



PARTNERING IN AGRICULTURAL RESEARCH AND EDUCATION: SYMPOSIUM HIGHLIGHTS



The Council on Food, Agricultural and
Resource Economics
An Organization of Agricultural Economists



Partnering in Agricultural Research and Education: Symposium Highlights

EXECUTIVE SUMMARY

Land grant universities and the U.S. Department of Agriculture have long combined research, extension, education and public outreach to spur the development of creative solutions. Such partnerships are now more vital than ever in a time of proliferating agricultural and environmental issues, tighter budgets and pressure for more accountability.

But many institutional, behavioral, bureaucratic, and cultural factors complicate efforts to broaden the partnership between research and education. University incentive systems, in particular, have long favored independent scholarship over collaborative work and professional credentials increasingly are determined by scientific societies that emphasize discipline-based, peer-reviewed publications and recognition. Multi-dimensional research and education often are considered second-rate. Administrators also may tend to undervalue partnering, and provide only limited institutional support.

Many scientists may even lack the interpersonal skills and training that today's undergraduate students routinely receive.

Despite these impediments, various success stories suggest that partnering can be made to work effectively, although some fundamental changes must be made to build upon these successes.

These include use of targeted incentive systems that downplay traditional peer-reviewed publications; wider use of seed money to attract and motivate partners; more extensive infrastructure to facilitate communication; education opportunities for scientists to enhance their interpersonal skills; and streamlining of bureaucratic approval and monitoring processes. Prospective partners must be highly skilled in their disciplines but they also must have the ability to work with others.

More effective partnering will require startup funding, but once these investments are in place operating costs should be minimal - and the net payoffs to stakeholders and others involved in agricultural research and education will be high. Administrators should continue to remove impediments to partnering and explore innovative incentive systems to encourage greater participation in productive partnerships for research and education.

Introduction

The culture of agricultural research, extension, and education is changing rapidly from one of competition among scientists, institutions and agencies to a structure involving greater collaboration, cooperation and coordination, including substantial stakeholder involvement. These changes are being driven by increasing consumer concerns about research and education, new production and communication technologies, the global, market-based economy and concerns about public budgets, accountability, and strategic planning. Most of the current agricultural research and education issues — agricultural genomics, food safety, human nutrition, environmental stewardship, economic competitiveness, value-added and new commodity uses — require multiple, collaborative approaches to solve problems.

More effective partnerships in research, extension and education will help create a more flexible system harnessing complementary skills on important issues affecting the well-being of consumers, agriculture, rural America, the nation's natural resources and the environment. Partnering opportunities, however, can be constrained by a host of factors and progress in forging new partnerships requires a clear understanding of their characteristics, incentives and information systems, past successes and areas for improvement.

This report summarizes the findings of a symposium organized by the Council on Food, Agricultural and Resource Economics on Partnerships in Agricultural Research and Education conducted recently in Washington, DC. The goal was to provide a forum for key decision makers to discuss partnering issues and experiences involving various disciplines, functions, regions and public/private initiatives.



Successful Partnering

Partnerships succeed when talented people perform different roles together under effective leadership, with the resources needed to move toward clearly defined goals and achieve rewards and recognition according to their contributions to the common effort. Working as a team, the group can achieve more than individuals working alone.

Case Studies

The Symposium featured the success stories of several entities engaged in diverse forms of partnering in research, extension and education. They include:

- **Kansas State University:** The university recently merged agricultural research and extension and established significant partnerships with private industry to reduce duplication in research and outreach and more effectively leverage financial and other resources. (*Wootton*)
- **Rural Policy Research Institution (RUPRI):** This multi-state institute is providing objective analysis and facilitating public dialogue about the impacts of public policy on rural people and places. (*Fluharty*)
- **Plant Genome Project:** A large-scale partnering initiative combining private industry, trade associations, government, academia, not-for-profit entities and international groups seeking competitive funding of work to improve understanding of plant genomics. (*Eversole*)
- **South Florida Everglades Restoration Project:** A scientific partnership that developed long-term eco-system management strategies and short-term restoration plans and ultimately is to lead to an effective restoration program involving federal and state governments. (*Milon*)

Partnership Attributes and Principles

The symposium participants identified a set of principles and qualities needed to help partners improve their performance and produce results.

