

# **Certifying the Quality of Agricultural and Applied Economics**

Julie A. Caswell

*American Journal of Agricultural Economics*  
In Press. 2014. Volume 96 (2).

## Presidential Address

Julie A. Caswell ([caswell@resecon.umass.edu](mailto:caswell@resecon.umass.edu)), Professor of Resource Economics, University of Massachusetts Amherst. The author is grateful to Cleve Willis and Edward Jesse for helpful comments on this article.

Presented at the 2013 AAEA annual meeting, Washington, DC. Invited addresses are not subjected to the journal's standard refereeing process.

## **Certifying the Quality of Agricultural and Applied Economics**

As agricultural and applied economists working in multiple fields, our main concern is with the quality of our contributions in research, teaching, extension/outreach, government, business, and non-governmental organizations. Quality certification relies on establishing standards, certifying to those standards, and communicating quality and value (for example, through certificates, labeling, and marketing). How are we doing as a profession and as the Agricultural and Applied Economics Association in certifying the quality of our work?

When I was standing for election as AAEA President in spring of 2012, I wrote about AAEA members facing a changing work environment in academia, government, the private sector, and non-governmental organizations (NGOs). Universities face reduced hiring, realignment of colleges, and the threat (and sometimes reality) of department consolidations or closings. Government units encounter challenges to show the need for specialized analyses relevant to the markets and policies on which we focus. The private sector and NGOs face a heightened and continual need to build expertise. Our new hires for universities, government agencies, the private sector, and NGOs have become more broadly based, coming from agricultural, applied, and general economics and from interdisciplinary programs. Similarly, our graduates are going out to positions in very diverse organizations.

Of course, a changing work environment is a given for many of us most of the time. However, as a colleague of mine said, my statement for the electoral ballot on change turned out to be prescient. On the day in May 2012 when Rob King called to tell me I would be the next AAEA President-Elect, at the University of Massachusetts Amherst our in-coming Department Chair Dan Lass and I, as out-going Chair, were sandwiched between a morning meeting with our current and soon to be former dean—who told us we were not a good strategic fit with his school—and a late afternoon meeting with our soon to be new dean who was very excited about having us join his college. I did take a minute to think, wow, my presidential address is writing itself.

What is unchanging in our work experience is the central role of defining quality in choosing, supporting, evaluating, and promoting the work we do as agricultural and applied economists. Also unchanging is the related need to develop and use quality

metrics in this process and to respond to the quality standards and metrics that others develop and use to evaluate our work. My goal here is to connect the forces and changes we are experiencing in academia, government, the private sector, and NGOs to the concepts of quality and quality metrics and to use these connections to identify major issues our profession and the Agricultural and Applied Economics Association face in certifying the quality of our work.

### **Our Conversation about Quality**

I am using this Presidential Address and plan to use my year as President to continue, extend, and focus the conversations about quality that we are all having in our own work environments, as well as nationally and internationally. This conversation occurs in small groups in our work places, in our AAEA Board, in our AAEA Sections and Committees, in College Personnel Committees, and in Presidential Addresses and columns in *The Exchange*. This address is an opportunity to talk as a group about quality, our profession, and our professional organization, the AAEA.

The first thread in this conversation about certifying the quality of agricultural and applied economics is the definition and recognition of quality across all our functional areas. Here I will focus on quality, quality attributes, metrics, and certification for individuals and organizations in academic settings. I concentrate on academic settings because they are what we all have in common through our training as economists. The second conversation thread is focused on asking which of these quality attributes and metrics are central and how are they likely to play out for agricultural and applied economics and economists?

A third conversation thread is key areas where quality and quality certification come together including in hiring and promotion and in the positioning and differentiation of agricultural and applied economics departments and faculties in universities and colleges. These are questions of fit in the real and academic worlds, as well as of differentiation of what we do. We already have many milestones in our on-going discussion of these questions. One is the 1992 *Choices* article where Daniel Bromley said, “Departments of agricultural economics as we know them will be practically extinct in another 20 years. Departments of applied economics, however, can create an important market niche in

academia (p. 58).” So, 20 years later is 2012! In between, in his 2006 Presidential Address Steven Buccola evaluated the effects of specializing forces in economic fields and centralizing forces in economics overall on our profession and AAEA. And Ron Mittelhammer talked about applied economics—without apology— in his 2009 Presidential Address. Very recently, Richard Sexton wrote in *The Exchange* about the Renaissance of Agricultural Economics defining agricultural economics “to include the interface of production and consumption of agricultural products with the natural resource base and the environment and to include the implications of food consumption for health and nutrition (2013, p. 1).” Communicating quality and positioning are major challenges that our conversation about quality needs to address.

The final conversation thread in my address is the role of the AAEA in today’s quality certification landscape. We are robust now and we can take steps to be more so. How do we as an association build on our ability to meet the needs to support quality and communicate about the contributions we make in our work? Communicating about the impact of our work is particularly timely given our meeting here in Washington, DC. How do we as a discipline and as AAEA participate in and respond to the quality certification environment and support professional development? In this process, we have a crucial generational challenge of connecting to and with students and early career professionals.

As a contribution to our on-going conversation, I offer observations and working hypotheses around these four themes. Overall, I will argue it is all about quality (attributes) *and* quality metrics.

### **Quality Standards and Certification for Academics**

Quality certification requires a hierarchy of activities starting with standard setting, standard enforcement (evaluating who meets the standard and deserves certification), and quality signaling. As an example, in the U.S. system universities set standards for tenure and promotion; departments, colleges, and central administration evaluate whether those standards have been met; and success is signaled by the title of Associate Professor with Tenure. Sounds relatively simple but embedded in this process are a number of other quality certification systems or layers including external reviewers; course evaluations;

journal publications, reputations, and rankings; and stakeholder input. Assistant professors have much in common with a food company subject to multiple certifications—they never know which auditor is coming through the door on a particular day.

Quality certification systems are also better understood through analyzing who performs the parts of the certification system. In my area of research, certification of food products, the who is fairly straightforward with first, second, and third parties and government taking these roles. The first party is the product seller; the second party is the product buyer; and a third party is, for example, a private collective of companies or an independent entity such as a non-governmental organization or private certification body. Finally, government is local, regional, national, or multi-country governmental entities.

For the quality of academics (people and organizations), there are multiple quality attributes, each with many sellers and buyers. For example, if we think of individual agricultural and applied economists at academic institutions as the sellers, the value of their services depends on the quality attributes of their work (e.g., of their research, teaching, and extension/outreach). For an assistant professor, the buyer is the hiring department who in turn becomes a seller of the value of the new hire to the college and university as buyers, who in turn are sellers. Some of the buyers may be referred to as stakeholders. We can think of it as a supply chain with non-exclusive products. We all learn to identify multiple markets and targeted buyers but as a group we need to think about the boundaries of first, second, and third parties and their roles in quality certification.

