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## Feature Article

# Perspectives on Diversity, Equity, and Inclusion in the Agricultural and Applied Economics Profession

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## Abstract

In this paper, we present perspectives on diversity, equity, and inclusion (DEI) from leaders in the Agricultural and Applied Economics profession. The leaders address how to enhance DEI by identifying goals, barriers, and strategies. DEI programs are already underway, and with the changing student demographics to an increasing proportion of minority students, leaders in Agricultural and Applied Economics departments and employing organizations may want to further position themselves to continue to have an impact. Moreover, creating a successful DEI environment for students may also require improvements in the hiring and retention of diverse talent in academic departments and government institutions. Professional associations like the Agricultural and Applied Economics Association (AAEA) may assist in helping students transition from their academic programs to successful careers, particularly if in collaboration with hiring institutions.

## 1 Introduction

Academic departments, professional societies, and governmental institutions recently recommitted efforts to ensure and enhance diversity, equity, and inclusion (DEI). Yet<sup>1</sup> in 2020, the Agricultural and Applied Economics Association (AAEA) launched an effort to increase diversity within the profession. Among the efforts, the AAEA integrated goals and strategies into the Strategic Plan adopted in 2020, refined mentoring programs to be inclusive of a broad set of participants with varying career goals, addressed the climate and resources for diverse audiences at meetings, and continued a Diverse Voices webinar series to share the “pathways to our profession” among a varied set of AAEA members. As an effort to add to and promote these new initiatives, a panel session featuring varied leaders was convened at the 2021 AAEA annual meeting to discuss their visions for a DEI environment. After some time to consider what else can be said, we asked the leaders to elaborate upon their visions for a DEI framework.

The purpose this paper is to report our findings from the follow-up contributions from the leaders participating at the 2021 AAEA panel session. In this article, we examine the information presented at the 2021 AAEA meeting and the follow-up contributions for themes and important findings. As a result, we find that six themes emerge from this paper. First, our leaders often made statements in the 2021 panel that were consistent with the current DEI literature. Second, changes in the demographic characteristics of the student body are coming, which means that Colleges of Agriculture, departments,

<sup>1</sup> Agriculture has a rich and important history in the United States, shaping economic interests, policies, and even political affiliations (Hardin 1950). However, this history also includes slave labor, sharecropping, tenant farming, and discriminatory policies and practices affecting how some groups view agricultural and related majors to this day (Mann 1989; Warlow, Graham, and Scott 1995). Given this history, it could be argued that the culture of American agriculture has been disproportionately shaped by a select majority, with limited understanding of how policies, programs, and attitudes have affected underrepresented groups.

and employers have choices on how best to position themselves for success in the future. Third, efforts that encourage an emphasis toward DEI in the classroom and workplace are already underway. Fourth, economic principles can provide a useful perspective on the assumptions to a DEI framework. Fifth, leaders are an important ingredient to a successful DEI effort. Sixth, a successful effort may require more than creating a DEI environment for graduate students, it may require DEI environments in at least hiring academic departments and government research institutions.

Contextual information for this paper was gathered from two sources. At the 2021 AAEA panel session, the leader-participants were asked to discuss their vision for a DEI framework. At the session, we asked the panel members to elaborate on DEI goals, barriers, and strategies. We selected the panel members who represented important positions of influence, including university leadership, leadership within the profession (i.e., AAEA leadership), and leadership from a major employer of graduates from Agricultural and Applied Economics departments. Their comments provided perspectives from their institutions, and within the broader field of Agricultural and Applied Economics. To enhance their contributions from the panel session, we briefly compare our leaders' statements with the current DEI literature. This is relevant in that a considerable body of literature now exists in other fields, and it is useful to know whether the leaders had the knowledge capital of the literature from other fields to help guide their institutions.<sup>2</sup> Moreover, our leaders' statements are the application to the principles laid out from the DEI literature. We add the literature to help make clear some of the originating principles that are often written about in business and the social sciences. Second, we later asked the panelists to provide further thoughts after having given their presentation and taking more time to reflect on what they would like to contribute. Three out of four of the panelists were able to contribute further thoughts and are included as co-authors to this paper. They are Deacue Fields, Dean of the Dale Bumpers College of Agricultural, Food and Life Sciences, University of Arkansas; Dawn Thilmany, 2021 then President of the AAEA; and Spiro Stefanou, Administrator of the Economic Research Service (ERS), U.S. Department of Agriculture. Titus Awokuse shared his perspectives at the 2021 panel session from his leadership experiences as the Chair of the Department of Food and Agricultural Resource Economics at Michigan State University. Awokuse currently serves as the Associate Dean for Research and Strategic Partnerships for International Studies Program at Michigan State University.<sup>3</sup>

