# Problems and Potentials of Agricultural Economics Extension

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This paper is organized around three sections. The first is a background statement which discusses Extension's legislative authorities and its connections with research. The middle section identifies some of the problems faced by Extension with scant attention paid to lists of subject matter projects, and much attention devoted to its institutional fabric. The last section sketches some alternative approaches to these problems.

#### Background

#### Legislative authority

A series of federal laws has fostered and expanded the concept of the land grant university. In 1862, the Morrill Act provided for the sale of public lands to establish schools to teach agriculture and the mechanic arts as well as other scientific and classical studies. In 1890, a second Morrill Act expanded the concept to create separate land grant colleges for blacks. Recognizing the need for research, the Hatch Act of 1887 set up the state experiment stations to conduct research bearing directly on the nation's agricultural industry. Later, the Purnell Act of 1925 expanded the scope of research to include the manufacture and distribution of agricultural products, marketing, and economic and sociological studies that would improve rural living.

Meanwhile, the Smith-Lever Act of 1914 provided for cooperative agricultural exten-

sion work between the Universities and people on farms. This Act specifically mentioned field demonstrations, home economics and youth work, the distribution of publications, and efforts to carry out the intent of the law "as may be mutually agreed upon by the Secretary of Agriculture and the state... colleges receiving the benefits of this act." Hence, the research and extension capabilities of the land grant system evolved in sequence.

Since then, much other legislation, either directed specifically at the land grant system or indirectly affecting it, has provided impetus for change. For example, the Bankhead-Jones Act of 1935, as amended, pushed research and extension work into natural resource management, and attempted to provide a "sound and prosperous agriculture and rural life as indispensable to the maintenance of maximum employment and national prosperity." Public policies such as the extension of Social Security to farmers. and laws affecting rural development. environmental protection, credit, rural electrification, worker safety and health, waste and sanitation, have carried diverse implications for research and extension information and education programs.

The point is that this legislative history describes a potential for administrative flexibility and professional creativity in adjusting to social, economic, and political pressures. Research and extension programs can be determined by negotiation between the Secretary of Agriculture and administrators of the various land grant colleges, as well as by legislative mandate and expression of local needs.

## Pressures and central questions

The considerable achievements of the

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Land Grant System have not meant, however, that everyone is satisfied. On the contrary, significant pressures for change exist and undoubtedly will continue. Debate about the land grant system will include questioning whether or not the system can and should change and, if so, how much and in which direction. Three central questions are: How well does the land grant system serve the nation's people? Should there be limits to its involvement in society's problems apart from agriculture? If so, what should they be? How can a bureaucracy of scientists from many disciplines stay responsive to societal problems without overcommitting their available resources or endangering their academic and scientific credibility?

The land grant system of universities has always been an educational entity developing and delivering information, primarily for people in or related to agricultural communities. Despite the perception of some groups and the desires of others, this system is not an action agency in the business of loaning money or renting machinery, not is it a synonym for a Community Action Program.

# The external viewpoint

Criticism of research and extension agricultural economics programs comes increasingly from individuals and groups who feel out of contact with the system. They perceive themselves as legitimately within the groups that the land grant system should serve, their taxes help pay the system's costs, yet they purport to see little or no tangible evidence of benefit to themselves. Relatively lower food prices, they claim, are a myth perpetuated by economists who mumble words such as "inflation," and "recession," and who are protected from unemployment by tenure and peer review rather than "relevant performance."

These people express direct interest in topics such as nutrition, food safety, dietary habits, the human and environmental effects of agricultural chemicals, and rural community services. They question, among other-things, why we should be helping further the concentration of already economically successful and politically powerful agricultural interests, groups which they believe are capable of doing more of their own research and development. They say they want more emphasis on "people" programs rather than on commodities. Many individuals seem to be in a skeptical and anti-intellectual mood, which they combine (perhaps illogically) with a wish for more direct involvement by University faculty. There have been arguments raised that the system fosters elitism: that it helps only the successful, that it is not concerned about the people who fall by the wayside in society, and that over time the concentration of clientele attention which occurs discourages a re-evaluation of program priorities.

Counter arguments are that: this picture is inaccurate: that, indeed, research and extension programs are available to anyone; and that all research needs to be specifically fitted to each firm in any case. These statements generate from the commodity production and marketing groups, distribution and retailing groups, those directly affected by energy, water and soil depletion, and those confronted with increasing regulations, labor demands and shrinking market shares. These groups see their political power declining, and visualize further erosion of their once favored position in agricultural programs. They are concerned that research to help solve cost-price and overall productivity problems will face limitations not posed in the past. Examples include, restrictions on research budgets and chemicals used, physical and economic limits to water and energy, and a lack of familiarity and experience with the practicalities of farming and marketing by the scientific community.