I focus on quality certification for both individuals and groups (e.g., departments, institutes, faculties, agencies). The who of quality certification includes peers, departments, colleges, universities, AAEE and other professional organizations, granting agencies, stakeholders, and third-parties (e.g., the National Research Council, Thomson Reuters, Academic Analytics, Google Scholar). Several quality metrics that are of increasing prominence are essentially third-party entries into the fray. For example, Thomson Reuters, Academic Analytics, and Google Scholar sell or give away quality evaluation metrics. Quality metrics for individuals are aggregated to evaluate organizations. For both individual and organizational assessment, the quality metrics are

augmented by judgment about what is most important—in other words the choice and use of quality metrics affects the evaluation.

#### *Quality Attributes and Metrics for Individuals*

Evaluation of individuals begins with a definition of the person's profile or performance expectations. In academic circles, this begins with an initial appointment that assigns percentages of time to different activities and/or defines a teaching course load.

Expectations are generally subject to negotiation over time.

For academics, the quality standards focus on the major attributes of research, teaching, and extension/outreach/service. For example, research quality is judged by publication quality and quantity. Article quality is judged by content, journal reputation, and journal ranking, and, with a lag, citations, which also feed back into some journal ranking schemes. Researcher quality is assessed based on total output. In the U.S., there is a clear career progression from Assistant, to Associate, to Full Professor, with annual reviews for merit along the way for pay raise purposes and after reaching top rank. The formality of teaching evaluation varies across institutions. Some use frequent peer evaluation and portfolio assessments in judging quality; others rely primarily on evaluations by students and a more informal feel for how an instructor is doing. The formality of evaluation of extension/outreach/service evaluation also varies. The major focus in extension is on program development and impact, with extension appointments increasingly being paired with formal research appointments. Note that within each quality attribute there are multiple metrics.

#### *Quality Attributes and Metrics for Organizations*

Quality metrics for organizations are more complicated than for individuals both because of the aggregation needed over the individuals and the differences in assessment of what is important to quality in particular contexts. The basic ingredients are still research, teaching, and extension/outreach/service. For academic departments or faculties, there are national, international, and local (e.g., state) reputations, which may be quite different and rightfully so based on quality differentiation. There is also a reputation game internal to the university or college that depends to different degrees on national, international, and local reputations.

## **Central Attributes and Metrics for Quality Certification in Agricultural and Applied Economics**

Quality certification for academics is colored by the particular disciplines in which it is applied. Thus for agricultural and applied economics we can explore quality certification and related metrics for the three central attributes of research, teaching, and extension/outreach. These attributes and metrics span both individual and organizational quality and are important to AAEA activity in the future. I focus on discussion of metrics that are prominent now in quality assessment.

### *Research/Ph.D. Program Quality*

Do you know a university that does not want to be among the top x group of research universities? In the case of my university, UMass Amherst, this aspirational group most recently is the AAU, the Association of American Universities. Meeting these aspirations means more research, more Ph.D. instruction, and higher levels of grants in the departments. National and international ranking of departments based on research rests on these same factors. Two mechanisms have been front and center recently in program assessment in the United States: the National Research Council's (NRC) review of Ph.D. programs and citation indexes of various types.

The first mechanism for Research/Ph.D. quality assessment is the NRC study, *A Data-Based Assessment of Research-Doctorate Programs in the United States*, which used data primarily for 2005-2006 and was published in revised form in 2011. Column 3 of table 1 indicates the Ph.D. programs that were included in the assessment for agricultural and resource economics departments. These programs numbered 28 at the time. Another 3 programs had consolidated or joint economics/agricultural and applied economics programs and are included in the assessment of economics departments. In comparison, there were 118 economics Ph.D. programs assessed. Because the NRC review includes variables based on faculty research productivity, it has also been used as an assessment of departmental research quality. These research-based variables include publications per allocated faculty, cites per publication, percent of faculty with grants, and awards per allocated faculty.

The NRC Ph.D. program assessment and its use for metrics of overall department research quality raise several questions for agricultural and applied economics. The first is the maintenance of a sufficiently large number of Ph.D. programs that identify as agricultural and resource economics (the name used by NRC) in the next and subsequent NRC reviews in the presence of growth in many joint agricultural economics, applied economics, economics, public policy, and interdisciplinary Ph.D. programs. For example, when I asked department heads and chairs around the country to vet my table 1, Terry Crawford from New Mexico State pointed me to his department's joint Ph.D. in Economic Development with the Economics Department in the College of Business and an interdisciplinary M.S. & Ph.D. program in Water Science and Management, with a concentration in Water Economics and Policy, primarily located in the College of Agricultural, Consumer, and Environmental Sciences but also University wide. How do we (do we need to?) maintain a strong core of agricultural and applied economics departments in order to remain distinct and provide a peer group in assessment settings such as NRC? How do we as a professional group make sure that Ph.D. programs of diverse formats are recognized as part of the agricultural and applied economics family?

A second issue with using the NRC Ph.D. assessment as a research assessment metric is how a department gets on the radar screen for departmental ranking based on research if it does not have a Ph.D. program or does not have a stand-alone Ph.D. program. Operating or starting a separate Ph.D. may not be an option in some cases. In other cases it may not be the most efficient use of resources for departments but may be felt to be dictated by the need to get recognition for research productivity.

Overall both of these issues related to NRC Ph.D. assessment review raise questions about the definition of the disciplinary core and scope. This definition of the disciplinary core and scope is likely to only partly depend on counts of free-standing Ph.D. programs. It also depends on identifying the core areas and how departments and professionals relate to them in diverse academic settings (i.e., on identifying the extended family).

The second prominent mechanism for assessment of research and Ph.D. quality is citation-based metrics, which are increasingly employed to assess individual and organizational research quality. These measure the degree to which articles, researchers, or journals are cited by other articles, researchers, or journals. As a small sampling,



Thomson Reuters (ISI Web of Knowledge) includes reports on 2-year impact factors (charmingly called the impact factor), 5-year impact factors, cited half-lives, eigenfactor scores, and article influence scores. It prominently ranks journals based on 2-year impact factors, which have grabbed center stage even though they are flawed measures. Another contender for ranking researchers or organizations is the h-index, which looks at a scientist's or organization's most cited papers and the number of citations those papers have received. Some of us have found ourselves and our departments being evaluated against very different agricultural and life science departments based on the h-index, even though its creators (and statisticians of all stripes) caution that it is valid only for comparisons among disciplines with like publication profiles.

