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NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

Response to the External Review Report for the Specialty Crop Research Initiative

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On January 31, 2007, USDA Secretary Johanns introduced the administration's recommendations for reauthorization of the farm bill later in 2007. Included in those recommendations was a proposal to invest \$100 million annually for 10 years in the Specialty Crop Research Initiative (SCRI). Subsequently, the National Institute of Food and Agriculture (NIFA) published a white paper titled, Implementing Research, Education and Extension for Specialty Crops. In this white paper, NIFA proposed that an external review of SCRI would be completed after the third funding cycle of the program. To be consistent with stated and published plans, SCRI Program Directors began, in 2010, to plan for an SCRI program review. Because there is little historical agency precedence for such a competitive-program review, the Program Directors combined elements from NIFA-led departmental reviews and agency portfolio reviews organized by our previous Planning and Accountability staff.

The purpose of this document is to provide a response to the SCRI external review panel report and to describe how their recommendations will be considered and what steps the agency may take to incorporate them into the SCRI program and its management.

It is important to emphasize the gratitude NIFA has for the efforts of the review panel. It was a monumental task to review the self-study document and prepare the panel report. The level and quality of effort given by the external review team provides a service to the entire nation and will help insure that SCRI is a program that has a positive impact on the lives of everyone touched by specialty crops, from producers to consumers. In particular, NIFA would like to acknowledge the leadership of the panel chair, Dr. Eldon Ortman, as he helped the team organize their thoughts, focus their efforts, and achieve consensus.

In order to conduct the external review, it was decided to recruit a panel of stakeholders and partners to examine the program using their knowledge of the challenges facing specialty crop producers and consumers. The NIFA Program Directors consulted with a number of interested parties to identify potential panel members. The Program Directors worked to ensure that the panel had diverse representation. Representation on the panel included members representing industry, academia, research, extension, varying geographic location, food and non-food specialty crops, fresh and processed specialty crops, other federal science agencies, and expertise in program evaluation. The panel met in Washington D.C. on January 24-27, 2011.

The Program Directors and staff compiled a self-study document that was provided to the panel. That document is available on the NIFA web site: <http://www.nifa.usda.gov/funding/scri/scri.html>

The panel reviewed the self-study document, as well as additional information that was provided upon request by the panel. During that meeting, the panel drafted an initial report, which was later provided to the Program Directors in final form on Feb. 28, 2011. That report has been made available at the web site address shown above, <http://www.nifa.usda.gov/funding/scri/scri.html>, alongside this document

The external review panel report was developed along four major themes: Focus, Approach, Outreach and Finance. Recommendations for program improvement were made in each area. The recommendations of the external review team appear at the beginning of each section and the NIFA response to those recommendations follows.

FOCUS

Specialty crop needs, relevancy

Develop and enhance the need/relevancy criteria and evaluation information in the RFA. Give need and relevance an increased emphasis, increased visibility, in the proposal evaluation process.

The panel recommended that relevance to stakeholder needs and the critical nature of those needs be given increased emphasis during application evaluation. Stakeholder needs have been a major focus of SCRI since its inception and the Program Directors appreciate the suggestions provided by the panel to effect a strengthening of this aspect of the program. It should be noted that the current SCRI evaluation criteria include 10 points (out of 100) for Documented Need and 10 points for Stakeholder Involvement. These both address the panel's concern for relevance and critical need and, combined, account for 1/5 of an application's total score. Nevertheless, the agency will consider how subsequent requests for applications (RFAs) can incorporate modification to the published evaluation criteria that will signal the importance of relevance and need to the application review panelists. In doing so, it will be necessary for the agency to consider the broad spectrum of stakeholders and what "documented need" and "involvement" are possible and reasonable. For example, metrics that might apply for an SCRI application dealing with a single, or major, crop represented by a well-organized commodity group would not apply for an SCRI application dealing with a large number of limited-acreage crops, which individually or collectively lack any organized association, or dealing with a large number of small, unaffiliated producers. Both ends of this stakeholder spectrum are important, and any "relevance and need" metrics would need to treat both equitably.

