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REGIONAL SHARING IN AGRICULTURAL AND
RESOURCE ECONOMICS EXTENSION

Robert L. Christensen and David A. Storey

Extension Paper Series #84-1

December 1984



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INTRODUCTION AND BACKGROUND

Introduction

A variety of forces have created stresses on land-grant university extension programs in recent years. Support for extension programs in real dollars has been static for at least the last decade (Joint USDA-NASULGC Committee, 1983) and, along with research and instructional support, has declined in the most recent years. Extension has seemed particularly vulnerable to budget stringency, especially where joint appointments are prevalent, because tenure-track requirements favor research over extension, and on-campus instruction typically receives higher priority than off-campus programs. The result has almost certainly been a decline in professional time committed to extension programmatic activities.

At the same time extension audiences have broadened to include a wider range of types of farmers and non-farmers (even though the number served has decreased) and the needs of these audiences embrace more complex economic and technological issues. The level of scholarly knowledge necessary to effectively link research to users has become more sophisticated, with no lessening of the commodity/resource practical knowledge requirements. Communication skills remains one of the most important attributes of the extension professional but the way communication is accomplished is changing. Traditional delivery mechanisms such as meetings and publications have become less useful with

some audiences. New delivery mechanisms, such as videotape and computer assisted communications, must be learned and adapted to program requirements. Some of these forces tend to push the declining numbers of extension professionals toward becoming generalists. Yet, emerging disciplinary and societal trends suggest advantages to increased specialization.

One response to the problem may be to develop systems of regional or even national specialization and sharing of extension resources. In this paper, we will explore this concept as it relates to agricultural economics extension programs in the Northeast. The focus will be on programmatic activities of professional agricultural (or resource) economists who function as state extension specialists in university agricultural economics departments.

General Assumptions About Extension

A few assumptions must be made explicit before continuing the discussion. One is that the diffusion of information and education of people about economic decision making processes that will lead to improvements in their well-being is a worthwhile activity. A number of efforts have been made to quantitatively assess the returns to combined societal investments in agricultural research and extension, and have showed annual rates of return ranging from 35 percent to 50 percent (Wallace, 1982). In the few instances where extension has been evaluated separately, returns have been biased upward by omission of consideration of private sector contributions, but after allowing for the biases, the rate of return to agricultural extension has been "modest or better in the

United States" (Huffman, 1978). These ex post analyses are supportive of the premise that extension is a valuable activity.

Another assumption is that real dollar budgets for extension work in agricultural and resource economics will, at best, remain relatively static in the near future. The outlook for significant increases in state or federal financial support for extension is pessimistic given national and state fiscal conditions. These assumptions, coupled with the other forces mentioned, will make it difficult for extension to maintain its present budget share, let alone increase it.

There are undoubtedly several divergent views of the proper role for the extension economist in the future. However, Ikerd's 1982 statement (pp. 887-888) seems appropriate:

"The professional role of the extension economist will become increasingly the role of an educator with a declining emphasis on information and direct service. There will be less reliance on personal delivery systems and greater reliance on electronic communications to deliver these educational programs. This will allow extension to reach its varied clientele with timely programs that are designed specifically for each target audience. Extension agricultural economists will come to view their role increasingly as agricultural economists working in extension rather than extension workers in agricultural economics."

There is a fairly widely held body of thought that the distinction between extension and research is arbitrary and that the two areas should be systematically intertwined. In this way, extension programs would be undergirded by economic theory and modern analytical tools and concurrently, extension programs would be advocates for economic research (Woeste, 1982; Ikerd, 1982).

The actual current institutional arrangements in extension vary widely within the Northeast region, ranging from complete separation of extension economists from research-teaching faculty to complete integration via split extension-research or extension-instruction appointments. In partially integrated situations, extension faculty may have joint appointments but programs or budgets or both are administered by the college extension director rather than by the head of the academic unit. The variation in institutional arrangements complicates definition and analysis of a regional shared approach.

Results of a Survey

In the Summer of 1983 a survey questionnaire was sent to extension specialists in agricultural economics and rural sociology in the 12 Northeastern States. The purpose of the survey was to learn more about experiences with cooperative efforts among states and to seek insights with respect to regional cooperation from the attitudes and ideas expressed by those surveyed. A total of 83 questionnaires were sent and 45 returns received. Only a brief summary of the results of the survey will be presented here.

