



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

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Dear Director Angle,

In January 2020, the American Society of Agronomy, Crop Science Society of America and Soil Science Society of America asked our membership for their ideas on how to improve the implementation of NIFA's capacity and competitive programs. We also asked what could be done to increase NIFA's transparency, effectiveness, and efficiency of its organizational structure. With such a diverse membership, it is not unusual for Societies' members to disagree on research or policy directions, but responses were remarkably similar in this case, falling into the categories of **investing in communication; supporting and empowering NIFA staff; streamlining the grantmaking process; and investing in a diverse, next generation of ag scientists.**

Invest in communication

“Formula Funds” need to be clearly explained on the website

Most importantly, respondents requested clear explanations of what formula funds are and how they are calculated. This information would improve NIFA transparency, funding process, and organizational structure. One respondent explained, “Most of us, even those who benefit from these programs, have no clue how these programs are delivered to our Universities.” Another said, “At the faculty level, the use of formula funds in most institutions is not transparent [and] research and extension faculty are unaware of how the funding is utilized...the impact of formula funding is hidden beneath institutional bureaucracy.” NIFA needs a webpage that explains the “formula,” how funds are calculated, who benefits from these programs, and, above all, which parts of the process are at USDA's discretion and which are Congressionally mandated.

NIFA should expand outreach efforts to the general public

Better communication between NIFA and the scientific community was a common response to questions of how to improve NIFA's transparency, effectiveness, and efficiency. Surprisingly, however, many members suggested NIFA also needs to increase its visibility and improve its communication with the general public. Members felt that such outreach is not only in the interests of transparency but also in demonstrating the impacts of agriculture research and to make a compelling case for its importance.

Most respondents agreed that NIFA is doing a great job funding science with the resources it has, but it needs to modernize its reporting system, move beyond simple metrics (e.g. number of meetings, papers published), and focus on impacts and outcomes. NIFA should also market and publicize its impacts, explaining to Congress, other federal agencies, and the public why diverse funding sources are needed for agriculture. Many advised hiring specific communications staff or consultants to increase NIFA's stature in the public eye. A comprehensive communications strategy, including social media outlets, such as Twitter or LinkedIn is critical for disseminating NIFA impacts and to announce funding opportunities. YouTube-style video, podcasts, or other novel media tactics could be linked to the tweet or post.

NIFA staff need to travel and engage

Another common suggestion can be summed up in one respondent's answer, "Be present!" NIFA should meet in person with PIs and collaborators, have yearly on-site evaluations for each project, and go out into the production landscape to speak directly with farmers, industry, and conservation organizations, and other stakeholders of agriculture research and development. Many respondents wrote that NIFA staff should attend professional society meetings and provide regular trainings and workshops about the nature of NIFA and its different funding mechanisms. One respondent suggested NIFA have a "cheerleader" who attends meetings of the scientific, producer, and trade group communities to present NIFA's annual report, take feedback, and answer questions. Respondents also suggested using successful, NIFA-funded scientists to amplify information about NIFA and its programs. For example, NIFA-funded scientists could serve as "ambassadors" at their local institution. These NIFA-ambassadors could meet directly to discuss and provide feedback to NIFA. Above all, respondents agreed that NIFA personnel need the funds and approvals to travel much more frequently. Funding should be specifically set aside for travel, and staffing should be sufficient to provide time for personnel to travel for annual site visits and small meetings.

NIFA's website should be transparent, informative, and interactive

The website should provide a seamless, easy-to-follow RFP application experience

Respondents articulated a range of RFP-related resources they wished were available on NIFA's website. For example, it would be useful for the Agency to supply an expected timeline from submission to funding. This information could be utilized to help early career researchers trying to build a diversified, grant-based research program with the addition of graduate students or post-docs. A webpage describing the decision chain would also be helpful and increase transparency. The webpage would describe RFP generation, funding allocation (e.g. what is mandated by Congress, what comes from the Secretary/political level, and what comes from National Program Leaders or program managers), and proposal funding processes. Each of these web features should be interactive, with links to clear materials and contact information for further questions.

Beyond simply being a static tool for information flowing from NIFA to researchers, respondents asked for a real-time online award tracking system with contacts for questions and issues. Respondents hoped the website could be a tool for two-way communication. They asked for online methods to request changes in fund allocation or no-cost extensions rather than using letters to communicate these requests.

