
Background

The 2008 Farm Bill (H.R. 6124) contains a provision which states in Section 7505 that “The Secretary shall work with university partners in extension and research to review and identify measures to streamline the submission, reporting under, and implementation of plan of work requirements, including those requirements under – (1) sections 1444(d) and 1445(c) of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3221(d) and 3222 (c) respectively); (2) section 7 of the Hatch Act of 1887 (7U.S.C. 361g); and (3) section 4 of the Smith-Lever Act (7 U.S.C. 344). … In carrying out the review and formulating and compiling the recommendations, the Secretary shall consult with the land-grant institutions.”

Five-Year Panel of Experts

On May 4 – 6, 2010, a Panel of Experts was convened to review and make recommendations to the National Institute of Food and Agriculture (NIFA) regarding streamlining the submission, reporting, and implementation of the Plan of Work requirements. The Land-Grant University members of the panel were chosen by nomination input from each of the ten Regional Executive Directors for Research and Extension. NIFA panelists were chosen by nomination from the Office of Planning and Accountability (OPA) and the panelists’ supervisors. An expert panel will convene every five years to continue assessing the relevance, quality, and usefulness of the performance data received from the Plan of Work and Annual Report of Accomplishments and Results and make recommendations to further its improvement, as necessary.

The sixteen member panel included eleven professionals from the Land-Grant University partners. Five members of the panel were from NIFA, including Planning and Accountability staff, Policy staff, National Program Leaders (NPLs), and Information Technology staff. The Accountability and Reporting Leader from the Office of Planning and Accountability provided primary panel support.

The panelists were:

- Bill Brown – Dean & Director, University of Tennessee Agricultural Experiment Station
- Nancy Franz – Professor/Extension Specialist, Program Development, Virginia Tech
- Karen Hinton – Dean & Director, University of Nevada Cooperative Extension
- *Steve Loring – Associate Director, New Mexico State University Agricultural Experiment Station
- Deb Segla – Grant Coordinator and Property Officer, University of Alaska Agricultural and Forestry Experiment Station
- Mary Jane Willis – Associate Director, Rutgers Cooperative Extension and Urban Programs
- Charlene Herrick – Program Compliance & Reporting Officer, University of Maine Agricultural and Forest Experiment Station
• Marshall Martin – Sr. Associate Director of Ag Research & Assistant Dean of Agriculture, Purdue University Agricultural Experiment Station
• Ellen Taylor Powell – Distinguished Evaluation Specialist, University of Wisconsin Cooperative Extension
• Oscar Udoh – Coordinator, Planning & Evaluation, Southern University Extension
• Jose Ulises Toledo – Associate Dean and Director of Business & Finance, West Virginia State University Gus R. Douglass Land-Grant Institute
• Ellen Danus – Branch Chief, Policy and Oversight, Office of Extramural Programs, NIFA
• Marty Draper – National Program Leader, Plant and Animal Systems, NIFA
• Gary Jensen – National Program Leader, Plant and Animal Systems, NIFA
• John Mingee – IT Project Leader for Plan of Work and REEport, Information Systems and Technology Management, NIFA
• *Bart Hewitt – Accountability and Reporting Leader, Office of Planning and Accountability, NIFA

* Co-Moderators of the Panel

The OPA provided the panelists with a set of questions to consider in preparation for the meeting (see Appendix A). These questions were used to focus the panel’s discussion and led to additional issues being raised and addressed. Various panel members solicited input from members of their regions and contributed that input over the course of the discussions.

OPA answered questions about use of data and the value of data coming from the system in meeting NIFA’s reporting needs. In particular, data are used to:
1. Facilitate communication between the Institutions and their NIFA NPL Liaisons;
2. Help in assessing NIFA Portfolios;
3. Complete Office of Management and Budget (OMB) performance reports;
4. Provide evidence of past performance for the NIFA budget process;
5. Answer Government Accountability Office (GAO), Office of Inspector General (OIG), Congressional, and Departmental (USDA) inquiries;
6. Bring greater visibility of the successes of Formula funded grant programs.