A majority of the survey respondents had participated in informal shared extension programs in the sense that they had served as a speaker or resource person at conferences, meetings or workshops in other states and had requested similar participation from colleagues in other states. Most were somewhat positive about further developments in sharing on a regional basis. However, their comments about advantages, disadvantages and other considerations indicated that, in general, their thinking did

not extend to innovative modes of regional sharing. In most cases regional sharing was simply conceived as the occasional trip to another state to present a talk or workshop program. While the open-ended character of the questionnaire allowed for innovative thinking, it did not suggest alternative arrangements or operating modes as a basis for reaction. Prior to initiation of any substantively different alternative, it would be useful to obtain reactions from specialists to such alternatives.

Criteria for Evaluation of Alternative Strategies

As a guiding principle, the concepts of welfare economics should apply to the operation of extension economics programs. If aggregate gains to beneficiaries exceed aggregate costs to losers, then an economic efficiency improvement has been identified. However, we should also be concerned with the distribution of benefits and costs among the potential participating states.

There are other pertinent elements in the appropriate multiobjective welfare function. Freedom of individual departments and states to arrange their own programs is a relevant objective. Flexibility to adapt to changing circumstances without burdensome administrative requirements also seems important.

The analysis will be descriptive rather than quantitative. While the evaluative approach is not drawn from institutional theory, present institutional arrangements strongly influence the interpretations of gains and losses. The evaluation is intended more to stimulate and focus discussion than to draw conclusions.

ALTERNATIVE ARRANGEMENTS

Alternative Strategies

Given the need to increase efficiency in the use of the scarce extension economist resources in the region, there are several plausible strategies that have been identified (see, for example, Hildreth and Armbruster, 1981). One is to more clearly target programs toward specific clientele groups (but there is disagreement, for example, whether to target on large, knowledgeable farmers or small subsistence, hobby or part-time farmers). Another is to improve the level of disciplinary knowledge of county level field staff by training. Another is to improve delivery efficiency by more use of electronic communications and mass media, development of programmed instruction materials and individualized self-paced learning programs, and more effective use of newsletters or other printed media. The strategy to be examined here is the modification of institutional arrangements for carrying out extension programs so as to foster regional specialization and sharing of extension economist resources.

Five alternative arrangements will be compared:

1. The "status quo": informal sharing arrangements
2. Exchange of services through market procedures
3. Use of regional committees
4. Specific formal agreements among cooperating states
5. Use of regional specialists with federal appointments.

The Status Quo: Informal Sharing Arrangements

For many years there have been informal agreements among the

extension directors in the Northeast permitting the exchange of specialists among states. Rather simply, the process involves an arrangement between the requesting specialist and the invited specialist with respect to the nature of the assistance and schedule and requires the approval of the arrangement by the respective extension directors. Generally the travel and subsistence expenses are borne by the requesting state. In certain circumstances and on rare occasions an honorarium may be provided from registration fees.

This relatively informal system has been dependent upon individual initiative on the part of the extension economist in the requesting state. Since requesting assistance is sometimes felt to be an admission of inadequacy, it may be that assistance is requested less often than might be desirable. As noted earlier, the nature of the assistance is most often as a guest speaker at an extension sponsored meeting or as a resource person at a workshop training session. In the first instance, there is seldom an opportunity for in-depth treatment of a subject matter, nor are continuity or follow-up with clients usually possible. The latter types of sessions are more intensive, are more typically for extension field staff, and are a less frequent type of exchange.

From the economic efficiency viewpoint of the region as a whole, the present informal system has deficiencies. With reliance on voluntary judgments in recipient states, calls for assistance may be less than appropriate because of pride, prejudice, and "turf protection." This in turn may hinder the development and availability of specialized abilities and materials. As practiced, the system also has been limited to certain types of delivery systems, principally meetings and workshops. Since

sharing activities must be individually negotiated, the transactions costs per unit of programmatic output are probably fairly high.

Extension clients under the existing system may receive specialized attention but may otherwise be treated inequitably if the state extension economist in their area is not the most knowledgeable person within the region. Rewards, and consequently incentives, to individual extension workers to participate in programs elsewhere may not be very high, especially if there is no relaxation of their at-home duties.

The autonomy of the different states -- their freedom and flexibility to arrange and change programmatic thrusts as they please -- is obviously a strong point in favor of this arrangement.