The panel also suggested that a possible way to strengthen the emphasis on relevance and need would be to hold separate panels that would only rate the relevance and need associated with an application. NIFA believes that, while peer-review panels can evaluate scientific merit relatively objectively, a panel formed solely to evaluate relevance and need could not do so as objectively and consistently. Depending on the relevance panel's composition, it would rate the need of the applications' problem areas differently. The best that such a panel could do would be to establish a threshold and categorize each application as meeting that threshold of need, or not. The review report seems to acknowledge this situation in their assessment. And, in fact, this "relevancy and need" process is included in the current peer-review process employed by NIFA for SCRI. That is, only those applications that have demonstrated some baseline level of relevance and need make it to the higher ranking categories, where scientific quality then determines their final numerical order. Also, NIFA has used this dual-panel tactic in the past during the implementation of the Methyl Bromide Transition Program, the Crop at Risk from FQPA Implementation Program and the Risk Avoidance and Mitigation Program. The process proved to be extremely cumbersome and inefficient and added a layer of complexity. NIFA decided at that time that the benefit derived from a dual-panel approach was not commensurate with the additional cost or staff time involved. The current review process takes about 4 months and inserting another panel would make it difficult to obligate funds to successful applicants during the time that the funds are available for that fiscal year. Finally, in recognition of the review panel's concerns in this area, there are some very simple and straightforward steps that NIFA can take regarding "need" assessment in the current peer-review process. For example, the Program Directors can emphasize in the instructions provided to panelists before the

panel meeting, and during the pre-panel meeting, that each application needs to demonstrate a baseline level of need irrespective of its scientific merit. Also, the panel manager, assisting in the facilitation of the panel meetings, can verbally reinforce, during the discussion of each proposal, that the peer-review panel must exercise due diligence in considering need. While both of these activities are performed now, they could be further emphasized in the future.

Stakeholder role

Further promote and strengthen the stakeholder involvement in additional ways. Require each grant to have an active “Project Stakeholder Committee”.

The panel expressed concern that SCRI application review panel composition has decreased from 25% stakeholders in 2008 to 12% in 2010. This has also been a concern for the Program Directors. This trend is partly a reflection of the difficulty for stakeholders to commit the time necessary for the peer-panel process, especially in the March-April timeframe. Past efforts by the Directors to solicit stakeholder participation on review panels, while attending meetings with various groups, has had only limited success. Consequently, in the fall of 2010, the Directors recruited a review panel manager from the private sector who has excellent contacts within the stakeholder community. He was persistent and unrelenting in his recruitment efforts, which led to a marked increase to 30% in stakeholder participation in 2011. However, in discussions with the Program Directors, even he acknowledged frustration at the level of stakeholder response to his invitations. Engaging stakeholders on a continuing basis will be a persistent challenge. Once they realize the tremendous time commitment needed to participate in an application review panel, stakeholders are often reluctant to serve on a panel a second time. Both the SCRI external review panel and NIFA have acknowledged the tremendous effort that the stakeholder community put forth to convince the Congress that SCRI was needed. NIFA will continue to work with the stakeholder leadership to communicate that stakeholder participation in SCRI must still continue through the peer-review process, in addition to participating in SCRI applications themselves.

The panel recommended that NIFA consider developing a broad-based stakeholder liaison committee for SCRI. The formation of such a committee would require compliance with the Federal Advisory Committee Act (FACA). NIFA feels that it may be unnecessary to develop such a committee specifically for SCRI since there already exists a Specialty Crop Committee within the National Agriculture Research, Economics, Education, and Extension Advisory Board (NAREEEA Board). The Program Directors, at the invitation of the committee chair, have provided annual reports on SCRI implementation in the past for inclusion in the committee annual report mandated by Congress. It is possible that the relationship between SCRI and the NAREEEA Board Specialty Crop Committee can be strengthened to achieve the outcomes proposed by the panel.

Regarding stakeholder committees, the review panel also suggests that each SCRI project form such a committee at the project level that would generate an annual report to the awardee and NIFA. The SCRI RFA already requires that larger projects (Standard Research and Extension Projects, Coordinated Agricultural Projects) create an advisory board for the life of the project (including timeline and functions for this board), “to assess and evaluate the quality, potential outcomes, and impacts.” NIFA agrees that good stakeholder involvement is key to a successful SCRI project. On-going Program Director post-

award involvement with funded projects confirms that many projects are making good use of their advisory boards.

APPROACH

Planning Grant

Modify language in the RFA to clearly state that there is opportunity to apply for two types of Planning Grants

The panel recommended that the SCRI RFA language be modified to allow for two types of planning grants. One would be used for developing a competitive application to the program (as is the case now) and the second could be used to develop a strategic plan for a sector of the industry and to identify need/relevance priorities. NIFA believes that latter type of planning activity is an excellent and appropriate use of the planning grant mechanism and anticipates incorporating this modification into the next RFA.

RFA Language

Incorporate definitive language in the RFA to invite “specific targeted projects”

The panel recommended that language be incorporated into the RFA to invite “specific targeted projects”. It has always been envisioned that such projects would be accommodated by SCRI and they can be applied for under the Standard Research and Extension Project category. It is required that the applicant describe how the proposed research will provide a vital piece of missing information that can be used to address a critical need as identified by stakeholders, and further, the applicant is also required to demonstrate how the information will get into the hands of those who can translate the knowledge developed into useful practice (the outreach component). The reason that few targeted, fundamental research projects have been funded to date is probably due to the fact that the program is in its first five years and it has been very competitive. The number of fundable projects has always exceeded the availability of funds. Because the program has placed a strong emphasis on relevance and outreach, integrated systems-based projects have simply ranked higher than projects that have a narrower, disciplinary focus. On the other hand, many astute SCRI applicants have successfully incorporated “specific targeted projects” as (sub)objectives within larger projects. An intent of SCRI has always been to ensure that funded research has the proper “context” (i.e., stakeholder relevance, system understanding, scientific expertise, outreach, etc.), so that the research is truly meaningful and useful.