As noted, this paper discusses more than DEI in the classroom. Although education is critical in accomplishing a DEI environment, efforts necessarily include more than classrooms and universities alone. Success in achieving more diverse student bodies in universities means that future employers will encounter a more diverse pool of job seekers. If students' future incomes and employment is important to universities, then universities will have at least an interest in whether employers' HR offices and professional associations adopt DEI efforts that will help ensure the success of newly hired students.

The paper proceeds as follows. First, we briefly compare the current literature with statements by the leaders speaking at the 2021 AAEA panel session on DEI. Afterward, we follow up with more detailed perspectives from leaders within a university, the AAEA and a prominent employer, the Economic Research Service (ERS) of the United States Department of Agriculture. Although this article is different from the traditional papers in this journal, most of which have been dedicated to classroom, teaching, or Extension resources, we do contribute to a major aim of this journal, which is to provide

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<sup>2</sup> For some, this may be less surprising. After all, most persons receive training about DEI principles, but it is uncertain how effective these training are in using the principles. Also, it is uncertain how leaders in Agricultural and Applied Economics are following up with actions consistent with their training, or the literature.

<sup>3</sup> Donald Hirasuna and Andrew Muhammad contributed to this paper by conducting a literature review, identifying the themes and key findings, and writing the narrative. The other authors contributed and helped verify the follow-up statements in this paper and vetted the themes and key findings. The perspectives provided by leaders do not necessarily reflect the position of each of their institutions nor represents the collective perspectives of all leaders within Agricultural and Applied Economics, but rather their personal views and examples from their own experiences.

commentary that enhances our understanding of important societal issues, including inequality and discrimination.

## 2 Literature and the 2021 AAEA Panel Session on DEI

To help clarify what we mean by DEI, we first set the context with some definitions. Next, we compare scholarly writings with statements made by our panel members.<sup>4</sup> Perhaps somewhat ironically, the literature presented below is largely from other fields than Agricultural and Applied Economics, where research has become ubiquitous with many articles published on the topic.<sup>5</sup>

Establishing definitions will help focus the discussion. To some, the definitions may serve as an introduction. To others, the definitions help clarify what we consider within a DEI framework. Together, the definitions to DEI signal to economists that some economic assumptions are being scrutinized and potentially modified. Among the assumptions that are implicitly, or explicitly, questioned in a DEI effort is that demographic categories of persons are completely homogenous, that co-workers cannot wield power in a way that prevent choices that rationally achieve organizational objectives, that social externalities, such as bullying of minorities, crime in high-poverty neighborhoods, or even microaggressions would not eventually affect a person's willingness to participate in work groups, that management knows with certainty the potential benefits of all choices, including a choice to further emphasize a DEI framework, or even that management can omnisciently foresee the strategies that best achieve their objectives.

Below are the definitions.

*Diversity* refers to the varied personal experiences, values, and viewpoints that emanate from differences. It includes differences in national origin, language, race, color, disability, ethnicity, age, religion, sexual orientation, gender identity, socioeconomic status, veteran status, and family structures (University of California, Berkeley 2015). In addition, diversity could also include nonobservable characteristics like culture. These differences can result in varied perspectives on issues and diverse approaches to problem solving and practices (Roberson 2006).

*Equity* is the guarantee of fair treatment regarding access to resources and opportunities. As part of that guarantee, equity includes identifying and eliminating systemic and structural barriers that prevent participation, particularly for marginalized groups. Structural barriers include discrimination, implicit bias, and segregation (University of California, Berkeley 2015). More informative descriptions of discrimination finds that its expressions can span two dimensions. Discrimination can be overt, or subtle such as favoritism, or microaggressions.<sup>6</sup> Also, discrimination can be intentional, or it can be subconscious, such as favoritism of groups similar to ourselves (Roos and Gatta 2009).