The use of citation indexes leads to gaming and sometimes unethical gaming, also known as coercive citation (see, e.g., Wilhite and Fong 2012; Lynch 2012). Greg Perry in his 2012 Presidential Address to the Western Agricultural Economics Association provides an excellent evaluation of these metrics as well as suggestions for preferred methods (Perry 2012). Overall, there is a movement to return research assessment to a science basis or as stated by the San Francisco Declaration on Research Assessment (2012) to put "science into the assessment of research." The group of editors and publishers in the area of cell biology that are signatories to this declaration make a general recommendation to "not use journal-based metrics, such as Journal Impact Factors, as a surrogate measure of the quality of individual research articles, to assess an individual scientist's contributions, or in hiring, promotion or funding decisions." Use of citation indexes as a quality metric poses challenges in quality certification and communication. I believe the AAEEA has an important role to play in this on-going discussion of certifying the quality of research and Ph.D. education through leading a conversation that vets, benchmarks, and communicates quality metrics for our profession.

#### *Teaching Quality and Quantity*

Teaching quality and quantity are key attributes for quality certification as universities have faced hard times financially and are seeking to verify their own effectiveness to their funding sources, including students and their families. A clear trend is to budget systems that are increasingly based on what units do in the form of activity-based (cost- and revenue-based), responsibility-based, or performance-based budgeting systems.

These systems return or purport to return revenue to departments based, for example, on their teaching numbers—e.g., total students or total student credit hours taught per full-time teaching equivalent, or other measures of teaching load. These systems are generally quite rudimentary at this point in time. A major question is how they will be used to certify teaching quality and quantity for individuals and departments.

As a profession, we are in an excellent position to continue to grow in teaching quality and quantity. Analytics may be a current buzzword but its importance in the business and policy worlds is persistent and growing. Our students have a unique combination of microeconomic knowledge, institutional awareness, and training in quantitative decision making that puts them in demand across the agricultural, food, resource, environmental, health, policy, and other business sectors. My own experience with teaching a new junior-level integrated experience course in the Resource Economics Department at UMass Amherst is reinforcing for me again the power of this combination of knowledge. Enrollments are growing at the undergraduate level in our departments. For example, at a roundtable I attended at the Southern Agricultural Economics Association meeting in February 2013, department after department reported increased enrollments. We need to be aware, however, that revenue-based allocation will generate more competition for students, particularly from business schools that, with revenue incentives in front of them, will open up enrollment.

A significant challenge for agricultural and applied economics in cross-university comparisons is demonstrating quantity in teaching. For example, economists in departments of economics at research universities frequently have 2-2 teaching loads, while their colleagues in agricultural and applied economics departments may teach 2 or perhaps 3 classes per year. Can lower teaching loads in agricultural and applied economics departments continue to be effectively explained by heavier research appointments or even by extension appointments? Deans and Provosts care about the total productivity of people and departments; teaching productivity is important in tenure cases and in arguing for new hires. Departments with historically light teaching loads are likely to need to work on their response to the observation that “you don’t teach much.” One way to respond is, in fact, to teach more—through teaching additional and/or larger courses, spreading teaching responsibility more evenly across subfields within

departments, and supporting teaching-heavy portfolios for people who want to teach more and are good at it. Increasing teaching profile for departments is responsive to both revenue-based models and cross-university comparisons.

#### *Extension and Outreach Quality*

Extension professionals, departments, universities, university groups, and government agencies have devoted much effort to thinking about and evaluating quality in extension work. Recently, the Extension Committee on Organization and Policy (ECOP), the governing committee for the Cooperative Extension System in the United States, is engaged in a Strategic Opportunities and Measuring Excellence Program to define impact indicators and report results by state. This system can replace or supplement existing evaluation programs at the state level. The discussion above of research and teaching applies to many faculty members who have split appointments involving extension along with research and/or teaching. Being in a department with no extension faculty and a state with few extension field staff, I am going to stop discussing extension here. I have much to learn and understand about extension quality assessment as part of our on-going conversation about quality certification for agricultural and applied economists.

#### *What's the Gold Standard? Comparing Portfolios*

It is well understood that within academic departments different individuals have different portfolios focused on research, teaching, extension/outreach, and administration. Evaluating performance across these different portfolios can be contentious—to be done well it certainly requires in-depth discussion due to different standards across the areas and different perceptions of their relative value. Even within functions, for example in research, diversification of fields poses challenges for evaluation as anyone who has tried to compile a top journals list in a diverse department will clearly know. Effective quality certification also requires conscientious revisiting of portfolio assignments and rebalancing as necessary to insure that evaluation matches responsibilities.

### **Key Places Where the Quality Story Comes Together**

Quality certification has multiple facets. Here I focus on three areas where quality certification comes together that are important for the future of agricultural and applied economics and for AAEA.

### *Hiring, Early Career Development, Tenure, and Advancement in Rank*

The overall quality of our body of agricultural and applied economics contributions depends on the individuals working in the enterprise—on their training, hiring, early career professional development, tenure (if in academia), and further development as mid-career professionals. The operation of the initial hiring market is a particularly important point where the quality story comes together in terms of defining the scope of agricultural and applied economics and the quality metrics for advancement.

The hiring market for agricultural and applied economics departments has changed, as has the market that graduates of these departments are facing. In the past, the primary market for agricultural and applied economics departments did not have a strong seasonal pattern—hiring announcements were made, screening and interviews were conducted, and positions were offered on a year around basis. The annual, summer meeting of the AAEA was generally treated primarily as an occasion to get to know candidates and do early screening. Our major complementary job market in general economics has a coordinated schedule with most positions being advertised in the fall, initial interviews at the Allied Social Science Associations meeting in early January, and on-campus interviews in January and February. By mid-March that market is mostly closing shop. Many of our departments have been substituting in the general economics job market or other professional meeting venues for hiring new faculty members. Graduates from our departments are competing in this general market, as well as for positions in public policy schools and interdisciplinary institutes, for example.

What does this change in the national job market mean for quality certification? In their crucial early years, there are multiple groups of early career professionals to be mentored regarding quality expectations and subsequently to be evaluated (see figure 1). The first group includes those working in agricultural and applied economics (AAE) departments. These early career professionals may have been trained in agricultural and applied economics, in general economics, or in other related areas. A second group includes those working in academia in AAE areas but not in AAE departments. Again these early career professionals may have been trained in AAE, economics, or related fields. The third group includes those working in government, business, and NGOs in

AAE areas, with training in AAE, economics, or related fields. Each of these three groups needs mentoring and could be a focus of our quality support efforts.