Scientific review expertise

Consider involving scientists from outside the immediate specialty crop arena on proposal evaluation committee

The panel recommended that NIFA involve scientists outside of the immediate specialty crop arena to limit conflicts of interests for reviewers on peer-review panels. As this review panel points out, the size of the specialty crop community is such that potential conflicts of interest for panelists are fairly common and can be a hindrance during the panel process. This problem has been exacerbated by the nature of SCRI projects (multi-institutional, transdisciplinary, and large teams). It is becoming very difficult to find panelists that aren't potentially conflicted with a large number of applications before the panel.

Including individuals outside of the immediate specialty crop community, but with relevant scientific expertise, is a very reasonable recommendation. In fact, the Project Directors and program managers have expressly broadened the panelist pool in this way in the past, for this particular reason.

Logic model

Review and further develop logic model

The panel recommended that the logic model developed for SCRI be further developed. The Project Directors plan to make modifications to the initial draft based on consultation with experts within and outside the agency. While many other NIFA programs require that applicants include logic models for proposed projects, none of those programs publishes its own, program-wide logic model. A refined SCRI logic model will be included in future RFAs and each applicant will be required to present a logic model that shows how their project will contribute to the goals of SCRI. In addition, the Program Directors will explore ways that project-level logic models can be used to guide reporting on project deliverables so that the information provided is useful in documenting measurable outcomes and impacts of SCRI (see response to “stakeholder committees” recommendation, above).

NIFA also plans to hold a series of workshops with stakeholders and partners that will focus, in part, on improvement of the SCRI logic model. In September of 2011, Program Directors will conduct a Project Directors’ (PD) workshop in conjunction with the annual meeting of the American Society for Horticultural Science. A major agenda item of this workshop will be the presentation of the SCRI logic model, how program staff intend to use it and discussion of how the model can be improved. In the white paper describing NIFA plans to implement SCRI, it was proposed that annual workshops be held with stakeholders to provide a forum for continuous improvement of the program. Program directors have met with various stakeholder groups at their invitation and received valuable feedback through this mechanism. A formal stakeholder workshop has not been held. NIFA intends to work with stakeholder leadership to develop a workshop expressly for presenting the outcomes of the SCRI external review. During this workshop, the logic model will be a major agenda item.

Accomplishment Reporting

*Establish a reporting system to better document project description, approach, and impact.
Develop a set of Program metrics that identify the key indicators of Program success*

The Paperwork Reduction Act prohibits federal agencies from requiring burdensome reporting from grant recipients. NIFA already requires that recipients of any NIFA funding complete an annual report through the Current Research Information System (CRIS). This requirement precludes SCRI Program Directors from requiring additional reporting by program recipients. NIFA realizes that CRIS may be inadequate to provide the information needed to adequately document the full impact of its funding programs and has been working for several years to develop a more robust reporting system. The rollout of that new reporting format is planned for early 2012. In addition, NIFA has created an internal data base that program directors can use to track program impacts that may not appear in CRIS. This internal database is not fully operational currently, but since the reorganization that occurred in October of 2010, program staff have been discussing ways to maximize use of this resource.

eXtension

Review the appropriateness of funding eXtension in the SCRI Program

The panel recommended that providing funds for eXtension through SCRI be further reviewed. NIFA concurs with the panel that the eXtension project type, as currently implemented in SCRI, is an “outlier” of sorts. An internal NIFA review of its use and implementation in the context of SCRI is warranted.

OUTREACH

Participant diversity

Work with representatives of limited acreage crops and the 1890, 1994 and Hispanic-serving institutions to help build the infrastructure and capacity to submit grants

