated by the problem exposed on Figure 1 [25]. In the vast majority of the states, the Pogoian thesis is correct insofar as extension and research endeavors are concerned: "We have met the enemy, and he is us." Joint appointments (faculty rank, tenure, equal treatment) allow or foster the immediate interaction between extension and research; there the dichotomy is normally embraced within the same scientist, in contrast to the separation between the extension arm and the research arm which remains at only a few land grant institutions. My professional career spent in Arkansas, Texas, and Alabama has led me to see only the separate extension-research system in operation, and that is the base from which my comments and observations are drawn. This article is not intended to be an academic treatise, but a reasoned plea for rational and rele-

FIGURE 1. STATES WHERE COOPERATIVE EXTENSION SERVICE STAFF DO NOT HAVE ACADEMIC RANK, TENURE JOINT APPOINTMENTS (1978)*



*Shaded States Do Not Participate in Faculty Status, Etc.

J. Michael Sprott is Director, Alabama Cooperative Extension Service, Auburn University.

vant research from the agricultural economist and realistic attitudes on the part of the administrator of these scientists.

From my perspective as an extension administrator, and previously an area farm management specialist, it is evident that extension's greatest need is for hard, relevant facts. Paraphrasing a recent statement emphasizes this point: "A basic fact about (the) Extension (specialist), which must not be overlooked is that (the specialist) can not be any better than the quality of subject matter (he) dispense(s) educationally. Further, we must recognize that (his) subject matter sustenance comes from applied research. Clearly (his) role is that of interpreting applied research results in real life situations as found on the farm, in the community, in the marketing firm, and in policy making actions" [18]. This is a listing of research needs (or audiences) about which I will have more to say.

I agree completely with Kolmer when he says: "The acceptance of the total output of the land grant university is materially affected by the creditability of the extending system attached to that land grant university. It (extension) must be responsive in the sense that it recognizes the problems facing the individual and the community are the problems they consider as high priority problems to be worked on, rather than solely working on problems that interest, stimulate, and intrigue the individual extension or research worker" [15].

Thus, the challenge for research lies "in appropriately assessing the signals received from continuing education (extension) and balancing them against research interests generated by the research staff" [8]. The very essence of the extension-research interface is present and pervasive in the foregoing few paragraphs—stemming from a balanced research program, yielding an effective extension system, resulting in recognized impact on and support from our clientele groups.

ATTITUDES

Not all research will or should be stimulated by investigations into clientele needs by the extension specialist; basic research in new methodologies, such as simulation techniques, very probably sprang from the curious mind of one or more researchers, unaided or unfettered by the extension specialist performing his role of problem identification. However, it does seem myopic when members of our own discipline [7, 10, 14, 21] address the issue of "Agricultural Economics: 1950-2000" and fail to mention even once the linking mechanism which extension performs in the equation of research-clientele needs-research. Those of us in extension are particularly wounded when we read that "researchers must, in the future, not assume that they have done their job if they supply their clientele with a random assortment of pieces of positivistic knowledge obtained from ad hoc excursion research" [10]. We contend that the urging (by research administrators) for researchers to develop appropriate organizational means and processes for interacting with our clientele for the purpose of identifying and defining its research needs is unnecessary; extension can and will do that very job if the agricultural economist engaged in research is willing to share and to interact.

The license to operate unilaterally, whether it be the agricultural economist functioning as a researcher or functioning as an extension specialist, has been revoked, if it were ever issued at all. The new farm bill, the resultant USDA reorganization, the President's FY 1979 budget recommendations, the ever blossoming regulations from EPA, OSHA, etc., messages coming loud and clear from state legislatures about the level and use of state appropriations, the emphasis on competitive grant research funding within USDA budgets, and the generally pervasive demand for accountability all attest to this fact. A basic need, then, is for the agricultural economics researcher to express a willingness and desire to work with, share with, and prosper with the extension specialist.

A second source of changed attitudes must be the administrators of these agricultural economists. Holding out single or senior author journal articles as a major indicator of promotability of staff seems suspect in light of the fact that our 3,000+ regular members submit about 300 manuscripts per year and about 100 ultimately are published in the *AJAE*—poor odds, poor decision making. Lee Kolmer reviews both this issue and the issue of multidisciplinary research and extension, with critical recommendations for administrators [16, p. 780].