In the tenure and promotion process in academia, we have different quality metrics for different types of professionals that need to be articulated in mentoring programs. An example is the evaluation of academics working in agribusiness and managerial economics fields. How does a top journal list differ for these individuals compared to those working in, say, environmental and resource economics, agricultural finance, risk management, agricultural production, international development, or health economics, or located in public policy schools? How does one answer the question, which journal is better to target for my paper?

Built into quality support and certification processes is attention to diversity in hiring, retention, and promotion. Early work on professionals and diversity in agricultural economics was conducted by Ahearn (1988-1989), Marchant and Williamson (1994), Marchant and Zepeda (1995), and Barkley, Stock, and Sylvius (1999). The AAEA through an effort launched by the Committee on Women in Agricultural Economics, the Committee on the Opportunity and Status of Blacks in Agricultural Economics, and the Employment Services Committee conducted a tracking survey in 1998 (Cheney 2000; Thilmany 2000; Hine and Cheney 2000), 2001 (no results published), and 2007 (Newton et al. 2009; Popp et al. 2009; McGraw et al. 2012). However, AAEA has not been tracking professionals or diversity since then. The American Economic Association's Committee on the Status of Women in the Economics Profession surveys diversity on an annual basis. If the experience in AAEA is parallel to that in AEA, we would expect that relatively weak progress has been made overall in advancement of women and minorities in our academic departments. We need to collect and analyze data to evaluate this hypothesis. A key question is whether women and minorities are leaving particular places, and why, or if they are leaving the profession. And if so, we need to learn why.

#### *Living in an Interdisciplinary World*

Quality and quality certification also depend on how we live in an interdisciplinary world. Major granting agencies and many of our universities put an increasing emphasis on interdisciplinary work. Measuring the impact of agricultural and applied economists in these settings is important both for assessing the quality of programs and people's work

and in arguing for significant roles in research and extension projects. For example, the National Association of Agricultural Economics Administrators (NAAEA) held a session at last year's AAEA annual meeting and has a session at this year's meeting on the measurement of the social science impacts of applied research in agricultural, agribusiness, health, energy, resource, and other areas. The idea is to focus on designing and implementing collaborative metrics for departments, colleges, and universities. Several states have made significant efforts to measure impact as well.

An unanswered question in terms of agricultural and applied economics and interdisciplinary work is whether economists can and will increasingly become major players by being the Principal Investigators on these large interdisciplinary grants. This type of effort will be necessary if agricultural and applied economics is to break out of an auxiliary role in interdisciplinary projects.

#### *Positioning of Agricultural and Applied Economics Departments and Faculties in Universities and Colleges*

Some of us come to this topic with a wealth of personal experience in positioning ourselves in academic settings. I speak as a former Chairperson of a Department that has been through interesting times in terms of placement. In 2009 under college reorganization at the University of Massachusetts Amherst, our previously repositioned College of Natural Resources and the Environment, the descendent of the College of Agriculture, merged into a new mega College of Natural Sciences. My Department of Resource Economics headed to the Isenberg School of Management, where we learned much about quality metrics in business schools. When we came to a parting of the ways in 2012, our soon to be former Dean said, repeatedly, "it's not about quality, you're a great department." Indeed, as we learned, it was about quality metrics associated with business school rankings—to which our quality attributes and metrics were not sufficiently linked. We have now happily moved to become part of the College of Social and Behavioral Sciences. This experience really caused me to relearn a two-part message: it is all about quality (attributes) *and* quality metrics.

Quality certification and communication plays a major role when university reorganization occurs and college or school placement is in play. At all times it also has direct impacts on who is hired, and why, and what resources flow to a department, even if

no one is moving anywhere. To gauge where we are on placement, I investigated all of the 77 departments listed as agricultural and applied economics departments on the AAEA website as of spring 2013. I then tracked their college or school placement and checked with Department Chairs and Heads for recent changes. Of the 77 departments listed in table 1, two are closed, with one subsequently being in the process of being reestablished as an agribusiness division.

Table 2 shows that the vast majority (58 of 75, 77.3%) of agricultural and applied economics departments reside in colleges that have agriculture or agricultural sciences as the lead names in their title. (Some of these departments reside across two colleges.) Another 4 departments (5.3%) are in colleges that have agriculture or agricultural sciences as the second or third names in their titles. Thus nearly 83% (62 of 75) of our departments are in colleges that emphasize agriculture, frequently in diverse combinations with natural resources, the environment, environmental sciences, life sciences, and other groups. Business schools are home to 5 (6.7%) of the departments, while the remaining 8 (10.7%) are housed in diverse places including colleges of natural resources, the environment and life sciences, environmental and biological sciences, arts and sciences, and (my own, new) social and behavioral sciences. Beyond college or school placement, departments increasingly have part of their faculty with tenure homes in the department who are actually functionally housed in part in other departments, centers, or public policy schools. My analysis of department placement brings forward the question of defining our universe. Are these 75 departments the universe? Clearly not and better defining the universe of agricultural and applied professionals in academia is an important on-going task for us.

College positioning is an important focus for quality certification in agricultural and applied economics because our quality attributes and metrics must address important societal issues, support disciplinary quality, *and* allow us to compete in our academic environments. We are answering questions of department positioning and differentiation on a department-by-department and institution-by-institution basis. As part of our conversation on quality, I think we would benefit from putting our heads together to think about the quality attributes and metrics that allow us to produce excellent work and to

compete well. Doing so would allow us to have something like a best practices manual to use when talking to our faculty, Deans, Provosts, and stakeholders.

*Summary—Where the Quality Story Comes Together*

These three places where the quality story comes together for certification of agricultural and applied economics are related to defining our scope of interest in terms of our work and of our association, the AAEA. Our continuing challenge is to understand the forces that influence quality standards, certification, and signaling across a diversifying field.

**The AAEA in Today’s Quality Certification Landscape**

Our conversation about quality includes the roles AAEA plays in supporting and recognizing quality in agricultural and applied economics. AAEA has been successfully adapting to the changing quality certification landscape and the changing scope of our profession over the last years due to great leadership on the part of our Boards, Presidents, Committee and Section Leadership, and EDI, our central management team. Here I will focus on some major points where I think we as members of the AAEA have decisions to make in order to support the further development of our profession and our association over the next 20 years. The AAEA Board is engaged in strategic planning during 2013-14, including results from the member survey that many of you participated in this spring. The topics below I believe are major areas of focus in going forward.