The panel recommended that Program Directors work with representatives of limited-acreage crops and the 1890, 1994 and Hispanic-serving institutions to help build the infrastructure and capacity to submit applications to the program. The RFA currently states that preference can be given to applications from EPSCOR states and for multi-institutional teams that include participants from 1890 land-grant institutions, 1994 land-grant institutions, Hispanic-serving institutions, and/or other institutions that serve high-risk, under-served, or hard-to-reach audiences. However, the Program Directors agree that more needs to be done to engage these sectors. Some efforts have already been initiated and are ongoing. Program Directors work directly with those applicants representing limited-acreage crops, who have been unsuccessful applicants, to provide additional information beyond what’s available in the reviewer comments and panel summary provided to them. At least one such interaction in the past year led to a successful proposal. (Program Directors are available to work directly with all applicants who request feedback on applications beyond what is provided in the reviewer comments and panel summary.) Successful participation by smaller and minority-serving institutions in SCRI has increased over the past two years, although success has been primarily limited to: (1) lead institutions on planning grants and (2) collaborating institutions on larger grants. Furthermore, teaching loads for faculty at these smaller institutions often do not allow much time for faculty to pursue extramural grant opportunities. And, it is widely acknowledged that the matching requirement of SCRI also limits their participation, as they don’t have adequate state-sourced, institutional matching funds.

The Program Directors think that if the Planning Grant option is expanded to allow limited-acreage industries to obtain funding for the development of strategic plans, it will provide additional opportunities for faculty from smaller institutions to interact with these stakeholders. NIFA’s National Program Leader for “small farm” activities in the agency has volunteered to help expand SCRI’s reach to limited-acreage crops, smaller producers, and 1890 institutions. Also, efforts to engage minority-serving institutions are poised to increase in other ways. Each 1890 institution has a USDA liaison located at the institution. NIFA also has a National Program Leader assigned to work with 1890 institutions and an 1890 liaison. By working with this network of USDA employees, SCRI Program Directors plan to encourage further participation in SCRI from the 1890 institutions.

In addition, for the past two years, SCRI Program Directors have co-hosted a web-cast grantsmanship workshop with a university partner. (We are currently planning the third workshop with the University of Tennessee in August 2011.) We intend to explore the possibility of co-hosting this workshop in 2012 or 2013 with an 1890 institution.

As noted elsewhere in the report, the current requirement that SCRI awards be matched 100% with non-federal funds is an impediment to participation by limited-acreage crop industries and minority-serving institutions. The state investment in these institutions is generally far less than the investment in 1862 land-grant universities. At 1890 and 1994 institutions, a high proportion of faculty salary is paid with federal funds. While a high percentage of matching funds by the 1862 schools comes in the form of in-kind salary dollars, such resources not available at these other schools. This impediment would require legislative action, but may be as simple as Congress designating that 1890 and 1994 universities are partially or fully exempt from the matching requirement for SCRI.

Reporting/Marketing

Develop an information marketing strategy for the Program

The panel recommended that NIFA develop an information marketing strategy for SCRI and implement it using a broad-spectrum multi-media approach. NIFA is currently developing a reporting system to replace the CRIS system. Full implementation of the system has been delayed due to cost considerations and final OMB approval. Once the new reporting format becomes active in 2012, we will reassess what, if any, ancillary forms could be attached to that new data-collection instrument to ensure that we have useful SCRI marketing information. However, program staff are also currently discussing ways that the SCRI logic model can be used to gather information that can be included in future information releases.

FINANCE

Match requirement

Significantly modify the 100% match requirement

This is a legislative mandate and is beyond agency control. However, NIFA agrees that some modification of the matching requirement would enhance certain aspects of the program. As currently authorized, there is no provision for waiver of the matching requirement. NIFA is willing to work with stakeholders to identify criteria that could be used to allow for waivers of some of the matching requirement. As previously noted, the stringent matching requirement has had the effect of disenfranchising some groups from participation in SCRI. By allowing for waiver of a percentage of the matching requirement, participation in SCRI would invariably be broadened.

Minimum allocation to each program area

Remove requirement that specifies programmatic fund allocation

The legislative focus areas contained within the SCRI authorization are the result of considerable stakeholder input during preparations for the last farm bill. SCRI Program Directors have not

found the requirement that at least 10% of available funds be obligated to each of the five areas to be unduly restrictive. The food safety focus area has been the one area where fewer applications have been received. But in the last two years, quality applications in this area have increased as Program Directors have made an effort to promote the program with scientists in this area. Future analysis of the entire portfolio of funded projects may indicate that some areas have received sufficient attention and new areas of concern may surface. Future authorizations that allow for some latitude in responding to changing challenges may be warranted.

Education component

Do not create an education component in the SCRI Program

As currently authorized, formal education is not fundable through SCRI. However, the Program Directors have received considerable input from stakeholders that workforce development is a critical priority if specialty crop industries are to move to more knowledge-intensive production systems. As visualized by Program Directors, this would involve a continuum of training and learning opportunities from K-12, through various degree options and include community colleges or certificate training that could be undertaken by extension educators or professional organizations. The Program Directors acknowledge that current program funding is inadequate to meet the demand of high quality applications that have been identified as critical priorities by stakeholders. In the absence of legislative authority and an increase in funding, Program Directors will work with partners and stakeholders to identify alternative opportunities to address the issue of workforce development.