*Inclusion* is a set of behaviors that encourages individuals to feel valued for their unique qualities and experiences. Multiculturalism, lack of cultural bias, resolution of intergroup conflicts, and freedom

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<sup>4</sup> To help ensure an exhaustive search and to help avoid a biased representation of the literature, we searched for DEI articles related to universities and employers. We searched EconLit, EBSCO, and Google Scholar for articles with keywords like diversity, equity, inclusion, goals, strategies, and barriers. To limit the number of articles, we searched for publications between the years 2015 through 2021. To further focus our search, we added keywords such as economics, university, and employer. Next, we searched several university and department websites for statements on DEI. We included land-grant universities in different regions of the country and several universities with highly ranked economics departments. Furthermore, we searched federal government department websites for DEI statements. Finally, we selected several articles that we had heard of before starting our search, such as the report from the American Council on Education. After identifying each article, we searched the bibliography for more citations. Our search found more than 50 relevant articles. From these articles, we pasted statements relevant to goals, barriers, strategies, and outcomes into a spreadsheet. Our literature review finally selected articles that we determined were representative of the recent literature on DEI.

<sup>5</sup> Garg and Sangwan (2020) cite that 13,896 publications on DEI appeared in the Social Sciences Citation Index from 1970 to 2009.

<sup>6</sup> Ioannides (2010) notes that whites in jury settings are developing more subtle interpretations to base their logical interpretations of guilt.

from harassment are characteristics of an inclusive organization (Roberson 2006). Inclusion includes two elements, a sense of belonging, which is the degree to which individuals feel a part of critical organizational processes such as access to information and resources, involvement in work groups, and ability to influence organization-wide decisions. The second is uniqueness, where individuals are valued for their contributions and encouraged to speak their opinions. Research suggests that diversity in and of itself may not necessarily result in positive benefits without inclusivity. Consequently, inclusion has emerged as a related and important concept.

The leaders-panelists from the 2021 session recognized the importance of DEI within their organizations. Thilmany noted that when she first began at Colorado State University, she was the only woman faculty. She subsequently made it a conscious effort to increase the number of qualified female graduate students and faculty. Broader definitions of equity and inclusion beyond gender was also recognized by the panelists. Thilmany noted that everyone has a responsibility to disallow discrimination. Stefanou noted that some may exercise their power and monopolize resources at the exclusion of others. Fields noted that when he was department chair, students would only communicate within their own racial groups. Awokuse emphasized that in the presence of less inclusive environments, one needs to build a community of trust and compassion, where others are treated with respect.<sup>7</sup>

Broadly speaking, today's paradigm has evolved over the last 70 years from the time when Title VII of the Civil Rights Act of 1964, affirmative action, and equal employment legislation were passed. In years past, the literature focused on barriers to diversity, such as discrimination, bias, and tokenism. The literature now includes empirical research on the benefits of diverse work and academic environments and the empirical conditions necessary for employers to reap the associated benefits like innovative perspectives, creative solutions, and enhanced problem-solving within the organization. The literature suggests that organizations are more likely to reap these benefits by inviting all characteristics, talents, and voices from different perspectives.<sup>8</sup> Under such conditions, persons may perceive themselves as being a welcome member of the group and are more likely to contribute their ideas toward creative solutions (Pless and Maak 2004).

Awokuse noted in the 2021 panel session that when graduate students and faculty feel that they have been treated equitably and fairly, they are more likely to stay in that department. Also, persons who are treated more equitably may become more productive and enhance the reputation of the department. That enhanced reputation in turn can benefit departments when they recruit the best graduate students and faculty.

Diversity can enhance education for all students by providing different perspectives in the classroom. Consequently, diversity can raise the level of critical thinking as students hear a variety of perspectives and unconsidered ideas. Discussions in the classroom that include unconsidered ideas might further provide the teachers with new ideas for research (UCLA Diversity and Faculty Development Program).