*AAEA: Broader or Deeper or Both?*

We as a profession and the AAEA have been continually adapting to the evolution of important issues in our field. This evolution was reflected in our adoption of the name of the Agricultural and Applied Economics Association, which both added “applied” to reflect broader subject matter and dropped “American” to reflect broader geographic interest and scope. At the same time, the renaissance of agricultural economics (Sexton 2013) reflects the central importance of the topics we focus on to the agricultural, food, environmental, resource, energy, climate change, and development issues of today and the next decades. We face a central question across all areas of AAEA activity of whether our goal is to be broader across applied economics fields or deeper within agricultural economics or both. We need to continue to create dynamic resources that support the



professional development and working environments of our members, occasional members, and potential members.

*Quality, Quality Metrics, and the Positioning of Agricultural and Applied Economics*

A role that AAEA can take if we choose is in leading a conversation about quality and quality metrics in the agricultural and applied economics field. Thinking about this in the context of the positioning of agricultural and applied economics departments and faculties in universities, for example, could be a helpful starting place in addressing both individual and organizational quality metrics. This initiative could be undertaken by a taskforce to focus on challenges and growth opportunities for university-based members. The taskforce would include department leadership, faculty, students, and alumni. It could serve as a broad forum for exchange of information on quality metrics, college positioning, promotion standards, hiring practices, graduate and undergraduate teaching, alumni interaction, and engagement with stakeholders.

Make no mistake about it; AAEA is already all about supporting and recognizing quality in agricultural and applied economics. AAEA does this through the hard work and effort of our Committees and Sections in developing programs and track sessions; sharing research, teaching, and extension information; and making awards for excellence. These efforts evolve to keep up with how quality is being judged in the discipline and from outside the discipline. Except for the selection of Fellows, where all spheres of excellence are considered, however, the AAEA does not have a venue outside of NAAEA, the group of agricultural and applied economics administrators, for discussing quality metrics across areas of activity. Nor do we have a venue for communicating our views of quality metrics to a wider audience, for example to colleagues in other departments in our colleges, college and university administrators, funders, or stakeholders. As only one example, what are the important metrics for journal quality and why? I am not envisioning industry standards for our discipline but reasoned presentations of pros and cons that can be referred to in quality metric discussions among us and with others. If there is enthusiasm about this discussion, it is one that we can launch now.

*Stand-Alone Symposiums & Other Intimate Scale Venues*

Our annual meetings are an incredibly vibrant platform for members of our profession to meet and exchange ideas. Highlighting our close ties to policy analysis, this meeting in

Washington, DC has set a 20-year AAEA attendance record. This is fantastic! Our annual meetings support and build our overall community. In addition, as part of quality enhancement and engagement, AAEA is building capacity to support other venues that are of a smaller and specialized scale to serve the needs of our members and potential members. Learning from the experience of the European Association of Agricultural Economists (EAAE), AAEA has launched the stand-alone Symposium series. These meetings will usually have attendance of about 75-150 people and last 1½ to 2 days. Our first symposium was a joint effort between our AAEA Food Safety and Nutrition Section and EAAE on the *Food Environment: The Effects of Context on Food Choice* held in Boston in May 2012 and co-chaired by Helen Jensen and Jayson Lusk. It was a rousing success. In October, 2013, the Extension Section will be offering the second AAEA stand-alone Symposium on *Crop Insurance and the Farm Bill*; organization is co-chaired by H.L. Goodwin and John Anderson.

I would like to see AAEA each year facilitating two to three stand-alone Symposia that are led and organized by Sections, Committees, and other groups (e.g., multi-state projects) to bring together people working in the same area. These seminars serve the interests and needs of agricultural and applied economists in universities, government, NGOs, and business. Through this smaller group interaction, applied economists who are not familiar with AAEA can be introduced to it as a forum for their work and professional interaction. These initiatives can provide a strengthened foundation for our work in research, teaching, outreach, business, non-profit operations, and public policy. I encourage you to use and help build the stand-alone Symposia, particularly through your Sections and Committees.

Smaller scale and more intimate venues that contribute to professional development and involvement in AAEA can also continue to be nurtured through innovation within our annual meeting format. An example is to experiment with new session formats that facilitate feedback and interaction, for example, dedicated sessions where graduate students present their research and receive comments from a panel of professionals.

As an alumna of two big regional research projects, NC-117 *Studies of the Organization and Control of the U.S. Food System* and NE-165 *Private Strategies, Public Policies, and Food System Performance*, I know first-hand the power of these smaller

scale venues to introduce graduate students to others in their field, give new and mid-career professionals the opportunity to shape and contribute to the research and outreach agenda, and support mutual mentoring among all participants.

### *Mutual Mentoring throughout the Career Process*

In today's quality assurance environment, a top contribution of AAEA is to provide mentoring opportunities to its members and potential members in multiple formats. As thinking about mentoring has evolved, this process is increasingly thought of in terms of mutual mentoring (Sorcinelli and Yun 2009)—that is that the participants in the mentoring relationship provide mentoring and insights to each other.

AAEA has a strong history and practice in mentoring. For example, the Sylvia Lane Mentorship Program has been matching early career professionals with researchers in their areas since 2008. Recently, the Early Career Development Committee has held excellent mentoring workshops at the 2012 and 2013 meetings and has plans for continuing activities. In this great effort, the committee has been chaired by Mariah Ehmke, while Kynda Curtis has been the mentoring program leader. Under a very generous grant to the AAEA Trust from Fellow Uma Lele, the Uma Lele Mentor Fellowship Award is being launched to promote collaboration between early career scholars who are citizens of and resident in a developing country and distinguished mentors.

These are fantastic programs that have or have great promise to have excellent impacts in terms of developing quality. I believe that in our current and future quality certification environment that AAEA's involvement in mutual mentoring should expand significantly to focus on our members throughout their careers and wherever they work. At the early career stage, mentoring programs can allow AAEA to continue to engage professionals who have been trained in our departments regardless of where they are employed, as well as to attract new assistant professors and other professionals who do not have a history with AAEA from their undergraduate or graduate careers (recall figure 1). Similarly, at early-mid to mid-career, mutual mentoring programs can allow professionals to be mentored by more senior people and to give back to new professionals. Senior people also benefit from these interactions.

Framing our AAEA activities as supporting quality and mutual mentoring offers a unified way to think about what we do across the board within the association. Mentoring, particularly of students and early career professionals, is the major area where AAEA can make investments that will pay significant dividends in terms of both quality and the long run vibrancy and relevancy of AAEA. To do this well, we need to understand better the paths our members, occasional members, and potential members are taking through their careers and track these paths by gender, racial/ethnic background, fields of interest, and functional areas.