Panel’s Findings and Recommendations

Overall comments and recommendations:
1. The current Plan of Work and Reporting process appears to be meeting Congressional and OMB needs and is a vast improvement over the burdensome Plan of Work process that was in place from FY 2000 – 2006. The panel congratulated OPA on its approach and work.
2. The panel found places within the current reporting system where data no longer needs to be collected.
3. Through this review process, the panel expects to enhance the quality and usefulness of information collection and lessen the reporting burden.

4. OPA and NPLs should continue to provide Institutions feedback including useful comments about the Plan of Work and Annual Reports. According to the panel, OPA webinars, newsletters, and other technical assistance and NPLs comments have helped to enhance the quality of the POW and Annual Reports. Feedback on submitted reports and clear guidelines regarding expectations and information to be submitted only serves to improve motivation to report and data quality.

The panel identified as most relevant and focused on the following issues with specific recommendations for action to improve and streamline the Plan of Work and Annual Report of Accomplishments and Results.

Specific issues addressed:

**Issue #1: The usability of quantitative targets for Outputs and Outcomes.**

Discussion: The panelists discussed the usability of quantitative targets for NIFA. The discussion centered on States guessing at targets for outputs and, in particular, numeric targets for outcomes. Some States overestimate data, setting themselves up for failure. Other states deliberately underestimate data to ensure success. It is extremely difficult to project performance targets five years into the future. Outcome and impact data are more important for reporting purposes than outputs, although linking outputs to outcomes helps to link investments to results. In terms of planning, the panelist found that numeric targets were not particularly helpful or used by NIFA in its reports. Moreover, the quantitative reporting of targets may perpetuate the confusion about reporting outputs rather than outcomes.

Panelists discussed the need for patent information. NIFA’s concern is that patent information from the Plan of Work and Annual Report reflects work done not by the Formula Grants, but by a variety of funding mechanisms unrelated to Formula Grants. Reporting patents is useful when it is directly linked to the Formula Grants that lead to commercialization of a product. As long as patent information is linked to NIFA funding, it helps tell part of the story. Patent registration was found to be not an optimal indicator of economic benefit due to the fact that not all of these patents become commercial. However, they are still a good indicator of Institutional discovery.

In the Annual Report, quantitative data is useful for reporting outputs and outcomes, especially when backed up with qualitative information to help explain the numbers. NIFA agrees that the most useful outcomes for external reporting purposes are those that combine quantitative data with qualitative explanations, done in number and text format.

Numbers representing faculty FTEs are considered useful data.

**Panel Recommendation #1:** Eliminate quantitative targets in the Plan of Work, but enable quantitative and qualitative reporting in the Annual Report. Maintain the reporting of faculty FTEs
in the POW. Maintain indirect and direct contact data, patent information, and publications information as standard outputs in the Annual Report.

**Issue #2: Rolling 5-Year Plans versus New 5-Year Plans every five years.**

Discussion: The rolling Plan of Work is seen as preferable to completing a new Plan of Work every five years. The rolling plan allows for nimbleness in making changes without waiting five years. Institutions need the flexibility to make changes when they occur. With the rolling plan, stakeholders can be asked annually about thoughts and opinions; there is a perceived open door policy with this input. Major efforts are being made for collecting this input from underrepresented groups.

The panelists’ concern is that Institutions may be tweaking the Plan, without a conscious comprehensive planning effort that a new Plan requires. The five-year time frame was instituted beginning with the FY 2000 – 2004 Plan of Work based on recommendations by a committee made up of both land-grant university and federal agency members. The five-year time frame is also the maximum number of years for the life of research projects. Before FY 2000, Plans of Work for Extension were based on four-year time frames.

Time frame: The panelists recommended keeping the concept of the rolling Plan of Work. However, there was much discussion on the time frame of the Plan of Work. The discussion then turned to whether the time frame should be three years instead of five. Some panelists felt that a three-year rolling plan would be better because a five-year reporting cycle may be too long and three years would minimize the burden. Other panelists felt that a plan needs to be five years because planning for major issues requires longer-range planning than a five-year time frame offers. A concern is that shortening the cycle to three years would put too much focus on short term outcomes. Other panelists did not see this as a problem. This discussion was linked to Issue #1. Institutions have a difficult time making meaningful output and outcome targets five years out. Three years would be a better time frame for quantitative targets. However, the problem of whether to choose a five-year time frame versus a three-year time frame would be alleviated if Issue #1 recommendations were adopted by NIFA.