> "The recognition of the opportunity for effective team research and extension, and the commitment to such activity can not just come from economists. It must all come from other disciplines. This, I believe, is one of the challenges that faces administrators of agricultural colleges (and department heads), agencies, government agencies and agribusiness firms. In universities there is a great temptation for scientists to talk to each other through refereed journals. The reward

system fosters this practice. This is true in too many ways at my own institution, and I am quite certain that it is true at many other institutions. However, this does not make it right or necessarily useful under today's conditions. Today's problems require the talents of numerous disciplines, and administrators must modify reward systems so that individual research and extension staff members can indeed see that commitment to teamwork will not only produce useful output for clientele but also will result in recognition of their efforts. This is a very substantial challenge for those of us in administrative positions in universities."

This is not to say that "all faculty in economic research would maintain constant, day-to-day liaison with research counterparts in other departments, but such liaison must be encouraged and stimulated with more vigor than in the past. Economists must be more aggressive in their dealings with biological scientists. Too frequently the search for economic significance is undertaken or even considered only after the data is already in hand" [17].

Administrators within the land grant institution, be they deans, directors, or department heads, must also pay attention to constructive criticism being received from another of our major clientele groups, agribusiness. Scroggs states, "The orientation of extension economists toward agricultural industries is saving the colleges of agriculture from a rather complete isolation from agri-business.... I do not speak for myself alone when I say the majority of economists in agribusiness firms feel that agricultural economics as practiced on the university campus virtually has 'no market' for its research—other than among other university economists" [23]. One man's opinion? Possibly so, but worthy of our serious concern and attention.

A third source of changed attitudes must be the environment itself. Our region, the South, is in particular need of your attention because of the dramatic and permanent changes which are underway in this area. The South currently uses a third of the nation's cropland but we have the nation's largest reserve of potential cropland. An additional 139 million acres of Class I, II, and III land conceivably could be tilled; about one half of this reserve currently is in pasture lands and one fourth is in wooded land [26, pp. 4-6]. Between 1960 and 1975, real personal income grew in our region 50 percent faster than the national average, our manufacturing employment increased by twice the percentage amount of the national average, our population growth was twice the national rate between 1970 and 1975, we produce more than one third of the $90 billion U.S. agriculture output, and our percentage is increasing. Further, the economic climate in the South (a function of tax levels, government intervention, unemployment, etc.) shows that seven of the top 10 states in the nation are in the South, with Alabama second only to Texas in overall positive economic climate suggesting dramatic, positive economic growth. We are where the action is or soon will be!

Strictly from an agricultural basis, "Important implications for the South are that the region's competitive position in international markets may be superior to its position in the domestic market for several important commodities. Particularly, in the case of feed grains and soybeans, and associated livestock activities, the South is a marginal producing area in the United States. However, the region may have a competitive advantage over much of the world outside the United States. Rice, peanuts, citrus, and wheat also offer considerable potential for the South in international markets" [19]. Equally enthusiastic statements could have been made or found about natural resource economics, community resource economics, public policy issues, and all of the other subdisciplines in which the agricultural economist is involved.

RESEARCH NEEDS

In terms of particular research areas, rather than the aforementioned attitudes on the part of the researcher or administrators, I would offer the following suggestions—few, if any, original, but possibly ordered or emphasized differently. This listing would be ordered by decreasing usefulness to extension as we deal with our agricultural clientele.

1. Commercial agriculture, with great emphasis on energy, economic thresholds of pesticide applications, implications of the new farm bill on farm growth, continuing attention to the impact of the new tax bills on estate and personal taxes, credit planning and acquisition, small or low income farm management research, forestry management, management of nontypical commodities such as shrimp and catfish, cooperative marketing mechanisms, and others too numerous to mention.
2. Natural resource economics, giving particular attention to the "Closed Earth" concept (as espoused by Boulding and mirrored by Kelso).
3. Rural resource development, or alterna-

tively community development, or alternatively regional economics.

4. International trade, including input-output coefficients from foreign trade of American agricultural products.
5. Economic theory or new methodology, in comparison to mission oriented or pragmatic research.

I have not mentioned the extremely critical need for public advice and assistance from public policy economists, employed within the land grant institution and backed by a breadth of policy oriented research. Much of our public policy on agriculture is formulated through research and extension efforts in the Midwest and interpreted in Washington, culminating in farm bills which finally are hammered into shape after exposure to the political processes of hearings and lobbying. Objective and well grounded voices must be heard from the South from within the land grant institutions; our present audiences deserve this contribution and our future clientele groups depend on it to a great extent.

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