In the 2021 session, Thilmany noted that implementing a DEI framework may sometimes result in research and valued scholarship that may not have otherwise arisen, such as work on food insecurity. Stefanou also noted that the guiding principles for managers of research in Agricultural and Applied Economics is whether the research is relevant and is timely. A working group at the University of

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<sup>7</sup> Currently, little is known about the level of diversity in Agricultural and Applied Economics. However, some information is available for economics in general. Disproportionately, fewer women and minorities earn doctorates in economics. Also, Lundberg and Stearns (2019) examined 43 colleges and universities, finding that the percentage of full professors that were women equaled 13 percent, 23 percent for associate professors, and 24 percent for assistant professors. For minority economists, of 1,150 students graduating with a PhD in 2017, 682 were not permanent residents of the United States. Among the remaining 468 U.S. citizens and permanent residents, 13 percent were Asian, 3 percent were African Americans, and 4 percent were Hispanic (Wessel, Sheiner, and Ng 2019).

<sup>8</sup> Even though DEI has progressed, more can still be accomplished. For example, Gould et al. (2020) suggest that DEI efforts for the disabled tend to be seen as acts of charity, instead of looking upon the disabled as assets to their organization.

Pennsylvania notes that minority and female researchers may pursue research that is different from traditional work.<sup>9</sup> The challenge posed in the literature and recognized by Thilmany and Stefanou is that we as a profession must consciously avoid automatically discrediting frontier topics and approaches to our research work because of perceptions that it is not rigorous, not published in prestigious journals, or not the same as research traditionally done within the field (Zambrana et al. 2018).

Leadership plays an important role in the transformation to a DEI framework. Leaders communicate a vision of a DEI environment, identify DEI issues, set expectations for an inclusive environment, provide guidance, and help connect resources to diverse staff. The best leaders in the right conditions can weave together the fragmented visions for a DEI framework across different groups of minorities and all other stakeholders.<sup>10</sup> The ideal leader can identify the different factions, incorporate the complex visions of many, and develop relationships with persons at all levels of the organization to develop a mutually shared vision (American Council on Education 2020). That vision is more than abstract and includes practical tasks, such as hiring and retention, mentoring, and making decisions about tenure.

Our panelists provided many statements that demonstrated fulfillment of this role within Agricultural and Applied Economics. It should be emphasized that these are examples of what works and that leaders are only one ingredient to creating a DEI environment. Leaders on their own may not accomplish a department's goals. Constructing a DEI environment involves many complex factions and conditions, which may make it difficult for some leaders to gain significant headway early on, especially without cooperation from others. Even though the panelists leaders provided many examples of leadership in the 2021 session, we only provide two examples because of space limitations.

First, Fields set expectations and spoke the message as an Associate Dean. He communicated a vision of a DEI environment and demonstrated his commitment to inclusiveness by leading by example. Fields notes that a DEI environment represents changes from many parties throughout the university. Corroborating the literature, Fields noted that we have to weave together the different factions within the organization. Clarifying that message, Fields noted that even though Associate Deans often work indirectly on such issues with and through chairs and professors, Associate Deans too, should communicate a sense of inclusion to everyone, including students. Fields noticed that some minorities do not feel like the department wants them. When Fields talked to minority graduate students, Fields observed that they did not feel like they were the type of student the department was looking for. As Associate Dean, Fields communicated in a way that made them realize that he wanted them in the college. Fields further noted that because of color, persons will have different experience and will have different perceptions from their experiences. Moreover, Fields claimed that because of unique experiences, one would be surprised how many students felt they were invisible.

Second, as chair of an academic department, Awokuse emphasized the importance of creating a working environment where each member of the unit has a feeling of community and a sense of belonging. He suggested that an academic department should not just be a place where you work, but it should also be a place where everyone in the community is treated fairly, accorded respect, and allowed to have a voice in providing inputs in decisions that affect the group. To build community, Awokuse created settings that would foster casual and deeper relationships. Space via affinity groups were created and supported for students, faculty, and staff in the department. That way if one member of the

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<sup>9</sup> Zambrana et al. 2018.