**Panel Recommendation #2:** Keep the five-year rolling Plan of Work if the recommendation for deleting the quantitative targets, discussed in Issue #1, in the POW is accepted by NIFA. Otherwise, the panel recommends a three-year rolling Plan of Work. The three-year rolling plan suggestion is to help reduce burden and to better reflect the frequent change in the planning environment.

**Issue #3: Right now the evaluation plans and reports section is optional. Should it be a required part of the Plan and Report?**

Discussion: There was much discussion on this issue. NIFA was asked to explain why this was a part of the Plan of Work and, if it is important, why it is optional. When this was instituted into the Plan of Work for FY 2007, the purpose of this section was to heighten the awareness of the need for evaluation and to identify formal evaluation studies going on for possible follow-up. The
agency also recognized at the time that formal evaluations, although preferred, may be cost prohibitive to some institutions, thus they were made optional.

NPLs on the panel stated that they experienced limited detail in this section other than very brief descriptions of general methods. For many cases it was difficult to know if the evaluations were actually implemented for reporting outcomes. The data were not as informative or complete as other sections. The inadequacy of information provided in this section may be a result of a lack of human resources to complete evaluations, or the nature of the instructions that are provided in the POW guidance.

There was considerable agreement about the need for evaluation, the need for better evaluation, and the need for evaluation plans. There was less agreement on requiring an evaluation plan in the POW. All agreed that it is difficult to justify the expenditures of federal dollars if one cannot document accomplishments and the relationship between investments and results. In the end, most agreed that including an evaluation plan in the POW is a good idea. It reinforces the need for quality evaluation; encourages documentation to see if outcomes achieved are what was planned; and connects with good scholarship and research-based programming. Having an evaluation would be helpful for other university needs, as it helps to collect and analyze data.

The problem may be in the way the instructions in the POW are expressed regarding the evaluation plan. Panelists made several suggestions about how to better word what would be required. For example, one suggestion was that the required evaluation plans simply include: what will be evaluated, how will it be evaluated, and to whom will these results go. It was agreed that making an optional evaluation plan in the POW, as in past guidance, is not useful. Panelists agreed that there should be an evaluation plan per planned program. A proposal was made that institutions choose a few programs to evaluate in depth to report in the Annual Report. Some institutions do that now, but they do not always have something to report annually. NIFA indicated that this would be okay.

In the Plan of Work, NIFA does not need a detailed plan: submitters need to indicate that there is an evaluation plan and describe it in general. There was some discussion about the NIH and NSF expectations for evaluation; resources invested in evaluation and rigor of evaluation being conducted by other federal agencies. At this point, NIFA has no additional money for evaluation studies. NIFA leaves program evaluation up to the states. NIFA is serious about accountability and post-award management, but resources are limited.

**Panel Recommendation #3:** Evaluation is important, but the Plan should leave the details up to the state; it should not be optional. Eliminate the current check box structure in this section. NIFA should provide a text box that lets the States describe their evaluation plans for each Planned Program. The panel suggests having a “help rollover” to explain the box and to also provide examples. It also recommends reducing redundancy by adding instructions to the evaluation plan explaining that including text such as “see outcome #4” (for example) is allowable in the evaluation plan. It is also recommended that there be evaluation training for personnel; NIFA should take the lead on having large scale, targeted evaluations on a national level with rigorous evaluation designs.
Issue #4: NIFA guidance for Knowledge Areas (KAs).

Discussion: The panel believes the new NIFA priority areas do not cover all areas of work and that Knowledge Areas (KAs) are needed to describe these areas, especially in the areas of family and consumer sciences and 4-H Youth Development. The discussion included an acknowledgement that institutions can have more than the five NIFA priorities as Planned Programs in the Plan of Work. The NIFA priorities are not intended to cover 100 percent of the Formula Grant work. But focus is currently on these areas and will be for the foreseeable future. The panels discussed increasing NIFA guidance for KAs, including their relationship to the five NIFA priority areas.