NIFA's organizational chart needs to be interactive

Comments poured in regarding NIFA's unhelpful org chart, a PDF document that includes only a brief, high-level outline of each manager's role, which many found difficult to locate on NIFA's website. Respondents want an easy-to-find directory or chart that includes all NIFA staff, not just managers, with email links. It should include links to FAQs, fact sheets, and contact information to find out more. The directory should be updated in real time so that staff members' names are connected with their program areas and current RFPs. Many members expressed frustration that the only place to find staff names is on the RFP itself. If a grant administrator is unavailable, it should be easy to locate a NIFA employee with a similar programmatic background to contact. One respondent suggested email updates

on personnel changes in addition to RFP notices, writing, “I do receive notices on RFAs as they are announced via email. I appreciate that very much.”

Support and empower staff

Hire support staff when necessary

Many respondents were concerned with NIFA’s staffing levels. Full staffing is necessary to reduce inefficiencies and increase customer service. Staff is required for nearly all of the suggestions mentioned in the feedback above: communications and marketing staff who will revamp NIFA’s website and publicize its impacts; human resources staff who will keep the interactive org chart up to date; and program managers with sufficient time, travel funding, and other resources to fully support all of the programs NIFA funds. An expedited grant-making process and timely feedback on RFPs was specifically mentioned by many respondents, and timely grantmaking is impossible with an overworked staff. As one said, “There are competent and capable people at NIFA doing really good work, and they should be commended. However, the slow/no response or delays in processing are the bottlenecks that frustrate people. If individuals need to be hired to improve this, then do so.”

Look beyond traditional staffing models

Respondents suggested having solid transitional programs to ensure new program managers are in place and up to speed before they take over a portfolio. There was also support for hiring temporary staff as details or rotators, similar to the rotator program at the National Science Foundation, where researchers from academia, industry, and other federal agencies bring their ideas and a fresh perspective to NIFA’s programming. With respect to organizational structure, many respondents indicated improvements were advisable but deferred to more professional expertise, suggesting NIFA hire consultants trained in organizational performance.

Empower decision-making at all levels

Beyond simply hiring for open positions, respondents suggested that NIFA needed to empower mid-level staff to make decisions that make scientific sense, even if the decision goes against precedent or policy. There is a perception that the organization is “top-heavy,” with few people doing the boots-on-the-ground work. Counter-intuitively, even those individuals at the top of the NIFA organization seem afraid to make decisions, provide information, or change a policy for fear of adverse effects on their careers.

NIFA staff should encourage collaborations

Respondents recognized the need for “implementation” or “team-building” grants to help spur collaborations. Other respondents asked for a specific RFP pertaining to multi-state Extension programs to develop more sophisticated learning tools, such as virtual reality and interactive publications. However, respondents noted that they would prefer an organizer without ties to a single university to broker such scientific collaborations. National Program Leaders were often cited as such organizers, but NIFA’s new DC-based liaisons or other, dedicated NIFA staff or consulting organization leaders could perform this task. Such staff would help build interdisciplinary, multi-institution teams to tackle wicked challenges; facilitate collaborations among a variety of research organizations, such as land grant universities, HBCUs, non-land grant colleges of ag, community colleges, and industry and commodity

groups; and support extension infrastructure to enable programs among multiple states that deal with the same pest, disease, crop, or production issue.

While encouraging collaboration was a very common survey response, some respondents pointed out that the more organizations are involved in a grant, the more overhead is taken in indirect costs. NIFA is encouraged to recognize its role in keeping large group projects organized through effective oversight and keeping indirect costs from eclipsing the research and education budget.

Streamline the grantmaking process

Develop efficient and effective RFPs

Many respondents had suggestions for making NIFA's requests for proposals more streamlined. All NIFA's RFAs, for example, should follow the same structure, with the same font and margins, and have relevant information in the same places. The template should be no longer than two or three pages, putting a premium on clear, concise language. Respondents explained their frustration with the current system, one remarking, "applicants should not have to guess what proposal writers meant – it should be clear." Program managers were also requested to look hard at all the paperwork requirements to make sure there is no overlap. One respondent wrote, "For CV, COI, C&P, data management, facilities, logic model, etc. – we have so many extra things we are required to produce, it has become more important than the topic itself. And many of these forms are from the 80s. When we get done writing a 15-18-page proposal, with all the extra paperwork, it ends up being well over 100 pages. If you cannot figure out what to fund/not fund in less than 10 pages (total) the process is broken."