*The AAEA: Deeper and Somewhat Broader?*

As I have been thinking about the AAEA in today's quality certification landscape and preparing for my year as President, I have developed a working hypothesis that the way in which AAEA can best support excellent quality in agricultural and applied economics, as well as build the connection between AAEA and its members and attract new members, is to first become deeper. This would involve more thoroughly reaching people working in our academic departments and faculties, both those who have agricultural and applied economics roots and those who do not, and people trained in our departments and related faculties who are out in other enterprises and fields. Second, AAEA can support quality and connection to AAEA by becoming somewhat broader in providing networking and research, teaching, and extension interaction opportunities to professionals in closely related applied fields through further development of the stand-alone Symposia and through mutual mentoring opportunities. In addition to serving our members, these efforts could attract people working in agricultural and closely related applied economics fields who are new to or not closely affiliated with AAEA.

My working hypothesis is that we can continue to build our AAEA community through deepening our involvement with our core, while building connections outward from our core in closely related fields of applied economics. The core itself is always under redefinition as many of our departments have now adopted the applied economics name or various compounds of agricultural, resource, applied, food, and development economics. In my view this deeper and somewhat broader approach would allow AAEA to retain our claim to agricultural economics and to make a vigorous claim to an important part of the closely related applied economics realm. This is a working

hypothesis that I look forward to examining, testing, and adapting with you through a broad conversation within AAEA on quality and quality metrics during the coming year.

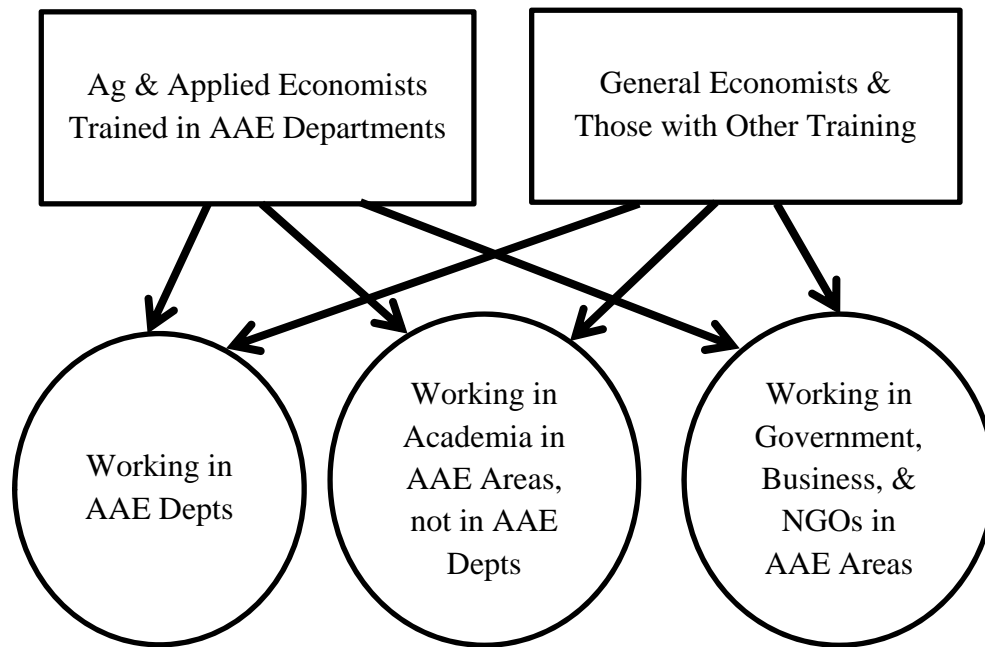
### **Quality and Quality Metrics: The Real Impact**

My address is a launching place for our conversation about how we are doing as a profession and as the Agricultural and Applied Economics Association in certifying the quality of our work. Quality certification happens through setting standards, certifying to those standards, and signaling quality. Quality is contextual—it is all about quality attributes *and* quality metrics. Here I have focused on the academic context but the job of defining quality and quality metrics, conducting certification, and signaling is the same in other settings where we work as agricultural and applied economists. In the big picture for all of us, it is all about the real impact of our work in terms of better understanding of economic processes, better policy making, and better quality of life for the people of the world. Our conversation about quality includes the roles AAEA can play in supporting and recognizing quality in agricultural and applied economics. I invite you to join, continue, and extend this conversation about quality and look forward to working with you.

## References

- Ahearn, M.C. 1988-1989. "Characteristics of Agricultural Economists and the Determinants of Salary Levels." *CWAE Newsletter*, American Agricultural Economics Association, Winter.
- Barkley, A.P., W.A. Stock, and C.K. Sylvius. 1999. "Agricultural Graduate Earnings: The Impacts of College, Career, and Gender." *American Journal of Agricultural Economics* 81:785-800.
- Bromley, D.W. 1992. "Vested Interests, Organizational Inertia, and Market Shares: A Commentary on Academic Obsolescence." *Choices* (3):58-59.
- Buccola, S. 2006. "The Organization of Economics." *American Journal of Agricultural Economics* 88:1123-1134.
- Cheney, L.M. 2000. "Tracking Agricultural Economics Professionals." *Review of Agricultural Economics* 22 (1):17-22.
- Committee on the Status of Women in the Economics Profession, American Economic Association. Annual report, multiple years.  
[http://www.aeaweb.org/committees/cswep/annual\\_reports.php](http://www.aeaweb.org/committees/cswep/annual_reports.php). Viewed May 26, 2013.
- Extension Committee on Organization and Policy (ECOP), U.S. Cooperative Extension System. Strategic Opportunities and Measuring Excellence Program.  
<http://excellence.tamu.edu/>. Viewed May 28, 2013.
- Hine, S. and L.M. Cheney. 2000. "Career Choices and Challenges among Agricultural Economists." *Review of Agricultural Economics* 22 (1):34-41.
- Lynch, J.G. 2012. "Business Journals Combat Coercive Citation." *Science* 335 (9 March):1169.
- Marchant, M.A. and H. Williamson, Jr. 1994. *Achieving Diversity: The Status and Progress of Women and African Americans in the Agricultural Economics Profession*. New York: Garland Press.
- Marchant, M.A. and L. Zepeda. 1995. "The Agricultural Economics Profession at the Crossroads: Survey Results of Faculty Salary, Employment, and Hiring Prospects." *American Journal of Agricultural Economics* 77:1322-1328.
- McGraw, K., J.S. Popp, B.L. Dixon, and D.J. Newton. 2012. "Factors Influencing Job Choice among Agricultural Economics Professionals." *Journal of Agricultural and Applied Economics* 44 (2):251-265.
- Mittelhammer, R. 2009. "Applied Economics—Without Apology." *American Journal of Agricultural Economics* 91:1161-1174.
- National Research Council. 2011. *A Data-Based Assessment of Research-Doctorate Programs in the United States*. J.P. Ostriker, P.W. Holland, C.V. Kuh, and J.A. Voytuk, Editors. Washington, DC: National Academies Press.
- Newton, D.J., J.S. Popp, A. Abdula, D. Pittman, and D. Danforth. 2009. "Factors Influencing Salaries of Agricultural Economics Professionals in Federal Employment." Selected paper presented at the Southern Agricultural Economics Association Annual Meeting, Atlanta, Georgia, January 31-February 3.
- Perry, G.M. 2012. "Deciding Where to Publish: Some Observations on Journal Impact Factor and Article Influence Score." *Journal of Agricultural and Resource Economics* 37 (3):335-348.
- Popp, J.S., A. Abdula, D.J. Newton, D. Pittman, and D. Danforth. 2009. "Factors

