



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

# *Staff Paper*

Forces Driving the Future of Extension

James T. Bonnen

Staff Paper 97-37

May 1997



Department of Agricultural Economics  
MICHIGAN STATE UNIVERSITY  
East Lansing, Michigan 48824

MSU is an Affirmative Action/Equal Opportunity Institution

## Forces Driving the Future of Extension

James T. Bonnen

bonnen@pilot.msu.edu

13 pages

Presentation to the Michigan State University Extension Specialist's Seminar, May 12, 1997.

Copyright © 1997 by James T. Bonnen. All rights reserved. Readers may make verbatim copies of this documents for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.

# Forces Driving the Future of Extension\*

by

James T. Bonnen  
Michigan State University

In preparing to write a book on the future of the “land grant idea,” I have been visiting with presidents, chancellors, trustees, administrators, faculty and clientele on a number of land grant campuses in addition to doing a lot of reading. So I have some impressions to share. My assignment today is to review trends or changes going on in the land grant system, especially those that affect extension.

Let me first take you back to 1974 and remind you of the classic article, which you may have read, “Agriculture, the Island Empire” by Jean Mayer and his son Andre. Jean Mayer was a nutrition scientist and long time president of Tufts. They described agricultural science as the first science, and one that developed as a systems science--i.e., in the unavoidable context of complex biological systems. But they also described agriculture as isolated from the rest of science, an isolated island of farmers, and their organizations, land grant universities and the USDA--i.e., the land grant system.

Since that article was published, the values and problems of society have changed. Society’s expectations of us are still changing and our slowness to respond is leading society to demand greater accountability and in some cases to legislate performance standards. Consequently our immediate environment is not what it once was.

---

\*Presentation to the Michigan State University Extension Specialist’s Seminar, May 12, 1997.

Clearly:

1. The university's covenant with society is failing and is up for renewal,
2. The post-World War II covenant of science with society is unraveling,
3. The federal-state land grant partnership has come apart, and
4. The political base of colleges of agriculture is eroding, both inside the university and outside in society.

Today, I find land grant leadership generally knows that “the system” is in trouble--quite unlike a decade ago when many were still in denial. Land grant faculty are confused and, with exceptions, on balance still resist the idea that their enterprise must change in any fundamental way. You cannot move a university without moving its faculty, and it is at the level of the faculty that most of the change must occur. Faculty must lead and be led to an understanding of the opportunity set and imperatives of their new environment. And they must act to shape their own future--or it will be decided for them in a manner or in directions they may not like.

Our island empire, our isolated self-sufficiency, has collapsed. We only infrequently stand together and our critics are accumulating. We are no longer able to resist all external forces. We must adapt and soon, as the window of opportunity, in my judgment and that of many land grant leaders I have talked to, is now about to pass us by. The question is how and in what direction do we move. The defensive posture so common over the last two or more decades will not work. It was never more than a delaying tactic.

### **The Land Grant Idea And Its Origin**

It is important in our adaptation to society's needs that we have a clear fix on the land grant idea and its origin, for this is our comparative advantage in American higher education and

our historically unique role. I find that understanding of this role is sometimes confused or incomplete. Exploration of the early historical materials tells one that the land grant idea is not about a specific institutional arrangement, but is a set of beliefs about the social role of the university in society. It was not about agriculture as such, despite much rhetoric to that effect. Thus, the original 19th century beliefs were that the land grant university exists to:

1. Provide broad access to higher education, irrespective of wealth or social status,
2. Educate and train the professional cadres of an industrial, increasingly urban society, and to
3. Strengthen and defend American democracy by improving and assuring the welfare and social status of the largest, most disadvantaged groups in society--which in the 19th century were farmers and industrial workers (then called mechanics).

It is necessary to understand that the land grant movement was led, not by farmers as such, but by middle class professionals who feared that the industrial revolution of 19th century America was pushing agrarian and urban workers into a disadvantaged underclass. These workers were seen as exploited economically, deprived of their political and economic rights, and denied the respect due citizens of a democratic society. Most leaders of the land grant movement were populists who saw a small powerful elite of Mellon, Rockefeller, Carnegie, Gould, Fisk and others amassing great fortunes while farmers and industrial workers were being reduced to the status of peasants. This concentration of industrial and political power, they believed, threatened to destroy democratic institutions and the existence of a middle class. The land grant idea was above all a profoundly democratic movement. Its leaders fervently believed in democracy and the new, but young, republic. Many had been raised in the presidencies of Jefferson, Madison and

Monroe. They were determined to assure a future in which all citizens, not just an elite, shared in the fruits of liberty and the individual rights promised in the Constitution and Bill of Rights. The land grant colleges and the USDA were partners in and instruments of this movement.