# The internal viewpoint

The agricultural economics proportion of many faculties is relatively large. We face challenge from within the system — "what, another economist?" — and from without — "where's the research and extension to help me?". In many areas there seems to be a skepticism and anti-intellectual mood, combined with a wish for more direct involvement by the faculty.

The process of internal change is not easy. Rigidities in the system impose obstacles to change: academic reward procedures, tenure, budget formation, inertia of faculty groups, and a general haziness of responsibility for decision making throughout the system even though decisions seem to evolve somehow. Furthermore, the funding process has become a legitimized realm of political activity as competition for research and development dollars increases. The assumption still held by many agriculturalists that policy makers will automatically see the critical need for food, and therefore appreciate and fund their programs accordingly, is no longer valid. if it ever was.

Most of those actively engaged in agricultural research and extension programs view themselves as committed to the land grant system, and effective within it. Some believe that information creation directed to the solution of social and equity-related problems is largely unrelated to their main obligation: to develop and deliver information to those who will use it effectively in producing, marketing and consuming food. They perceive the provision of a safe and abundant food supply as one pinnacle of public service, especially since the majority of faculty also engage directly in public service activities through meeting or speaking engagements.

There is scientific excellence in the agricultural faculty; and there is frustration when this expertise is challenged by those who are viewed as perhaps well-intentioned but uninformed. Yet among many faculty there also is increasing unease with the slow pace of change. This mixed response is due to several reasons: lack of clear definition of the problem at hand, lack of available information about alternative responses to the pressures, the risk associated with shifting resources to a new area, and different perceptions about the real weight of the forces asking for change.

# Problems

## Range of subjects

Problems are generically of two kinds: what we do, and how we do it. For my purposes here, the first can be dealt with in a fairly preemptory manner. Most laundrylists will do — yours, mine. The range of problems, the values and expectations of the people dealing with them are endless. Priorities are difficult to establish, and once made they will change over time. The problem is how to tie into, and anticipate the really important issues.

The food system, and management decision making processes; health, housing, and taxes: education, welfare, and transportation; consumption, nutrition and diets; natural resources, pollution and energy; sectoral productivity, domestic and international economic relationships; dissolution of traditional political bases of support — all have been areas of concern for at least some agricultural economists. Other areas can be added. Nothing seems to be explicitly left out. This raises some questions: despite our seeming willingness to take on many problems, are we capable of handling them well, and what are our perceptions of how we can get the job done?

Perhaps people are asking the land grant system to be something it isn't and cannot be if it sticks to its present educational role. In their desire to reconcile the gap between their levels of aspiration and achievement, people seem to be comparing the current system to a projected ideal of a personal and societal problem solving institution which does not exist. Now more than ever, we must answer to what extent the system (including agricultural economics) should be equipped to be responsive to people who declare themselves unaffected by its present educational efforts. If we say we will not be responsible, are we simply passing the buck; if we say we will be responsible, can we?

## Institutional boundaries

Institutionally, we operate with a generally

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nonvoting partnership comprised of the states, the counties, and the USDA. Now and then there are ad hoc contributions from the private sector. These are our sources for funding, for obtaining resource help, and for much problem identification.

Perhaps our main future challenge is how to refurbish that partnership in view of the original land grant charge, the current views of the systems' problems, and our own definition of educational leadership. Historically, an emphasis on local problems has led to the relatively small proportion of county funds outweighing the state and federal contributions and desires. Their relatively marginal dollar contributions have been alleged to influence unduly the allocation of much larger sums of fixed resources. The same point is made in reference to contributions from the private sector.

This situation is encouraged by an elaborate and successful Extension organization geared to responding to local needs: decentralization of decision making; staff, not line, relationships; easy access to subject matter expertise; a fairly loose reporting and accountability system; and the freedom to range over a wide front of geography and problem sets. That system still operates to get things done: clientele groups and leadership are identified, esprit de corps is fostered in rural areas, problem-solving alternatives are offered, and Extension is a great thing to be involved in — off campus.

On campus is a different story. Many agricultural economics research-teaching faculty have drawn away from tackling local and state problems, finding higher personal and professional reward in other endeavors. Given the present myopic campus and professional reward system, their actions are consistent with those of "economic man," peer review is oriented heavily toward published research materials rather than public service responsibilities of any kind. It sometimes seems that most professional rewards go to those who publish, not to those who provide useful information to decision makers and certainly not to those dealing with controversial issues which may embarrass administration. This emphasis on rewarding research appears to have sometimes confined resources and people rather than free them.