- Influencing Salaries of Agricultural Economics Professionals at Land Grant Institutions.” Selected paper presented at the Southern Agricultural Economics Association Annual Meeting, Atlanta, Georgia, January 31-February 3.
- San Francisco Declaration on Research Assessment. By a group of editors and publishers of scholarly journals meeting during the Annual Meeting of the American Society for Cell Biology in San Francisco, CA on December 16, 2012. <http://am.ascb.org/dora/files/SFDeclarationFINAL.pdf>. Viewed May 28, 2013.
- Sexton, R.J. 2013. “The Renaissance of Agricultural Economics.” *The Exchange: The Newsletter of the AAEA*, 35 (3):1-3.
- Sorcinelli, M.D. and J.H. Yun. 2009. Mutual Mentoring Guide. University of Massachusetts Amherst, Office of Faculty Development. [http://www.umass.edu/ctfd/mentoring/downloads/Mutual%20Mentoring%20Guide%20Final%2011\\_20.pdf](http://www.umass.edu/ctfd/mentoring/downloads/Mutual%20Mentoring%20Guide%20Final%2011_20.pdf)
- Thilmany, D. 2000. “Gender Based Differences of Performance and Pay among Agricultural Economics Faculty.” *Review of Agricultural Economics* 22 (1):23-33.
- Wilhite, A.W. and E.A. Fong. 2012. “Coercive Citation in Academic Publishing.” *Science* 335 (3 February): 542-543.



**Figure 1. Groups of Early Career Agricultural and Applied Economics (AAE) Professionals with Mentoring Needs**



**Table 1. Departments of Agricultural and Applied Economics & College or School Placement, 2013**

<b>Institution Name</b>	<b>Department or Program Name</b>	<b>In NRC Study<sup>a</sup></b>	<b>College</b>
Alabama A & M University	Agribusiness		School of Agricultural and Environmental Sciences
University of Alberta	Resource Economics and Environmental Sociology		Faculty of Agricultural, Life, and Environmental Sciences
Alcorn State University	Agriculture (Ag Econ Program, Agribusiness Program)		School of Agriculture, Research, and Applied Sciences
Arizona State University	Morrison School of Agribusiness and Resource Management, Undergrad Programs in Agribusiness and Food Industry Management		College of Technology and Innovation
University of Arkansas	Agricultural Economics and Agribusiness		Dale Bumpers College of Agricultural, Food, and Life Sciences
Auburn University	Agricultural Economics and Sociology		College of Agriculture
University of British Columbia	Food and Resource Economics Group		Faculty of Land and Food Systems
California Polytechnic State University at Pomona	Food Marketing and Agribusiness Management		College of Agriculture
California Polytechnic State University at San Luis Obispo	Agribusiness		College of Agriculture, Food, and Environmental Sciences
California State University at Fresno	Agricultural Business		Jordan College of Agricultural Sciences and Technology
University of California-Berkeley	Agricultural and Resource Economics	x	College of Natural Resources
University of California-Davis	Agricultural & Resource Economics	x	College of Agricultural and Environmental Sciences
Clemson University <sup>b</sup>	Applied Economics and Statistics	x	College of Agriculture, Forestry, and Life Sciences
Colorado State University	Agricultural and Resource Economics	x	College of Agricultural Sciences
University of Connecticut	Agricultural and Resource Economics	x	College of Agriculture and Natural Resources

Cornell University	Charles H. Dyson School of Applied Economics and Management	x	College of Agriculture and Life Sciences
Dalhousie University	Business and Social Sciences (B.S. degrees in Agricultural Business, Agricultural Economics, International Food Business)		Faculty of Agriculture (Dalhousie Agricultural Campus) located at Truro
University of Delaware	Applied Economics and Statistics		College of Agriculture and Natural Resources
University of Florida	Food and Resource Economics	x	College of Agricultural and Life Sciences
University of Georgia	Agricultural and Applied Economics	x	College of Agricultural and Environmental Sciences
University of Guelph	Food, Agricultural, and Resource Economics		Ontario Agricultural College
University of Idaho	Agricultural Economics and Rural Sociology		College of Agricultural and Life Sciences
University of Illinois at Urbana-Champaign	Agricultural and Consumer Economics	x	College of Agricultural, Consumer, and Environmental Sciences
Iowa State University	Economics	x under Economics	College of Agriculture and Life Sciences, College of Liberal Arts and Sciences
Kansas State University	Agricultural Economics	x	College of Agriculture
University of Kentucky	Agricultural Economics	x	College of Agriculture, Food, and the Environment
Louisiana State University	Agricultural Economics and Agribusiness	x	College of Agriculture
University of Maine	School of Economics (concentrations in Agribusiness Management, Resource and Environmental Economics and Policy)		College of Natural Sciences, Forestry, and Agriculture
University of Manitoba	Agribusiness and Agricultural Economics		Faculty of Agricultural and Food Sciences
University of Maryland College Park	Agricultural and Resource Economics	x	College of Agriculture and Natural Resources
University of Massachusetts Amherst	Resource Economics	x	College of Social and Behavioral Sciences
McGill University	Agricultural Economics		Faculty of Agricultural and Environmental Sciences
Michigan State University	Agricultural, Food, and Resource Economics	x	College of Agriculture and Natural Resources
University of Minnesota-Twin Cities	Applied Economics	x	College of Food, Agricultural, and Natural Resource Sciences