<sup>10</sup> For purposes of this paper, we refer to minorities as groups of persons who would add to diversity. As noted above, this includes persons with different national origin, language, race, color, disability, ethnicity, age, religion, sexual orientation, gender identity, socioeconomic status, veteran status, and family structures. It can include a single one of the statuses listed above, or it can include multiple statuses. A broad interpretation suggests that minorities include not only underrepresented groups, but also groups who are in the majority, but may be treated inequitably, or in a noninclusive fashion. As an example, see Hirasuna and Allen (2012) on how groups with multiple statuses can disproportionately experience worse outcomes in the home mortgage market.

group had concerns, it could be shared in a safe space and a representative of the group, instead of the individual, could share the concern to a larger group or decision makers in positions of authority. This approach acknowledges and accounts for the uneven hierarchy and power dynamics that often exist in many departments and organization that might unintentionally hinder and constrain a thriving DEI environment. The absence of a safe and inclusive space for sharing inputs and engaging in the diverse areas of participation and leadership in a community often result in the marginalization of people of color, women, and other underrepresented population. Awokuse noted that a careful and intentional development of community norms and empowering activities in a department can help reduce or eliminate toxic and unwelcoming environments.

### **3 Follow-Up Statements by Panelists From the 2021 Session**

We summarize the follow-up statements by the panelist-leaders from the 2021 panel in this section. The supplemental statements are what the panelists further had to say after two years of consideration. The leaders-panelists tell us further about their vision for a DEI environment including important issues and examples of DEI resources.

#### **3.1 University Perspective on DEI in Agricultural and Applied Economics**

Fields provided three example issues that deans within colleges of agriculture and similar leaders face when developing a DEI vision. These include developing and monitoring progress toward diversity among faculty, developing strategies that connect minorities with resources, and helping diversify the pipeline of graduate students. Part of Field's role was to develop a democratically shared vision of how to address each of these issues.

A key challenge for colleges of agriculture and universities is to develop strategies that can help diversify the faculty and graduate students within academic departments. Fields commented that every department faces distinct challenges in identifying strategies. For some departments, successful strategies may involve identifying and removing barriers to DEI. For example, faculty mentoring programs can be an effective strategy, particularly if mentors understand cultural and ethnic influences (Zambrana et al. 2018). These can complement current strategies, such as ensuring transparency in promotion, tenure, and incorporating DEI efforts in annual performance reviews.

Fields pointed us to another key issue, diversifying the pipeline of students within colleges of agriculture and Agricultural and Applied Economics departments. Land-grant colleges and universities may be lagging when it comes to attracting "nontraditional students" and embracing the next generation based on changing demographics in the United States. Consistent with national trends, universities are becoming more diverse, with Hispanic and Asian students representing the biggest gains. In 1996, for instance, students of color made up less than 30 percent of the undergraduate student population. This increased to over 45 percent by 2016 (Comevo 2020). With this growth, Fields and other leaders must consider the unique challenges and barriers for current and future students. They must identify strategies for higher education institutions to keep pace with the changing needs of this growing majority, whose challenges are often overlooked. Fields noted that one of the biggest ways that the higher education system fails these students is by not identifying their unique needs, which can inform the necessary interventions to keep students on course to completing their degree.

Looking ahead, Fields suggested that an important determinant in the success of Agricultural and Applied Economics graduate programs is how they adapt to an increasingly diversified graduate student body. Important determinants for departments will be the level of comprehensiveness, cost-efficiency, flexibility, and relevance. Broadening the pipeline arguably poses a special challenge. Certain groups

may have limited exposure to agriculture and related fields, which can affect their decision to select an agricultural major (Wildman and Torres 2001).<sup>11</sup>

Fields suggested that as we think about DEI and recruiting students, it is important that we do the following: acknowledge the potential benefits from inclusivity, safe spaces, and minimal stress environments; understand current views about employment and job opportunities; emphasize people, culture, and international affairs; focus on technology; stress the need to strengthen networks; and promote leadership and entrepreneurship. Academic departments should also consider the following when communicating to perspective students and demonstrating the value of their degree programs: expanding online education, increasing recruitment to parts of the country where populations are growing, and increasing outreach to first-generation and underrepresented students (Comevo 2020). Fields concluded that if academic departments can embrace these and other changes to a DEI environment, the future is bright for the Agricultural and Applied Economics profession.

### 3.2 DEI and AAEA

The AAEA is especially well-suited to connect members with DEI resources. Former AAEA president, Thilmany presented a DEI vision from the AAEA's perspective. Initiatives range from collecting more detail data on membership demographics, supporting mentoring initiatives, and funding and supporting DEI surveys. The AAEA is relevant to DEI efforts in that the AAEA can not only help graduate students from diverse backgrounds achieve success, but it can assist its members as they move into professional careers.