### **The Current Context of the Land Grant Universities**

The world in which the land grant university serves and, indeed, the land grant university itself has changed greatly since the early 20th century. The change just since World War II has been profound.

One major, but subtle change is the substantially broader expectation in society that the university exists to help society address its problems. It is leading to a perception of *outreach to society* as a primary role of the public and private university in the 21st century. This role is growing in higher education, public and private, although it may yet take several decades to achieve a clear form. Also, it will evolve completely independent of what land grant universities do, and whether colleges of agriculture survive or not. If you have any doubt about these assertions, read the writings of Derek Bok, former President of Harvard and Mary Walshok's 1995 book, Knowledge Without Boundaries. Bok tells his peers in private universities that they must become more responsive to society's problems. He points out that the immense scale of public funding of private institutions carries with it an obligation to serve society. Mary Walshok details in her book how the conventional components of the university, public and private, can and should support and reach out into society to assist in societal problem solving. This "how to do it" book is full of cases, not one from a college of agriculture and without any dependence on or reference to the land grant tradition and experience.

In addition, we all should read Donald Schön's 1983 volume, The Reflective Practitioner. Schön argues that the knowledge base for outreach from the university to society differs in nature from that of the core disciplines of the university. He demonstrates how outreach requires a different epistemology of science--a different way of knowing--because in outreach we face, not the stylized and carefully defined problems of science, but the ill-defined often large and messy problems of society that must be addressed from the perspective of eclectically combined subject matters and analytic methods that allow one to think more clearly about societal options for action and their potential impact on some specific problem. Extension Specialists should absorb this and be prepared to tell disciplinarians where to shove the basic science arrogance that claims credit for all the increases in the productivity of agriculture since the Middle Ages for basic science. Without the other inputs of applied science, extension education, new institutions, new physical and human capital, the productivity increases in agriculture and society would be a fraction of what has actually been achieved. Disciplinary science is necessary (as are these other inputs) but is not sufficient to achieve the productivity that has occurred. Research on the economic returns to agricultural research clearly demonstrates this (Bonnen, 1986).

As the federal government in recent years has withdrawn from support of different areas of public responsibility, the leadership in many of these areas has devolved to the states. In response governors and legislatures have looked to "their university" for help, in many cases only to be disillusioned, having not gotten what they expected. While their expectations were often unrealistic, in other instances the public universities were unresponsive. At the same time, the slowing in growth or decline (in real dollars) of federal funding for research and other university activities has returned the public university to far greater dependence on its state funding, which in



many cases has not kept up with inflation. Thus, there is both a budget and credibility crisis impacting all of public higher education today.

Today most land grant universities and colleges of agriculture are being forced to shift their relative focus more toward the problems and expectations of their states. At the same time the Office of Management and Budget (OMB) in Washington, D.C., administrators in the U.S. Department of Agriculture (USDA), and some in the Congress have developed the view that federal support of the colleges creates a line relationship which gives the federal government the right to dictate or unilaterally direct the priorities and activity of the state Experiment Stations and Extension Services--irrespective of state needs or priorities. It is also true that the states have in the past often presumed on or more recently attempted to control or go around the system by soliciting special (i.e., politically generated) grants from Congress. This leaves what has been a very productive, decentralized federal-state partnership in danger of coming unraveled. While this compact has always been confirmed in the political arena of Congress, national priorities in the past were initially developed in an interactive debate between the substantive partners to reach a consensus of the states and the relevant federal executive agencies before going to Congress. The decline in this partnership silences many of the voices in the larger land grant community and reduces the capacity and flexibility of the system. The levels of conflict in that system today are an obstacle to the ability of the colleges and the USDA to deal with the problems in agriculture and the society.

Since World War II the reward system of the state universities (including colleges of agriculture) has drifted out of the direct control of university leadership and into increasingly disciplinary-oriented, national funding sources, national professional associations and their

journals. This has made it difficult for many institutions to sustain their focus on students, public service and state problems--i.e., their state level missions. Today society is forcing these universities to refocus on their state level missions, which is leading to a nationwide review of educational accountability and to reform of university reward systems and tenure rules.

The increased internal and external complexity and the growing incivility and conflict faced by university leadership has made the roles of university presidents, provosts, deans and even department chairs more political and far more difficult. Median tenure is now about five years for all these leadership roles. Institutional change, which by design is slow at best in any university, is now made even more problematic by rapid turnover in leadership. This is especially the case when boards of trustees, drawn predominately from the private sector, often have so little understanding of and respect for the nature, multiple roles, and internal complexity of the university.