- Partnerships need a clear focus, specific goals and consistent accountability procedures.
 - Partnerships are not an end in themselves - merely the structure leading to attainment of goals.
 - Partnership goals do not preclude individual objectives. In fact, individual objectives may be met better by collaborative efforts than by independent work.
 - The attributes of individual scholarship — discovery, integration, application and teaching — are leveraged by collaboration and cooperation.
 - Successful partnerships involve individuals who anticipate and prepare for the unique challenges of communicating effectively with people in other fields.
 - Effective partnering requires disciplinary excellence, but communication abilities, interpersonal skills, appreciation for multi-disciplines and functions, and other attributes are also needed.
- Partnerships are inherently fragile because they lack the continuity of the sponsoring institutions.
 - Colleges and universities have advantages in long-term partnering because of their breadth of expertise and ability to involve senior staff.
 - Research and education thrive when academic freedom and professional discipline by the participating scientists are effectively balanced.
 - Partnering functions best when it is reinforced by a high degree of trust and a true sense of community among participants.
 - Trust takes time to establish but it is what holds partnerships together, motivating members to commit time, effort and resources. Trust is fostered between individuals by shared professional goals and interests.
 - Participants must accept a high degree of accountability, leading to self-regulation.

Institutions considering partnerships should consider these important criteria:

- Will the outcomes be consistent with institutional goals?
- Will the participants learn new approaches and methods that improve long-term performance?
- Will skills be further developed through new contacts, different training and alternative policy approaches?

Overcoming Impediments to Partnering

Numerous organizational, behavioral, and institutional factors may hamper successful partnering. These impediments must be clearly defined and overcome to improve partnering prospects.

The incentive and reward system

Incentive systems designed to reward individual productivity, creativity, scholarly capacity and intellectual effort often do not support partnering activities. Incentive and reward systems are disciplinary-based, reflecting the substantial role of peer review by professional societies in journal publication, scholarly recognition and other activities. The peer review system itself can be an obstacle because it functions largely along disciplinary lines (e.g., plants, animals, engineering, economics, sociology).

Actions

- Create incentive systems for rewarding multi-dimensional accomplishments, including elements of compensation, resources, recognition, and stakeholder publicity.
- Reduce the heavy reliance on incentive systems that involve disciplinary-based professional societies emphasizing peer review and publication.

The professional culture

The professional culture, especially in academia, favors independent scholarship over multi-dimensional collaboration. The culture is reinforced administratively through salary levels, promotion, tenure and recognition. Graduate programs contribute to this culture of independent scholarship by producing new professionals with little or no experience of working on a team and undeveloped interpersonal skills.

Actions

- Develop multi-dimensional partnering experiences in university graduate programs, similar to those in undergraduate programs that place substantial emphasis on teamwork and interpersonal skills.
- Mobilize science-based disciplinary expertise through in-service educational programs in communications and interpersonal skills and through wider recruitment of personnel.

Disciplinary-based institutions

Administrative leaders who generally administer disciplinary-based units, tend to undervalue multi-dimensional partnering activities. Consequently, institutional infrastructure — meeting facilities, communication mechanisms, documentation and paperwork — needed to sustain partnering often is lacking.

Actions

- Develop infrastructure systems to support partnering but maintain flexibility for differing partnering styles.
- Develop management strategies to respond to partnering's risks — unanticipated withdrawals of key personnel, communication difficulties, personality clashes, perceived inequities, changes in supporting institutions and outlived usefulness of the partnership.
- Allocate additional authority, resources and incentives to partnering entities (institutes, centers, consortia), with monitoring and reporting procedures.
- Streamline approval processes for partnerships to maintain trust, credibility, initiative and enthusiasm among participants.
- Enhance the availability of "seed" money during partnership development.
- Shift the basis of funding and budget proposals from the traditional agency and disciplinary approaches to outcome- and issue-based approaches.

Accountability and property rights

Partnerships are impeded by a lack of clearly-defined goals and effective, measurable performance criteria. Concerns about intellectual property rights, especially involving public and private sector initiatives, make partnerships less attractive.

Actions

- Develop criteria and standards for evaluating multi-dimensional performance of partnerships.
- Shift the basis of funding and budget proposals from traditional agency and disciplinary lines to one based on results.
- Invest in research to develop equitable ways to resolve intellectual property rights disputes.

Conclusion

Financial, accountability and other pressures on the agricultural research and education system make partnerships more vital than ever. Individual case studies have shown that successful partnerships often share certain attributes and principles. However, impediments to partnerships are substantial. Efforts to overcome the impediments will spur more effective and creative partnerships that are needed to solve increasingly complex issues in the food and agriculture system.

C-FARE is a non-profit organization of agricultural economists dedicated to strengthening the national presence of the agricultural economics profession. For more information about C-FARE contact Tracy Irwin Hewitt, Executive Director, 703-524-2145, itracy@aol.com.



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