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

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Six disctinct topics receive some attention in Sprott's article: (1) differences among land grant universities in the organizational status of the state agricultural extension service and in working relations between research and extension faculty; (2) the way in which clientele needs should be identified for use in establishing research priorities of the state agricultural experiment station; (3) multidisciplinary research, the university reward system, and research priorities of faculty employed by the state agricultural experiment station; (4) the image of agricultural economics research from the agribusiness point of view; (5) effects of economic conditions in the South on research priorities in that region; and (6) Sprott's personal rank ordering of major research areas within agricultural economics. Sprott is to be commended for recognizing the relevance of these six topics to his subject. The principal criticism is that he did not use a few introductory paragraphs to develop an organizational framework for his article so that the relevance of these topics to one or more central themes might be more easily understood.

Most of Sprott's paper addresses the broad question of extension's need for research results without regard to subject matter or discipline. He develops two important and relevant issues. The first is performance of the state agricultural experiment stations in meeting the needs of the state cooperative extension services for research results. The second issue is the land grant university as an environment for the conduct of applied research in agriculture. My comments are directed to these two issues rather than to a detailed discussion of Sportt's article.

PERFORMANCE OF THE STATE AGRICULTURAL EXPERIMENT STATIONS

One concludes from Sprott's article that the state agricultural experiment stations have not been responsive to needs of the state cooperative extension services for research results. Some of this criticism is valid, but not all. One of the main causes for erroneous criticisms of this type is failure of persons in extension to distinguish between research results needed and information needed.

The cooperative extension service in a given state has need for a great variety and large volume of information and should use a variety of information sources. The results of recent or current research by research counterparts in the local agricultural experiment station is only one of those sources. Some other sources of information include observations on the performance of ongoing activities in industry and government; result demonstrations and development activities conducted by industry, industrial organizations, and agencies of government; statutes enacted by legislative bodies; ordinances, rules, and regulations established by agencies of governments; accumulated knowledge generally recorded and available in written form; extension-conducted result demonstrations; and last, but not least, extension program planning and development. If extension information is to be timely, extension personnel must be familiar with and make use of all these information sources as appropriate. To do so also will help them improve the clarity and reliability of extension information.

This enumeration of different sources of knowledge or information should remind us that the acquisition of new knowledge and further interpretation of present knowledge are not uniquely research activities. Rather, acquisition and interpretation of knowledge can be achieved by the human agent observing and interpreting any activity about him. One may think of such observations and interpretations as occurring over a continuum extending from the most casual and incidental observations and interpretations through the most formally organized research.

In this continuum, extension result demon-

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strations and extension program planning and development are at the boundary of applied research; and as Sprott noted, those extension activities interface with applied research. Near this interface is a gray area which might logically be classified as either research or extension. However, I have observed in recent years, that state extension administrators, and to a lesser degree other state extension personnel, have increasingly gone beyond this gray area and have looked upon many activities as research which should be accepted readily as extension result demonstrations or program planning and development.[1]

One cause for this attitude of extension administrators and specialists is the rapid increase in costs of performing the more sophisticated result demonstration and program planning and development work required if extension is to serve effectively an increasingly sophisticated clientele. Extension administrators appear to understand that a more sophisticated clientele requires better trained specialists; but they do not seem to understand that better trained specialists require much more support for strictly extension activities if their skills are to be fully exploited. Their thought process appears to be that historically the state agricultural experiment station has provided its scientists with sophisticated and costly equipment, supplies, facilities, services, and support personnel, but extension has not. Therefore, when extension finds it necessary to pay for what traditionally have been research support items, that is *prima facie* evidence that extension is engaged in research. The rapid rate of inflation in recent years has aggravated this problem by putting both extension and station support budgets under pressures.

One other source of extension criticism of the state station arises because of failure to recognize that the station is not the only source of applied research results which extension should use. Some other sources are other state stations, other research units of the state land grant university and other universities, research units of the U. S. Department of Agriculture and other federal agencies, other research agencies of the state, and private research organizations. Thus, there is not and should not be an applied research counterpart within the state station for every activity in which extension is engaged. In other words, it would be an inefficient use of the state station's resources to try to provide applied research support for each activity in which the state extension service is engaged.

In recent years, extension has moved into nontraditional program areas, areas in which the state stations had few or no programs and few or no new funds with which to expand. Moreover, in some of the new and expanded extension program areas, such as human nutrition and area development and housing, other public and private organizations already are generating considerable relevant applied research results.

THE LAND GRANT UNIVERSITY AS AN ENVIRONMENT FOR APPLIED RESEARCH

Sprott argues that research personnel employed by the state station have no need for contact with extension clientele other than that which might arise out of their routine working relations with extension. He says:

". . the challenge for research lies in appropriately assessing the signals received from. . . extension and balancing them against research interests generated by the research staff. . .resulting in recognized impact on and support from our clientele groups. . . .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...."

This argument appears to be inconsistent with Sprott's plea for more applied research by the state agricultural experiment stations to provide information needed by extension's clientele. Although the state station is only one of many information sources available to extension, it is a critically important source in many problem areas. It is the only information source which should be expected to perform applied research tailored to meet the unique needs of those within-state agricultural clientele who provide most of the continuing support for both the state agricultural experiment station and the state cooperative extension service. What is badly needed is an effective means of insuring that those unique needs are identified and that resources of the station are utilized in an efficient way to attack the more important problems.

The greatest hinderance to development of such a responsive station program is the adverse climate in the college of agriculture

[1] I interpret Sprott's comment, "Extension's greatest need is for hard, relevant facts," as reflecting this type of erroneous thinking.

within the land grant university. The land grant university and college of agriculture have moved very rapidly toward general university and academic college models and away from the tradition of service to the people. There has been a broadening of intellectual, vocational, and disciplinary interests and skills within the land grant university and college of agriculture. The land grant faculty have been given even greater control of the faculty reward system so that the broader interests and skills have been reflected in that reward system. Station administrators have had their administrative authority eroded along with that of the academic administrators in the university, despite the nonacademic purpose of the agricultural experiment station and the continuing need for a directed research program in agriculture. There has been a sharp decrease in the weights given the more practical and applied faculty contributions in relation to the more intellectual and theoretical types in faculty performance evaluations. Most station scientists are employed jointly by the academic program of the university, and the weight given academic program needs and academic performance of the faculty is grossly in excess of the share of salary and support provided from the academic budget.

An essential element in any effort by state agricultural experiment station administrators to restore responsiveness to clientele needs is increased direct contact and interaction between station administrators and scientists and the station's and extension's common clientele. Such contact will have some direct effects on the faculty member's personal research priorities. In addition, the clientele may be encouraged to seek changes in the university system which will redress the reward system for faculty employed or supported with agricultural experiment station funds and the authority of station administrators. Extension administrators and specialists can help such efforts to succeed by cooperating with station administrators and station-employed faculty to develop direct contact and interaction with clientele groups. The future well being of both the state agricultural extension service and the state agricultural experiment station depends on the success of such efforts.