The industrialization of agriculture and of the entire food system has shifted that system to far greater, and still growing, dependence on private sector markets for its inputs. This is greatly reducing its dependence on public R&D and extension-like information and educational services. The information and biotech revolutions are currently accelerating this shift away from the predominant dependence of agriculture on the public supported research and services of the land grant college of agriculture. Most basic research and an increasing percentage of applied biological, social, and physical science research of significance for extension education is performed today outside the colleges of agriculture in stark contrast to the pre World War II situation. Thus, the industrialization of agriculture continues slowly to reduce and change the role of the college of agriculture. The colleges reason for existence has been primarily as a producer

of public goods and services for agriculture, the food system, and the sustainability of the environment and natural resource base of society.

With the research function of the college squeezed from both the basic science and applied science ends of the R&D continuum, the colleges of agriculture are left with a smaller *relative* role in extension and research, but with a strategic and expanding role in coordinating and managing the increasingly complex continuum of private and public produced knowledge from basic science and applied R&D through extension to use.

The advances in scientific knowledge and the external effects on society of the industrialization of agriculture have raised questions about food safety and nutrition, environmental and resource degradation, air and water pollution, agricultural sustainability, farm structure and rural community viability, all of which are in some degree additions to the research, teaching and extension agendas of the colleges. While farm and food system productivity and welfare issues remain of primary importance in strong agricultural states, the college agenda and its management and political base have grown far more complex. In states with little or no commercial agriculture, the colleges have evolved away from agriculture toward a broad natural resource and environmental focus or become the university's life science college. The land grant colleges of agriculture, which used to have a common culture and mission, have become far more diverse in character. They are no longer just colleges of agriculture. They are many things, in a few cases only marginally agricultural in focus.

As a consequence of the expanding educational scope and scale of land grant universities since World War II and the relatively small percent that agricultural students are today of total university enrollment, any college of agriculture faculty that does not commit itself to generate a

successful undergraduate enterprise of some sort is likely to shrink much faster than the total university faculty does during the current downsizing of public higher education--despite all the important research and other services it performs. If the college and any of its departments cannot sustain a vital undergraduate student enterprise, the faculty base will eventually erode and graduate programs will deteriorate, if not disappear. In such cases the potential for developing or sustaining a national reputation will also likely disappear.

The industrialization of agriculture has left farming with many fewer farmers, but farmers who are wealthier and far better educated and informed about all dimensions of their business and who pay consultants and firms for highly specialized information and services tailored to their specific farm and its location. This has all but eliminated the traditional role of generalist-trained, county extension staff in advising most large *commercial* farmers, raising questions even about the effectiveness of the campus based extension specialist. Under the impact of the industrialization of agriculture, the role of extension is slowly being privatized in many countries of the developed world. The role of extension, and its organization is at special hazard in the U.S. in today's changing world.

Despite endemic assertions about the decline of the political power of agriculture, in many if not most states politically active farmer organizations, while lacking *positive power* to achieve new goals, still have the *negative power* sufficient to defeat any change that they believe appears to be taking from them any functions of "their" college of agriculture. Thus, change to broaden the problem solving efforts of the college beyond agricultural issues must carry the neutrality or support of older clientele. Despite their resistance, the expansion of scope is usually in the long run interest of agricultural and other older clientele. On the other hand, in some states organized

farmer and other agricultural interests have already given up on the land grant college, no longer support the college and care little what happens to it or the university.

### **Some Common Campus Characteristics**

So far I have visited eight land grant campuses. Five were part of multi-campus systems, three were single institutions with their own governing boards. Half were small with less than 20,000 students. One was an 1890 land grant university. Despite the diversity some surprisingly common characteristics developed from my interviewing.

1. *All campuses* now recognize that they must make major changes to adapt to societal pressures and expectations. This is true of administrative leadership without exception, and with some exceptions, faculty leadership as well, while the average faculty member “feels the heat” but is not entirely clear what the problem is or what he or she needs to do about it and is struggling to understand and react.
2. *All campuses* are already making major changes. Major reorganizations are occurring in some universities. All campuses are:
  - \* Reintegrating research, extension and teaching.
  - \* Refocusing research, teaching and extension on clientele/customers.
  - \* Dropping poorly subscribed fields/majors and developing new ones. The curriculum is in flux.
  - \* Focusing on greater multidisciplinary and multi-department and multi-college collaboration in teaching, research and extension.
  - \* Attempting to modify their reward system and tenure and promotion rules.