Thilmany noted that the 2019 climate survey by the American Economic Association (AEA) is particularly informative. AEA reported a high incidence of what they termed "costly avoidance" activities among their members, such as avoiding certain research areas, not participating in conferences, not asking questions or engaging individuals and groups with ideas or viewpoints, or even leaving a job. Overall, average reported avoidances were higher among female and underrepresented minorities (Bayer et al. 2019).

As one timely response, the AAEA established a Professional Code of Conduct to transparently frame standards for conduct at our professional activities. Although such aims to improve the professional environment is needed, Hilsenroth et al. (2022) noted that such policies are insufficient to fully ensure more diverse, equitable, and inclusive professional spaces. They argue that collective and layered approaches from AAEA are needed to help shift norms.

Thilmany recognized that the AAEA launched a new strategic plan in 2018, but the COVID-19 pandemic and recent tensions elevated the need to address DEI and justice in the society. Consequently, the AAEA revisited the plan in 2020, with a focus on prioritizing DEI and social justice issues. A major focus area for the AAEA's 2020 strategic vision was establishing and fostering a culture of engagement and inclusion. In this regard, AAEA committed to supporting a diversity of perspectives by enhancing feedback and interaction opportunities for all at the annual meeting; encouraging programming by sections, which tend to allow for more comfortable group dynamics, similar to what Fields mentioned with respect to meetings he hosts with diverse students; forming sections to fully reflect the diversity of member interests; supporting diversity in thought through alternative meeting formats and venues, such as symposia, workshops, and sponsored events; developing inclusiveness by encouraging all members to participate in AAEA committees and sections; and striving for equality of opportunity by actively promoting fairness in access, treatment, and opportunity.<sup>12</sup> But what does this mean in practice? As an example, Hilsenroth et al. (2022) highlighted a recent effort spearheaded by the Committee on

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<sup>11</sup> As one reviewer noted, that although traditional row-crop and animal agriculture is important and the biggest focus in agricultural-based economics, increased diversity might foster more research within urban agriculture, food access, food security, and food distribution.

<sup>12</sup> For more about the role of sections in the AAEA conference, see Wilson 2022.



Women in Agricultural Economics (CWAE) to secure on-site childcare and childcare support at the annual meeting for greater inclusivity for faculty with young children, particularly women, on whom childcare responsibilities typically fall disproportionately. Additionally, Thilmany noted that in 2021, members of AAEA leadership participated with industry partners in Together We Grow (<https://twg.csusystem.edu/>) as part of a transformational leadership cohort receiving professional development training focused on providing leadership on DEI issues within ag organizations (ProInspire 2018).

Recognizing the long-term commitment that is needed to ensure greater inclusiveness and a diversity of voices, Thilmany noted that the AAEA prioritized investing in long-term leaders, including mentoring and training programs. In fact, the AAEA strategic plan elevated mentoring, noting that its members can be significantly strengthened professionally through mutual mentoring relationships. The AAEA also recognized that there is a wide range of professional training opportunities, formal and informal, that members can receive, including trainings and workshops for graduate students and early-to-mid-career professionals. Even with these efforts, new models are needed to increase the pipeline of African Americans, women, and other underrepresented groups into the profession.

Too often, social change efforts do not engage the right mix of people. When leaders bring data-driven solutions to underserved, limited resource or low-income communities, those communities not only should be at the table, but they should also be engaged and developed for leadership positions (Thilmany 2020). To this end, Thilmany stated that it has been heartening and hopeful that diverse leaders are stepping forward to frame, lead, and guide AAEA's efforts. Commitments to better track our members across several characteristics are underway and will inform how DEI are playing out in the association.

### 3.3 Perspectives from a Government Research Agency

In this section, the current administrator of the ERS, Stefanou, described the agency development and implementation of their DEI vision. Stefanou provided more information on the goals, barriers, conditions, and strategies that characterize the DEI efforts. What becomes clear is that the USDA and universities have a mutually dependent relationship that can work together to increase diversity in employment and in research topics considered. ERS looks to universities to provide well-prepared students skilled in the tools used by economists. Successful university departments and graduate programs supply future employees with diverse backgrounds and research interests.

