





American Society of Agronomy . Crop Science Society of America . Soil Science Society of America

February 22, 2022

Dr. Jewel Bronaugh USDA Deputy Secretary of Agriculture 1400 Independence Ave., SW Washington, DC 20250 Mr. Arturo S. Rodriguez United Farm Workers President Emeritus 29700 Woodford-Tehachapi Road Keene, CA 93531

Re: USDA Equity Commission and Subcommittee on Agriculture Meeting

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Dear Dr. Bronaugh and Mr. Arturo:

Thank you for the opportunity to offer comments to the U.S. Department of Agriculture (USDA) to provide recommendations to the USDA Equity Commission and Subcommittee on Agriculture on policies, programs, and actions needed to address racial equity issues within the USDA and its programs.

The American Society of Agronomy (ASA), Crop Science Society of America (CSSA), and Soil Science Society of America (SSSA) represent more than 8,000 scientists in academia, industry, and government, over 13,000 Certified Crop Advisers (CCA), and 620 Certified Professional Soil Scientists (CPSS). We are the largest coalition of professionals dedicated to the agronomy, crop, and soil science disciplines in the United States. USDA researchers and USDA supported graduate students and postdoctoral scholars are among the members of ASA, CSSA, and SSSA.

Our societies have made the commitment to enhancing the experiences, opportunities, and safety of all members through creating a diverse, inclusive, and equitable environment in our scientific fields of study and throughout the Societies. We applaud USDA for taking this important step forward to address inequities through the formation of the USDA Equity Commission, and we welcome the opportunity to comment.

Based on our Societies' DEI research efforts, we have provided the USDA several recommendations to consider when analyzing current organizational programs, policies, systems, structures, and practices. We encourage the Equity Commission to take the time and resources necessary to hear the needs of farmers and ranchers, as well as USDA employees, understanding that reducing barriers will not be the same for all underrepresented people. We also encourage the Equity Commission to expand upon the Executive Order On Advancing Racial Equity and Support for Underserved Communities Through the Federal Government to include equity for all underrepresented groups. Below, we aim to use the work we have done in our Societies to support our recommendations to the USDA Equity Commission.

Understand the challenges facing underrepresented individuals in agricultural research

We are committed to enhancing the experiences, opportunities, and safety of our members and affiliated practicing professionals by creating a diverse, equitable and inclusive environment in our scientific fields of study and throughout the Societies. ¹

We define equity as follows:

Equity is providing various levels of support and assistance depending on the specific needs or abilities of individuals to ensure all can succeed. Equity is different from equality in that equality implies treating everyone as if their experiences are exactly the same. Being equitable means acknowledging and addressing structural inequalities—historic and current—that advantage some and disadvantage others. Equal treatment results in equity only if everyone starts with equal access to opportunities.

We define diversity as follows:

Individual diversity is a unique collection of attributes and life experiences that make us each who we are. These include, but are not limited to, national origin, language, race, color, political viewpoints, disability, ethnicity, gender, age, religion, sexual orientation, gender identity, socioeconomic status, veteran status, career stage, and family structures/backgrounds. Collectively, the diversity of our members helps guide our missions, provides innovative ideas to solve the problems facing our communities and our planet, and provides a richer connection to each other.

We define inclusion as follows:

Inclusion is to pursue deliberate efforts to ensure that our organizations welcome differences, respectfully listen to diverse perspectives and make every individual feel welcome, empowered, accepted and that they belong.

To address longstanding inequities in agriculture, it is important we understand the many ways in which diversity can present itself. Additionally, creating an inclusive environment is often the first step needed to recruit and retain diversity within an organization. Diversity, equity, and inclusion should be intertwined and include many other values, such as accessibility and justice.

In 2021, as part of the phasing of the Diversity, Equity, and Inclusion (DEI) cross-Society initiative for ASA, CSSA, and SSSA, a survey was developed and conducted across the full membership of the three Societies.² The survey assessed members' understanding of DEI concepts, DEI-related issues members face, and awareness of DEI resources within the membership. Based on our survey results, the following DEI challenges were identified as impacting the agricultural research workforce:

 Implicit bias and gender bias
For those who have experienced discrimination, implicit bias and gender bias were identified as the most prevalent DEI challenges. Additionally, Asian, Hispanic, and Black or African American

¹ https://www.agronomy.org/files/DEI/acs-dei-statement-2021.pdf

² https://www.agronomy.org/files/DEI/dei-survey-summary-report-06252021.pdf

members are more likely to consider "racial discrimination" the most prevalent issue people in their position face when compared to Caucasian or White members.