Panel Recommendation #4: NIFA should share the KAs that have been designated to a Priority Area for the three areas which have been done as soon as possible. As soon as the other priorities areas have been classified with KAs, these should be communicated to the states. Expand KAs for Family and Consumer Sciences and Youth Development.

If there are additional KAs that support cross-cutting priorities and national work, a petition should be made to the NIFA classification board to consider these KAs. It is not just assisting with clarifying the relationship between priority areas and KAs, but to also add more classification definitions and increase the breadth of programs. NIFA should act on these recommendations immediately.

Issue #5: Multistate Extension and Integration Research and Extension Reporting are not included in the online software.

Discussion: Multistate Extension and Integrated Research and Extension requirements provide an excellent opportunity for cross-faculty interaction and enhanced programming. The majority of faculty are not aware of the multistate Extension requirement. The panel feels that the multistate extension and integrated research and extension requirements under AREERA sections 105 and 204 should have been a part of the original software package. This requirement had been moved under NIFA’s Awards Management Branch in the Office of Extramural Programs, and they will be working with OPA to get a system in place for reporting to this requirement in the Plan of Work software in the future.

Panel Recommendation #5: The Multistate Extension and Integrated Research and Extension Reporting, which currently is sent via Email to the Office of Extramural Programs, should be included in the online Plan of Work software. Until it can be implemented in the software, a link should be provided to upload the existing file in PDF format as an attachment to the Annual Report.

Issue #6: A conscious effort was made to gather data in the Plan of Work around a simple logic model structure (Situation, Ultimate Goal, Inputs, Activities, Outputs, Outcomes, Evaluation), so that if States had a logic model drawn up for each Planned Program it would
be relatively simple to complete each Planned Program. Is there a better structure for the Planned Programs, and if so, what is it?

Discussion: The consensus of the panel is the logic model format has been useful and is now widely understood and should be continued. It helps program folks plan better and point to expected outcomes; and provides a consistent language and approach across the system. The research panelists want to keep it because researchers are just getting an understanding of the logic model and its purpose and are seeing value in it. More support and guidance is needed, however, to help people understand the difference between outputs and outcomes. Assumptions and External Factors are being used by NPLs to help assess program plans. Moreover, an explanation of the external factors is useful in Annual Reports to explain why something did or did not happen.

Panel Recommendation #6: Continue using the logic model as the framework for planning and reporting.

Issue #7: Should a budget be introduced in the Plan of Work?

Discussion: The consensus of the panel is that any budget number for Planned Programs is meaningless for Formula Grants because of the nature of the grant. These dollars can be reallocated from year to year at the discretion of the directors because of emerging and unforeseen needs. Thus, a budget at the Planned Program level three or five years out would be guessing. The panel agreed that an overall budget can be brought forward for each Formula Grant through the Grants.gov process and thus is not needed in the Plan of Work.

Panel Recommendation #7: The panel recommends that budget information be excluded from Plan of Work. This overall budget data can be collected through the Grants.gov process.

Issue #8: Formula Grants from NIFA provide value above and beyond outcomes reported through planned programs that are in the current POW and report.

Discussion: Over the course of the two days, the panelists continued to refer to the value of the research-extension system that goes unreported and unknown by many. The panelists believe that there is a bigger story (which the current plan of work reporting system does not capture) to tell regarding the value NIFA and the land-grant universities provide in sustaining a research, extension, education capacity (human, technical, physical) that makes it possible to respond to current and emerging food and agricultural issues. It is the total system that enables the discovery, development, and diffusion of research-based knowledge and technical expertise for enabling the solution of food and agricultural problems; that provides for the professionalization of the agricultural sector (e.g., research and extension play a prominent role in the professional development of crop consultants, seed dealers, veterinarians, etc.); that develops the next generation of agricultural and food scientists and extension professionals; and that sustains a entrepreneurial and innovative food and agricultural system. This is accomplished through the one-of-a-kind federal, state, county partnership, linkage to the land-grant system, and ability to use the federal dollars to leverage resources and create and sustain networks and collaborations across
multiple levels and boundaries. The panelists reported time and again the multiple sources of funding that support research and extension initiatives and the way in which states and institutions use the federal funds to leverage additional resources to support important work. The panelists believe that measureable outcomes can be developed so that the system can document the continuous need for this capacity building with the purpose of sustaining a vibrant food and agricultural infrastructure in a measurable way, and which can be communicated to stakeholders.