Exchange of Services Through Market Procedures

Some people believe that sharing of extension specialist talents across state boundaries can only be accomplished via the development of a formalized consultant policy. Thus, a specialist could be permitted (and encouraged) to work in another state as a free agent, subject to regulations common among all participating states. Required would be explicit recognition that work in another state is not part of the individual's regularly assigned duties and that no conflict of interest would be involved in consultant activities in another state. Secondly, it would be necessary to explicitly define the individual's freedom to work as a consultant. Currently, several states allow a faculty member to consult one day per week. However, in a few of these states it is assumed that such consulting shall take place on personal time. It appears that it would be essential that some reasonable limit be placed on the number

of days an individual might be permitted as a consultant. It might also be necessary to develop a standard fee schedule and per diem expense policy. That is, exchanges of consultants between states should be on the same cost basis. Standard contracts for consulting arrangements might become necessary.

It seems likely that this alternative would function much as does the current system. Other than the establishment of guidelines on consulting days, honorariums, and per diem expenses, there would be little more administrative involvement. Direct program costs would increase by the amount of the honoraria paid, but the transactions costs associated with voluntary arrangements would be lessened. The net effect would probably be an increase in cash costs, however, which in a time of budgetary stringency, would almost certainly inhibit the development of this approach. Individual specialists would gain financially, would have more incentive for specialization, and might serve clients better. Freedom and flexibility would be as good as in the present system. Nevertheless, if we accept present real dollar budget levels as upper limits, it is difficult to view this arrangement as one with a serious likelihood of implementation in the near future.

Another market system procedure which is already practiced to some extent and which creates incentives for regional specialization and sharing is the preparation of educational materials (bulletins, newsletters, programmed instruction materials, computer software, etc.) at one location for sale to other extension workers or clients within the region. For these types of delivery systems, the market approach has the promise of greater efficiency and equitable sharing of costs. Budgetary

limitations would be less of a problem, especially if purchases by one state were balanced by sales of different materials to other states. There would, of course, be some administrative complexities. There would still be considerable local freedom and flexibility.

Use of Regional Committees

A variation which does not represent a major change from the present system would be to use a regional committee approach, either by carefully and systematically exploiting the existing regional committees or by developing new working extension committees. The existing committees in farm management, marketing, and policy are jointly supported by the state extension services and the Farm Foundation, with the latter organization furnishing travel funding for meetings. One of the stated purposes of these committees is the fostering of regional cooperation on programs. Included have been the development of regional bulletins and other educational materials. In addition, there are task force groups within these committees that may have specific assignments to explore or identify program needs in the region. Not included, to our knowledge, has been any formalized mechanism for the sharing of personnel among states in the region.

If regional committees were used as formal administrative devices for identifying needed areas of work and designating specialized responsibilities to different committee members, the quality of extension output could be considerably improved. There would be some modest additions to administrative costs and perhaps to travel costs. The likelihood of equity in the sharing arrangements also seems positive.

There would be a moderate loss of local freedom and flexibility. However, it must be noted that new authorities would be required, as present regional extension committees have no administrative or budgetary authority to accomplish shared programs of work.

Formal Agreements Among States

In this alternative formal agreements would be executed between two or more states identifying the specific nature of the sharing of resources. Included in such an agreement would be a defined division of extension time between the states and a corresponding sharing of salary and support costs. The agreement might simply reallocate previous time commitments; e.g., the specialist in one state who previously worked quarter-time on milk marketing and quarter-time on agricultural policy might under the agreement use the entire half of his/her time for work on milk marketing, whereas the corresponding person in a second state might agree to drop milk marketing and to work half-time on agricultural policy. On the other hand, the agreement might reallocate resources between states. For example, half-time extension appointments in two states might be consolidated into a single full-time extension position in one state, with an associated transfer of salary and support costs from the other state. Clearly, the latter type of arrangement would reduce the size of the extension organization in the second state, and therefore would be less likely to gain administrative approval unless there were an offsetting transfer of some other position to the second state.

A major advantage of the formal agreement approach is that it might improve efficiency of the total regional extension activity compared to

the present system. Specialization would be expected to result in higher quality and quantity of output. While travel and administrative costs would increase, it seems unlikely that they would offset the gains in program output.

An important disadvantage is the decrease in freedom and flexibility of the department to respond to changes in internal needs and in the external environment. Added administrative requirements might result in reduced flexibility within the overall system. If these considerations made the program cumbersome and sluggish, the efficiency gains from specialization might be offset by efficiency losses of a different type.

The effect of this arrangement on individual extension economists' welfare might depend on how the total time commitment of the individual is affected. A person previously working half-time on fisheries extension and half-time on forestry would probably gain more regional or national stature by specializing in one area or the other. However, if four people previously worked quarter-time in extension work in four different areas, with the remaining three-quarters of their time allocated to research or instruction, then a rearrangement such that one of the four now works full-time in extension might be to that person's disadvantage in regard to meeting academic tenure requirements.