2. Recruiting diverse candidates

Though both men and women consider "recruiting diverse candidates" a prevalent issue, women tend to consider this a more prevalent issue than men. Early, mid, late, and retired career members consider "recruiting diverse candidates" more of a prevalent issue than graduate students. One reason could be early career and later members are more exposed to hiring and the challenges faced with recruiting and retaining diverse talent.

3. Understanding other perspectives

According to our data, "understanding other perspectives" was considered an equally prevalent issue across man, woman, non-binary, and prefer not to answer gender demographics. Having this knowledge demonstrates that our members are eager to learn from one another and the diversity they offer, especially diversity of thought. It also demonstrates that there isn't enough opportunity to hear and respect the perspectives of others.

USDA can take steps to address the challenges facing the agricultural research workforce by promoting diversity – supporting accessible exchange of knowledge, bolstering the student pipeline, expanding educational programs and grants, supporting mentorship and sponsorship, and expanding resources for early career researchers – and by facilitating collaborations with diverse stakeholders to address existential threats, such as climate change.

Create and foster diversity through support, access, and mentorship

It is important to have a diversity of voices at all levels, from the scientists choosing which research projects to pursue to the technical advisers who can reach underrepresented farmers. Barriers of all kinds prevent people of color from pursuing careers in science and agriculture, and this needs to change. What is needed are inclusive research institutions, accessible conferences, a deep assessment of the challenges faced by researchers of color, and discipline-wide plans to address them.

Support accessible exchange of knowledge in agricultural sciences

Frequent conferences where researchers and technical advisers share challenges, opportunities, information, and experiences are fundamental to the development and dissemination of agricultural research findings. Equally fundamental is making sure underrepresented technical advisers and producers can participate and access the tools, techniques, information, and technologies that agricultural researchers provide. This can happen through accessible publications, research that applies to farms of all kinds, and conferences that specifically invite and cater to the needs of underrepresented groups through relevant sessions, invited speakers, and practical locations, including virtual conferences. USDA can support researchers, technical advisers, and producers in accessing information and tools by providing financial support for conference and workshop participation. More specifically, USDA should consider offering grants to support caregivers.

Bolster the student pipeline

To bolster the pipeline of technical advisers from underrepresented backgrounds, training and recruitment could start with the Biden Administration's proposal for a Civilian Climate Corps. Recruits could be trained in conservation and climate-smart agricultural practices with clear pathways to careers in technical assistance or academic study.

Equitable access to agricultural science also depends upon the types of questions under investigation. The graduate student cohort of the Agronomy, Crop, and Soil Science disciplines is the most diverse cross-section of our membership, and they have the potential to elevate issues important to underrepresented groups throughout their scientific careers—issues like environmental justice, climate action, culturally significant crops, and the challenges of small or diversified operations. Unfortunately, there are systemic barriers and inequities in place that discourage students of color from achieving their potential, resulting in a much less diverse cohort of professors leading our fields. USDA can start by bolstering the student pipeline.

In bolstering the student pipeline, USDA can also provide resources to help students develop soft skills, such as leadership, communication, conflict management, and time management. For the past 8 years, ASA, CSSA, and SSSA have hosted a graduate student leadership conference at their annual meeting to provide students with intensive professional development training. In the sciences, soft skills help to reduce the talent gap and promote career success for all students.

Expand USDA's educational programs

USDA's Agriculture and Food Research Initiative's (AFRI) individual investigator grants may provide funding for student work, but their 2- to 3-year duration is too short, the award amount too small, and the success rate too low to maintain graduate student interest and involvement. Those who come from disadvantaged backgrounds are less likely to choose a field with unreliable funding. USDA should double AFRI's budget for direct funding for graduate student research and programs, including student fellowships, from 1.5 to between 3 and 5% of its total funding. This will give financial security to students and the ability to choose their own research projects. Additionally, by expanding USDA's current educational programs, such as the Education and Workforce Development Initiative and National Needs Graduate and Postgraduate Fellowship program, and integrating them with USDA's 1890 National Scholars Program, talented students at the 1890s Historically Black Colleges and Universities (HBCUs), student members of diverse professional scientific organizations such as Minorities in Agriculture, Natural Resources and Related Sciences (MANRRS) and the Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS), as well as other minority serving institutions (MSIs) would have a streamlined path towards fellowships in the agricultural sciences.

Funding students and focusing on disadvantaged groups will still not be enough to counter the systemic challenges faced by Black, Hispanic, Indigenous, and other scientists of color. Challenges these scientific cohorts face should be assessed at each stage of advanced study to identify and remove roadblocks. Universities should collaborate to undertake discipline-wide analyses of biases and barriers and propose reforms to their tenure tracks that eliminate inequities and encourage a broad range of activities that stimulate mentorship, quality teaching, civic engagement, and local outreach. The value of a diversity of voices cannot be overstated, and their continued absence is an incalculable loss to science and to the planet.