Mississippi State University	Agricultural Economics		College of Agriculture and Life Sciences
Missouri State University	Undergrad Program in Agricultural Business		William H. Darr School of Agriculture
University of Missouri-Columbia	Agricultural and Applied Economics	x	College of Agriculture, Food, and Natural Resources, also have positions in Truman School of Public Policy
Montana State University	Agricultural Economics and Economics		College of Agriculture, College of Letters and Sciences
University of Nebraska-Lincoln	Agricultural Economics	x	Institute of Agriculture and Natural Resources (IANR), Academic Programs in College of Agricultural Sciences and Natural Resources within IANR
University of Nevada at Reno <sup>c</sup>	Center of Resource Economics (Economics Department was in same College)		College of Business
University of New Hampshire	Natural Resources and the Environment (Multidisciplinary--B.S. in Env and Res Economics among several degrees)		College of Life Sciences and Agriculture
New Mexico State University	Agricultural Economics and Agricultural Business	<sup>d</sup>	Agricultural, Consumer, and Environmental Sciences
The New School for Social Research	Economics		None
North Carolina A&T State University	Agribusiness, Applied Economics, and Agriscience Education		School of Agriculture and Environmental Sciences
North Carolina State University	Agricultural and Resource Economics	x under Economics	Agriculture and Life Sciences
North Dakota State University	Agribusiness and Applied Economics		Agriculture, Food Systems, and Natural Resources
Northwest Missouri State University	Agricultural Sciences (B.S. in Agriculture Business, MBA with emphasis in Agricultural Economics)		Melvin D. and Valorie G. Booth College of Business and Professional Studies
Ohio State University	Agricultural, Environmental, and Development Economics	x	College of Food, Agricultural , and Environmental Sciences
Oklahoma State University	Agricultural Economics	x	College of Agricultural Sciences and Natural Resources
Oregon State University	Applied Economics	x	College of Agricultural Sciences

Pennsylvania State University	Agricultural Economics, Sociology, and Education	x	College of Agricultural Sciences
Purdue University	Agricultural Economics	x	College of Agriculture
University of Rhode Island	Environmental & Natural Resource Economics	x	College of the Environment and Life Sciences
Rutgers the State University of New Jersey	Agricultural, Food, and Resource Economics		School of Environmental and Biological Sciences
Sam Houston State University	Agricultural and Industrial Sciences (B.S. in Agricultural Business)		College of Sciences
Santa Clara University	Food and Agribusiness Institute		Leavey School of Business
University of Saskatchewan	Bioresource Policy, Business, and Economics		College of Agriculture and Bioresources
South Dakota State University	Economics (Majors in Agricultural Business; Agricultural and Resource Economics)		College of Arts and Sciences
Southern Illinois University	Agribusiness Economics		College of Agricultural Sciences
Tarleton State University	Environmental and Agricultural Management (B.S. in Agricultural Economics with concentration in Agribusiness Management or Agricultural Economics)		College of Agricultural and Environmental Sciences
University of Tennessee at Knoxville	Agricultural and Resource Economics		College of Agricultural Sciences and Natural Resources
University of Tennessee at Martin	Agriculture, Geosciences, and Natural Resources (B.S. in Agriculture with Agricultural Business Concentration. B.S. in Natural Resources Management with Environmental Management Concentration)		College of Agriculture and Applied Sciences
Tennessee State University	No department structure (B.S. in Agricultural Sciences with concentration in Agribusiness)		College of Agriculture, Human, and Natural Sciences
Tennessee Tech University	School of Agriculture (B.S. in Agriculture with Agribusiness Management Concentration)		College of Agriculture and Human Sciences
Texas A & M University	Agricultural Economics	x	College of Agriculture and Life Sciences
Texas Tech University	Agricultural and Applied Economics	Not in NRC, has Ph.D.	College of Agricultural Sciences and Natural Resources

Tuskegee University	Agricultural and Environmental Sciences (no undergrad degree but have business concentration in other majors, M.S. in Agricultural and Resource Economics)		College of Agriculture, Environment, and Nutrition Sciences
Utah State University	Applied Economics	Admitting students to Economics PhD in Fall 2013	College of Agriculture and Applied Sciences
University of Vermont	Community Development and Applied Economics		College of Agriculture and Life Sciences
Virginia Tech	Agricultural and Applied Economics	x	College of Agriculture and Life Sciences
Washington State University	School of Economic Sciences (B.S. in Economic Sciences, B.S. in Agricultural and Food Systems--Agricultural and Food Business Economics)	x under Economics	College of Agricultural, Human, and Natural Resource Sciences
West Virginia University	Division of Resource Management, Program in Agricultural and Resource Economics		Davis College of Agriculture, Natural Resources, and Design
University of Wisconsin-Madison	Agricultural and Applied Economics	x	College of Agricultural and Life Sciences
University of Wisconsin-Madison	Development Studies PhD Program	x	College of Agricultural and Life Sciences, College of Letters and Science
University of Wisconsin-Platteville	School of Agriculture (B.S. in Agribusiness)		College of Business, Industry, Life Science, and Agriculture
University of Wisconsin-River Falls	Agricultural Economics		College of Agriculture, Food, and Environmental Sciences
University of Wyoming	Agricultural and Applied Economics		College of Agriculture and Natural Resources

<sup>a</sup>In National Research Council (2011), *A Data-Based Assessment of Research-Doctorate Programs in the United States* as either agricultural and applied economics or economics departments.

<sup>b</sup>Department closed in 2011; small agribusiness program is in the process of reopening.

<sup>c</sup>Department closed in 2011.

<sup>d</sup>Joint Ph.D. in Economic Development with Economics Department in College of Business and interdisciplinary M.S. & Ph.D. in Water Science and Management with concentration in Water Economics and Policy, which is mostly in College of Agriculture.

**Table 2. Summary of College or School Placement of Agricultural and Applied Economics Departments, 2013**

<b>College or School Placement</b>	<b># of Departments</b>	<b>% of Departments</b>
Agriculture or Agricultural Sciences is 1 <sup>st</sup> Name in College or School Title	58	77.3
Agriculture or Agricultural Sciences is 2 <sup>nd</sup> or 3 <sup>rd</sup> Name in College or School Title	4	5.3
Business School	5	6.7
Other <sup>a</sup>	8	10.7
<b>Total</b>	<b>75</b>	<b>100</b>

<sup>a</sup>Includes Natural Resources, the Environment and Life Sciences, Environmental and Biological Sciences, Arts and Sciences, and Social and Behavioral Sciences.