Use of Regional Specialists with Federal Appointments

Problems relating to academic, tenure-track appointments might be avoided if federal employee regional extension specialist positions were created. It may be possible to divert a certain proportion of Smith-Lever and ES-USDA funding to support appointments of individuals to serve as

regional specialists in particular fields. Obviously diversion of Smith-Lever funds would reduce state extension budgets, but the provision of certain specialized competencies across several states might relieve the budgetary burden on individual states. That is, there might be a satisfactory trade-off from the cost point of view.

The use of federal funds to totally support these positions would make the individuals involved federal employees subject to federal employment personnel regulations rather than to the academic tenure-track regulations affecting most university extension specialists. Nevertheless, it would be desirable to house the specialists in a university department where they would be able to work with other specialists and maintain the necessary contact with research and other aspects of the academic atmosphere. Alternatively, they might be housed in one location in the region where there are other federal employees (regional ARS, Forest Service, or SCS centers or laboratories).

The impact on service to various extension clientele is difficult to assess. Specialists under this alternative would presumably be highly focused on the subject matter concerns most relevant to their assignment. As specialists within the defined position, they would undoubtedly be in a position to be more current and knowledgeable in their subject matter than is presently the case. At the same time they would be more removed from the microeconomic climate in a particular state and less accessible to farmers and other client groups. It seems clear that a regional specialist would be essentially unavailable for individual advice or counseling of clients. Thus, the role would be that of an educator, and

the development of coherent and effective education programs and materials would be essential.

Freedom and flexibility within individual states and academic units would be reduced by this approach. Extension fractions of jointly appointed faculty time would be sacrificed in return for fractions of service from full-time federally-employed extension specialists.

SUMMARY AND CONCLUSIONS

Attrition has occurred in the extension specialist ranks in most agricultural economics departments in the Northeast in recent years. Support for extension programs in real dollars at the state level has been static for the past decade. Decreases in staffing tend to force remaining staff into the role of generalists. At the same time disciplinary trends and the demands of clientele point to a need for greater levels of specialization. These forces engender a situation demanding a re-evaluation of the extension mission for agricultural and resource economics and a search for more efficient methods of fulfilling that mission. This paper has considered several alternative arrangements for regional specialization and sharing of extension specialist expertise. Discussion included aspects of administrative structure and operation, individual specialist considerations, and service to extension clients. Finally, an attempt was made to provide a basis for the identification of the types of specialties where regional sharing might be most productive.

It seems evident that adjustments must be made in the way in which extension programs are conducted if we are to serve the educational needs of extension clientele in the future. Some of these adjustments will

entail internal shifts of resources and program definition. Others may include development of regional sharing of specialists as discussed in this paper. It may now be an appropriate time to begin serious consideration of alternative mechanisms in the region. It is a topic that must be considered both in a disciplinary and administrative context. That is, departments should begin a process of definition of their extension role in the next decade given constraints on personnel and operating funds. Extension administrators must begin a process of examining ways in which the extension mission may be accomplished more efficiently.

REFERENCES

- Araji, A. A., R. J. Sim, and R. L. Gardner. "Returns to Agricultural Research and Extension Programs: An Ex-Ante Approach." Amer. J. Agr. Econ. 60(1978):964-968.
- Hildreth, R. J. and Walter J. Armbruster. "Extension Program Delivery — Past, Present and Future: An Overview." Amer. J. Agr. Econ. 63(1981):853-858.
- Huffman, Wallace E. "Assessing Returns to Agricultural Extension." Amer. J. Agr. Econ. 60(1978):969-975.
- Ikerd, John E. "The Changing Professional Role of the Extension Economist: Discussion." Amer. J. Agr. Econ. 64(1982):886-888.
- Joint USDA-NASULGC Committee on the Future of Cooperative Extension. Extension in the '80s. University of Wisconsin Cooperative Extension Service, May 1983.
- U.S. Department of Agriculture. Evaluation of Economic and Social Consequences of Cooperative Extension Programs. Washington, D.C.: Science and Education Administration, January 1980.
- Wallace, L. T. "The Changing Professional Role of the Extension Economist." Amer. J. Agr. Econ. 64(1982):879-883.
- Warner, Paul D. and James A. Christenson. "Looking Beyond Extension Stereotypes." Jour. of Extension. 21(1983):27-33.
- Woeste, John T. "Future Directions of Extension Economics Programs." Amer. J. Agr. Econ. 64(1982):874-878.
- Wood, William W., Jr. "Future Directions of Extension Economics Programs: Discussion." Amer. J. Agr. Econ. 64(1982):884-885.