A corollary problem for some extension economists has been an alleged lack of professional competence, leading to lower academic status on some campuses. Is it merited? In some cases, ves - just as it is in research departments. However, for the most part, training in economics is provided by the same schools whether the individual chooses research or extension. Increasingly, county staff are as well trained as state level specialists. Clientele groups are often the same. The problem areas are similar although sometimes approached differently. What is different is that extension economists have different objectives: their jobs are characterized by performance accountability with noncaptive off-campus groups which often demand exposure to the policy arena rather than with the captive classes addressed by research-teaching faculty.

One consequence of the reduced field exposure on the part of research faculty is that economists with extension now have to do more of their own research, and hunt for their own funds to do it. Another is that extension has become less rather than more visible at all three partnership levels. This has also been affected by the changing structure of agriculture and rural communities. Perhaps less people know about extension now than ever before, and extension is partly to blame. Particularly is blame deserved if extension faculty have not tried to communicate with research staff about opportunities and challenges in the field. Although it would be nice to have a two-way flow of discussion, all too often one group assumes the other group is too busy, or uninterested, or an ineffective attempt in the past prevents renewed efforts.

People in extension all too often tend to downplay their own contributions, to be the "good guys" falling into the breach with the result that the other two legs of the Land Grant stool (teaching and research) assume Wallace

tree trunk proportions by default. Another result of holding this self-depreciating view within the present partnership arrangements is that when budget cuts occur extension often feels the knife more deeply than teaching and research.

Yet the real question is that, given the freedom to explore, to operate over federal, state, and lesser regional lines, and to attack problem areas people think are important. is our partnership still working to its best, or is it mired down in misunderstanding, ignorance, and overly narrow professional activities? I think there's room for improvement, because to the extent that extension is not well understood - what it is, what it does, what it means, what active participation by off-campus leaders and groups connotes --- it is hard for people in extension to work effectively. For example, data collection has become much more difficult and costly, partly because since many people are less familiar with extension, they are reluctant to share information they perceive might put them at an economic disadvantage. The changing structure of agriculture, complete with corporate bookkeepers and accountants, casts a different light than it did even just a few years ago.

Assuming that some type of agricultural economics extension function will be judged to be viable in the future, another question is, have all agricultural economists outgrown colleges of agriculture? The need for courses to service students throughout the University, broadening off-campus clientele groups and problem sets, needs for "outside" funding sources and more highly trained faculty, all signal expansion beyond generally accepted capabilities for colleges of agriculture of even 10 years ago.

In 1914, when extension was launched, we had a backlog of research to draw on and citizenry for the most part intimately acquainted with agriculture. Today, for many subjects quite the reverse is true. For example, we were lucky to have had a midwestern agricultural economist relatively geared up to go when the energy crunch of the early 1970's arose — who had developed solid data and who was willing to share them. Do we have that same expertise and research base available in housing, rural health systems, community services, state and local government finance? My fear is that we will good naturedly accept a task for which it will be quickly evident we are eminently unqualified. This means a waste of human energy, money, and time.

## Evaluation

Little has been said about the importance of extension to research. Most of the evaluations of research by our profession are incomplete in that the evaluators have lumped scientific discoveries with the information diffusion and adoption process, not acknowledging either joint productivity or the unique and complementary role that extension plays. Instead, credit goes almost fully to the researchers and the scientific subject matter discoveries. It appears to be second nature to leave out reference to extension and its role in filling the gap between scientific development and adoption. By not recognizing the whole process, we have lost much valuable identification for extension and thereby unwittingly depreciated extension's capacity to respond to state and local problems. Can it be that research, per se, has little worth, until the real payoff is activated through the creativity, effort, and knowledge of those in extension?

Some say that extension has an evaluative propensity to "look loyally backwards, so much so that we miss the changes coming up." This raises the question of whether we lack administrative leadership or whether the obstacle is a collective professional complacency and inertia. Fear of upsetting traditional loyalties, maintaining "successful" programs, and not making tough administrative decisions for change means that in the future we might have to respond to more mandates instead of taking the initiative ourselves. Such a mandate is explicit in the 1977 Agricultural Act which requests an evaluation of extension. I am suspicious that this request is partly motivated by those who wish more control over federal funds which they see as likely to be directed toward other than federal priorities.