Organize grants by funding level and timeline

Many respondents requested a tiered funding system for competitive proposals: seed, standard, and cooperative, with proportional funding levels. There was also an emphasis on the need for separate funding pools for short-term research, long-term research, and a small reserve to be kept for short-term opportunities for critical, emergent areas of research.

Invest staff time and resources to find appropriate reviewers

Respondents expressed concern about a small number of reviewers who are asked to serve on review panels repeatedly – leading to bias in the funding outcomes. They also described frustration with needing to contact individuals at NIFA to sign up to review a single RFP. It is time-consuming to look for RFPs just to review, and it is overly burdensome to reach out anew to program managers every time a new RFP is released.

NIFA should create and curate a list of potential reviewers for any NIFA RFP, which all program managers can access and edit. There should be a large, can't-miss button on NIFA's homepage for potential reviewers to click on to sign up. They would fill out their contact and background information just once, and then program managers could review the list and search for keywords to find a variety of reviewers. In addition to this passive method of accumulating reviewers, NIFA should reach out to scientists in underrepresented places, whether universities or industry, to request they sign up, not just for one panel, but to be contacted for future panels as well.

Support for virtual review panels were mixed. Some respondents liked how virtual panels save time and resources and enable the recruitment of reviewers unable to travel. But many respondents found the

virtual panels “horribly unpleasant experiences.” Common complaints included a lack of investment and attention on the part of the reviewers and difficulty engaging with peers without the benefit of body language. One respondent said, “I’ve declined to serve on a number of NIFA virtual panels because of this.” In addition to eliminating these issues, in-person panels have the added benefit of facilitating connections and networking among the reviewers and between the reviewers and NIFA staff.

Invest heavily in a diverse, next generation of agriculture scientists

Invest in graduate students

Respondents highly prioritized the need to ensure adequate resources for training the next generation of agriculture scientists. Tight budgets are not new for many agriculture researchers. While many researchers have had some success stretching a budget or finding extra funding to support students, this process is time-consuming, inefficient, and alienating to potential students, who may be lost to other, better-funded areas of study. One respondent suggested that if NIFA intends for a grant to fund a student, it should calculate how much money is required to pay for that student and ensure the funding amount realistically covers the cost. The Societies have also suggested that NIFA double AFRI’s budget for direct funding for graduate student research and programs to 3-5 percent. Students should be allowed and encouraged to apply for these funds directly. Such scholarships reduce the burden on professors, empower students, and lend prestige to agriculture science among students.

Expand programs that support broader participation

Respondents emphasized that efforts to bolster diversity and inclusion need to permeate NIFA’s culture beyond the grant-making process alone. For example, a respondent described a 3-day workshop that was required after receiving a non-land-grant agricultural college and university grant: “While I benefited from interactions with other attendees, the field trip events and various other aspects of the meeting were very “good old white boy,” with all field trip visits being with a wealthy/large scale white male farmer or farm manager. I believe that the agency can and should do better in acknowledging and celebrating diversity in agriculture.” Another respondent noted that there has been a significant increase in the number of students enrolling in courses related to agriculture and the topics at the nexus of food, environment, and climate. Many of these students come from basic science backgrounds but are motivated by solving global environmental and agricultural challenges, and many are women. NIFA can support these students and others by providing education programs, fellowships, and opportunities for students to connect with mentors and participate in research and extension.

NIFA’s successes should be preserved

Our survey responses focused on aspects of NIFA that underperform relative to our members’ expectations, but there are aspects of NIFA that exceed expectations and which members hope and expect to continue. From its inception, NIFA has transformed agriculture research for the better, not least because of its partnerships with researchers and willingness to seek further improvement. The continued increases in NIFA’s budget are critical for advancing knowledge and progress in agriculture, and they are well-deserved – funding has historically been delivered on time, and grant review panels typically provide useful feedback. The Societies’ support how NIFA has delicately balanced competitive

and capacity grants and funding for both basic and applied research. In addition, NIFA works hard to complement the funding missions of other agencies, and members appreciate its partnerships, such as with NSF and commodity boards. Members applaud NIFA's leadership and willingness to engage with the agricultural research community and are excited about the proposed idea of rotators to inject fresh ideas into RFPs.

Thank you for your consideration of these comments, and we look forward to working with you to continue to improve NIFA's performance and customer service.

Sincerely,

A handwritten signature in black ink, appearing to read 'N. J. Goeser', with a long horizontal flourish at the end.

Nicholas J. Goeser, CEO
American Society of Agronomy
Crop Science Society of America
Soil Science Society of America