Support mentoring and sponsorship throughout USDA

Within the agency, USDA should expand mentoring and sponsorship programs, such as Project Sync through the Agricultural Research Service (ARS). Mentorship programs should be widely available and publicized to all employees. However, special emphasis should be placed on reaching out to women, racial minorities, and other underrepresented groups, especially those just entering their career with USDA and looking for guidance to succeed. This could include workshops focusing on preparing nomination portfolios for awards and other recognition. However, mentoring may prove insufficient if

not accompanied by active sponsorship (i.e., routinely and sustainably create opportunities for participation, extend invitations keynote speakers, nominate for leadership positions and awards).

Expand resources for early career researchers

Early career researchers (professionals within 7-10 years of their terminal degree) face unique challenges during an important career transition after college or graduate school. These researchers are expected to meet high productivity demands while often working in several subsequent temporary (1-2 year) postdoctoral appointments before finding permanent, equally rigorous research positions. These demands can be even more pressing on underrepresented individuals who face systemic racism and other implicit bias in the workplace.

USDA can support early career researchers who are employed at USDA research agencies and those who receive funding from USDA research grants. Postdoctoral positions should be extended beyond a 1-year timeframe to allow scholars more time to onboard, conduct research, and present findings of research projects. Early career researchers should also be supported with better pay that considers the standards of living and potential opportunities for growth and promotions. Transitional resources, including workshops on grant writing and application process, funds for publishing research findings, professional development funds, and more, should be accessible for all USDA-funded early career researchers and late-stage graduate students. Finally, the promotion and advancement guidelines for researchers at USDA may unintentionally discourage principal investigators from empowering underrepresented students and mentees to get research experiences (e.g., publishing first author research articles). USDA should consider flexibility in the research promotion process and support early career researchers in mentoring students of color and other underrepresented individuals in agriculture research.

Encourage diverse collaborations for people, profit, and the planet

It is similarly useful to diversify the types of organizations working together to tackle the most pressing challenges in agricultural sciences, such as climate change. Unusual collaborations can have unexpected benefits. For example, Ceres Solutions is a farmer-owned cooperative delivering services to farmers in central Indiana and Michigan, and, recently, personnel from its Templeton, IN, location participated in a Soil and Water Conservation District (SWCD) watershed working group. This led Ceres to make a large donation of consulting hours through NRCS's Regional Conservation Partnership Program. Ceres staff leveraged their relationships with farmer customers to improve the use of nutrient management practices and successfully encouraged participation in NRCS Environmental Quality Incentives Program (EQIP) contracts.

In this case, the SWCD understood that Ceres Solutions had trust and influence among producers. Across the breadth of the nation, however, different organizations will have the trust of different farmers of diverse backgrounds and locations. Direct influencers include seed suppliers, crop nutrient and protection suppliers, consultants, bankers or lenders, equipment suppliers, feed suppliers, local Farm Service Agency (FSA) staff, and crop insurance agents. Bringing these groups to the table is the best way to win the trust of the farming community to support conservation practices that mitigate and enable adaptation to climate change.

Certified Crop Advisers (CCAs), extension agents, and Sustainable Agriculture Research and Education (SARE) officers will play a critical role in promoting equity throughout agriculture. They have the closest relationships with growers, are the interface between science and practice, and can integrate transdisciplinary research. They serve growers through public extension, private company agronomy

services, and retail channels including all the above examples of direct influencers. Stakeholders such as these will be important contributors to conversations on equity and play a key role in implementing action. Minority serving groups, such as Minorities in Agriculture, Natural Resources, and Related Sciences (MANRRS), the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS), the National Black Food and Justice Alliance, and the Northeast Farmers of Color Land Trust, are also valuable partners that bring a different perspective and hold the trust of groups often left out of traditional means of communication.

Lastly, multi-institution coalitions that include these groups and others will be vital for delivering essential information about ecosystem services and conservation practices. While coalitions need not include every organization, careful consideration of all the various stakeholders in the food and agricultural system should be given. A supermarket chain, for instance, may not seem like an obvious partner in the development of a research project. Retailers may simply not be interested in the science behind a practice. But it may be useful to include a marketing perspective as the project progresses. Including these groups at the onset promotes a sense of ownership and collective dedication to the projects' goals.

Thank you for the opportunity to provide comments to the Equity Commission and we extend our knowledge and resources to the Commission. By expanding your collaborations on these efforts, you will certainly strengthen the diversity, equity, and inclusion throughout our sciences and within your programs. We look forward to breaking barriers with you for our agricultural and environmental communities.