ERS has been and continues to be the largest organization offering employment opportunities for individuals with post-graduate training in the Agricultural and Applied Economics profession. Stefanou noted that with about 75 percent of our staff holding advanced degrees, ERS has a keen interest in the breadth, depth, and relevance of graduate training. A challenge for ERS is recruiting diverse students graduating with advanced degrees who are eligible for federal service.

Like many employers, a core need for ERS is hiring staff who are well-versed in the tools, concepts, and models of applied economic analysis. The ERS places a premium on hiring staff who can be relied on to get the job done well and on time, are interested in contributing to our agency in a meaningful way that adds value to our activities, can see how their projects and activities fit into the larger picture, and bring a high level of integrity to how they conduct their work and engage with their colleagues. Beyond the skills and attitudes that contribute to an organization, Stefanou suggested that the ERS is in the business of thinking: "We engage in analysis, problem-solving, and making meaning of trends that can advance the well-being of American households, farmers, and rural America."

ERS seeks to contribute by engaging in capacity-building programs to advance efforts to build a DEI workforce. By building a pipeline of opportunities earlier in the education process and extending it through graduate studies, ERS will contribute to building a more diverse workforce for the agency, as well as a diverse group of agricultural economists, in general.

Stefanou noted that ERS has a long history of supporting undergraduate students studying agribusiness and agricultural economics through the USDA-wide 1890s program. This program provides tuition, books, and summer internship training for the selected students from 1890s institutions. The agency also has a program supporting the Farm Foundation Agricultural Scholars Program, which hosts up to 15 graduate students each year who engage in a series of programming supports with ERS to build networks, learn about USDA programs, receive mentoring from ERS economists, and complete a research project. Starting in 2022, ERS expanded this program to include graduate students from 1890 colleges and universities. Efforts are underway to collaborate with minority-serving institutions and others to explore additional research collaboration opportunities for students and faculty to support and expand ERS's reach to students of color, females, and persons with disabilities.

Stefanou noted that DEI does not only include the well-deserved workforce initiatives. Another dimension is the consideration to advance DEI in the science and research taken up by Agricultural and Applied Economists within ERS and elsewhere. Stefanou suggested that how we choose to engage in our science in the context of DEI bears closer scrutiny. The type of DEI-aware science we observe varies. Our profession addresses food security, food access, and broader poverty impacts on the well-being of socially disadvantaged stakeholders. As a profession, the portfolio of research could be more expansive in addressing the prospects to improve the well-being of socially disadvantaged stakeholders in terms of income and productivity growth, access to agricultural innovations, access to capital and markets, impacts of climate change, and the broader suite of research on agriculture, food, the environment, and rural America.

The opportunity set of DEI-aware research questions to stimulate graduate research is largely predetermined by the scope of research activities among faculty. Enterprising graduate students can take a different direction, but it can be a challenging path toward degree completion. How do we ensure the graduate research training reflects the well-being of our diverse stakeholders, particularly socially disadvantaged farmers, ranchers, and members of the public? Identifying the asset needs is a key step in terms of data, modeling frameworks, and expertise.

## 4 Conclusion

Institutions of higher education and associated organizations, are recognizing the benefits and are adopting strategies for increasing diversity, promoting equity, and enhancing inclusion. Indeed, DEI objectives have become a central concern at universities, where universities have created administrative infrastructures to address issues of representation, impartiality and fairness, and inclusivity. Although efforts are underway, significant challenges lie ahead as the agricultural economics profession seeks more diverse representation. There is a clear need for land-grant universities and Agricultural and Applied Economics departments to improve upon current efforts to attract minority students. Academic departments have the responsibility of graduating professionals with the needed skills to advance the profession. As noted in this paper, expanding the breadth and depth of research areas, and increasing opportunities for students to study disparity issues in food, agriculture, natural resources, the environment, and rural communities could help in this regard. Finally, to help maintain diverse representation, employers will look to universities for skilled economists. Professional associations like the AAEA must continue efforts to support DEI-focused research and inclusive professional engagement.

One of the objectives of this paper was to encourage discussions by Agricultural and Applied Economists and their respective departments about enhancing their DEI framework. This paper informs the reader of how leaders can facilitate a DEI environment. Not only can leaders aid in a DEI environment within the classroom, but leaders can also help in diversifying the workforce of Agricultural and Applied Economists. As part of diversifying the classroom and the workforce, leaders may forge new areas of research and new methods of investigation.

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