## **Possible Solutions**

Regional centers, campus based institutes, and sabbatical leaves are approaches to solve these problems, yet they are not likely to produce a fully adequate, long run research base necessary for the conduct of effective educational programs. For example, can they provide for the continuing participation by those whose concerns become the problems which we identify as worthy of our time? Assuming that the forces of personal interest, what the profession deems important, and available funding will continue to direct our professional activities, what can be done to initiate a rearranging of priorities and rewards?

There seem to be four avenues to explore: 1) broaden our intellectual bases more than we have; 2) say "no" more often, accepting limits of some kind on the profession; 3) specialize by subject or region, and trade knowledge sets more than we have; and 4) some combination of the above.

The first will take more funds and an enlightened view by both administrators and established clientele groups who may feel threatened by attention diverted from their needs. The second choice will take individual leadership, integrity and much administrative support. It will be the most difficult to deal with effectively. The third offers perhaps the most opportunity to cut duplication, to permit comparative advantage to act, to force cooperative planning, and to pinpoint responsibility and performance. The fourth is probably where we'll end up. It certainly offers great opportunity for revision in the partnership agreements.

An overview of how to shift priorities indicates that volunteerism will elicit more longrun cooperation than administrative mandate. The goal of this interest recruitment should be to obtain greater cooperation within the system than now exists. Agricul-

tural economists will necessarily share a spot on University wide teams encouraged to deal with these complex problems. As members, of these new teams underwritten by reawakened partnership opportunities, we will need an increased sensitivity to subsets of issues which are related to the main problem areas. Examples of problems which need such peripheral vision are pest management, environment, and agricultural chemical involvements; water allocation, pricing, quality, and rights problems; and farm workerfarmer problems in a context of total rural employment. The role of the agricultural economist will be one of an integrator playing a support role more than a central one of subject matter expertise. However, characteristics of issues which will arise include many familiar ones: risk and uncertainty; anticipatory planning; property rights, privacy and freedom; regulation, bureaucratic red tape. and identifying the appropriate roles and links between private and public sector objectives and activities.

Choices will not be so clear, more and different factors affecting decisions will present themselves, and alternative solutions will be more complicated. This way exacerbates an already confusing situation of fragmented clientele groups and opposing value systems with limited room for political maneuvering beyond the point where it can move to some concensus. There will be an increased need for economists to listen carefully to people whose problems they are attempting to work on. As a result, there will also be increasing pressures for analysts to take advocacy positions as they pursue the tradeoffs between efficiency and equity. For example, while the production sectors in international trade may be well defined and assumptions made about markets, until questions of the distribution of wealth are recognized an appraised, effective marketing programs cannot be realistically addressed, nor can incomes policy programs be created to complement and support the marketing efforts. Most analysts would conclude that advocating policy eliminates the ability to educate. Need this always be so?

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Do agricultural economists have special peop qualifications that enable them to evaluate these new directions, and effectively analyze new programs among a wider audience than commercial farmers? It's increasingly clear that many of us are not competent at either recognizing or measuring the incidence of complex benefit and cost consequences of resource use changes and policy alternatives. Further, today's political and social climate presents changes in values and priorities

which we may have trouble accepting because our analytical assumptions might have already pushed away the core concerns such as: cost efficiencies at farm levels will benefit consumers through lower food prices.

When all is said and done, one cannot escape the fact that the quality of research, extension and their administration is a direct function of the quality of the people involved. Well trained scientists who are sensitive and smart tend to do interesting, anticipatory, and reliable things whether the problems are theoretical or developmental. Administrators who are perceptive, active, focused, and able to communicate tend to get things done. Yet there is something more that can be done than simply to say that the challenge is to hire the best people we can.

Even though obstacles are increasing to restrict flexibility in both hiring and firing people, we can better fit our professional and campus reward process to the problems at hand and those we see in the near future. We can catalyze attention toward different and more complex problem sets than we have previously approached, and we can encourage the development of, or access to, a research base to support this involvement. We can listen more closely to what our critics are saving, and do a better job of communicating what we do, what our charge is, and in what ways we, and our system, might be of some help. We can interact more closely with those whose problems we do work on, we can gain more field experience and visibility. We can blend professional self-direction with problem priorities different than ones we now hold. We can push for more freedom of everyone's intellectual inquiry by extending respect to individuals who try to accept responsibility for their own actions in an increasingly complex world. We should also be able to expect strong administrative support and leadership rather than political "sponginess" aimed at maintaining administrative tenure.

By doing these things well, we can continue to contribute to society, the profession, and our universities. Perhaps the greatest benefits, however, will accrue to each of us who does these things because we know they're worth doing. December 1978