3. In all states higher education has fallen from first or second in state funding to third or fourth--behind prisons, the courts, K-12 and Medicaid.
4. It is clear that administrative leadership and faculty must better define their product at university, college and department levels or they will be downsized and redirected out of much of their current capacity by outside political forces. In short, faculty must get ahead of the curve in modifying their products or have the future decided by external forces that do not understand the academic enterprise.

**The National Synthesis Conference of the  
National Association of State Universities and Land Grant Colleges**

The National Association of State Universities and Land Grant Colleges (NASULGC) has been conducting a comprehensive strategic planning effort involving the national system of colleges of agriculture and natural resources.<sup>1</sup> It was brought into focus October 8-10, 1996 in a National Synthesis Conference in which I participated as a final commentator. Let me share a few of my comments and impressions.

1. First, strategic planning across so large a system does not very often result in recommendations as coherent in focus or backed by as strong a consensus as was achieved. Past NASULGC efforts have been troubled by too much “turf protection” behavior.
2. To my surprise the recommended goals imply a very large increase in demand for various types of social science expertise--far more than the colleges and the USDA

---

<sup>1</sup>The results have gone for final action to a Kellogg financed panel of NASULGC presidents and chancellors on which Michigan State University President Peter McPherson sits.

now possess. Some of the demand is for university expertise that can be found only outside the colleges of agriculture.

3. It is also worth noting that, while we are used to talking about agricultural systems as biological and production systems, these recommendations broadened the systems concept to involve socio-cultural and economic systems in food and agriculture.
4. I was also struck by the return in the recommended goals of the Conference to the early goals and activities of the land grant system. These include the early focus on personal and public health, nutrition, human capital development, leadership formation, an emphasis on broad as well as technical education, the need to develop new institutions, management and business training, infrastructure development, integrative systems/holistic approach, and coalition building or partnering.

I take this to be evidence that we are in the midst of a major transformation of the land grant system. An important early dimension of land grant activity that was perhaps not well enough recognized in the Conference recommendations is that of institution building. Many of the actions recommended will require new institutional rules and organizations.

5. My visits to different land grant universities this year have made it clear that many of the changes in goals recommended are already being pursued. The institutions are moving in the general directions being recommended by the Synthesis Conference.

6. Quite a few of the recommended goals will involve the land grant system in conflict in the society. This makes it all the more important that the land grant colleges and universities maintain an objective science and education reputation and posture. They may not allow themselves to be politicized. It also means that academic freedom is a critical institution, if society expects a candid and objective performance of university faculty.

I was impressed by the broad and strong consensus on action that was achieved in the National Synthesis Conference, and how relevant and comprehensive the recommendations were. This says that the land grant system may be ready to move on needed changes. It was not ready to do so a few years ago. There is a window of opportunity today to achieve these goals. It is in my judgment our last opportunity.

I left the National Synthesis Conference optimistic for the first time that the colleges are finally prepared to do something about the accumulating dysfunctions in the land grant system's obligation to serve its society. Each land grant university I visited was already adapting to the expectations it faced. How successful they are remains to be seen.

The land grant universities are not alone in this effort. All of American higher education is in fact in what football coaches call a "prove it drill." We in the land grant system have some unique advantages in this competition. But as we used to say in rural East Texas, it is "root hog or die" time.



## References

- Bok, Derek. Beyond the Ivory Tower: Social Responsibilities of the Modern University. Cambridge: Harvard University Press, 1982.
- Bok, Derek. Universities and the Future of America. Durham: Duke University Press, 1990.
- Bonnen, James T. "A Century of Science in Agriculture: Lessons for Science Policy." American Journal of Agricultural Economics, Vol. 68, No. 5, December 1986, pp. 1065-1080.
- Bonnen, James T. "Agricultural Development: Transforming Human Capital, Technology and Institutions," In Agricultural Development in the Third World (eds. Carl K. Eicher and John M. Staatz) 2nd Edition, Baltimore, MD: Johns Hopkins University Press, 1990, pp. 262-279.
- Bonnen, James T. "Changing Roles of Agricultural Economists and Their Institutions." American Journal of Agricultural Economics, Vol. 74, No. 5, December 1992, pp. 1259-1261.
- National Research Council, Board on Agriculture. Colleges of Agriculture at the Land Grant Universities: A Profile. Report of the Committee on the Future of the Colleges of Agriculture in the Land Grant University System. Washington, D.C.: National Academy Press, 1995, p. 76.
- Schön, Donald A. The Reflective Practitioner: How Professionals Think in Action. New York: Basic Books, 1983.
- Walshok, Mary Lindenstein. Knowledge Without Boundaries: What America's Research Universities Can Do For the Economy, Workplace, and the Community. San Francisco: Jossey-Bass, 1995.