**Panel Recommendation #8:** Task a group 1) to further define and bring meaning to this concept; 2) identify measureable outcomes; and 3) propose a process for collecting data to measure this impact.

**Other recommendations:**

Discussion: After short discussions, the following recommendations were also made by the panelists.

1. Include McIntire-Stennis and its funding in the Plan of Work and Annual Report. The panel recommends exploring the possibility of including Animal Health and Renewable Resources Extension Act to the Plan of Work also. The panel believes including these in the Plan of Work and Annual Report will help tell the whole story of Formula Grants.
2. Add eXtension to the Extension Methods check boxes. This is a delivery method that should be captured. Explanation on how eXtension is used can be done in a text box.
3. The panel supports an existing effort to develop national outcome indicators for the NIFA priority areas and other common national programming efforts for institutions to voluntarily adopt.
4. Continue providing consistency in language between NIFA reporting systems. NIFA has done an excellent job making reporting consistent.
5. Link the Plan of Work system to REEport and NIMSS to enable FTEs, classification data, and financial data to be uploaded automatically into the Annual Report.
6. Provide the Institutions with a model Plan of Work and Annual Report. Continue providing examples in the POW that are relevant to both Extension and research.
7. NIFA should continue having a POW panel to provide feedback on an annual basis as to what has been done in the system and to recommend and validate new applications for the system.
8. The panel recommends that NIFA continue to provide constant feedback regarding Plans of Work and Annual Reports to institutions submitting the POW and AR.
9. Provide a way to capture the value of volunteers.
Appendix A: List of Questions Sent to Panelists Via Email on April 20, 2010

To: Plan of Work Panel Members

The panel to improve and streamline the Plan of Work and Annual Report begins two weeks from today.

Dr. Steve Loring, Associate Director of the New Mexico State University Agricultural Experiment Station has agreed to help me co-moderate the Panel so we can keep the discussions moving and help draw out all ideas.

Steve and I would like you to consider the following set of questions before you arrive to help spur discussion.

1. Rolling 5-Year Plans versus New 5-Year Plans every five years. What are the pros and cons of each?
2. What data can be reused directly from CRIS/REEport?
3. State use of data versus NIFA need for data in the Plan of Work and Annual Report
4. What do the NIFA NPLs want to see in a Plan of Work and in an Annual Report?
5. What data is NIFA missing that the States think is valuable? And why?
6. What data is NIFA asking for that the States think is meaningless? And why?
7. A conscious effort was made to gather data in the Plan of Work around a simple linear logic model structure (Situation, Ultimate Goal, Inputs, Activities, Outputs, Outcomes, Evaluation), so if States had a logic model drawn up for each Planned Program it would be relatively simple to complete each Planned Program. Is there a better structure for the Planned Programs, and if so, what is it?
8. Should the Annual Report be based on the approved Plan for the fiscal year for which it is approved? Should it mirror the approved Plan of Work? Should it be a blank slate? Should it be something else?
9. Right now the evaluation plans and reports section is optional. Should it be a required part of the Plan and Report?
10. Should a budget be introduced in the Plan of Work?

We look forward to a constructive discussion and panel recommendations to help NIFA improve the Plan of Work and Annual Report of Accomplishments process.

Please let me know if you need any additional information.
Appendix A: List of Questions Sent to Panelists Via Email on April 20, 2010

Bart

Bart Hewitt
Accountability and Reporting Leader
Office of Planning and Accountability
National Institute of Food and Agriculture
Voice: 202-720-0747
Fax: 202-720-7714
Email: bhewitt@nifa.usda.gov

Planning and Accountability Web site: http://www.nifa.usda.gov/opa/

Investing In Science | Securing Our Future