Reporting Web Conference Question – August 9th, 2012

Q: In REEport, what are you defining as a "project" for Research and Extension?

A: The definition of a project in REEport is the same as it is CRIS Webforms for Research Activities. That is, any unit of work being done under a particular title with a unique accession number (NIFA's tracking number) and Project Number (the state assigned tracking number) is a "project." For formula funded activities, projects are begun by submitting a project initiation in REEport (current AD 416/417 in CRIS). For non-formula, a project initiation "shell" is created in REEport based on fields pulled from the grants.gov approval process; the PD then submits that project to NIFA in order to receive his/her competitively awarded funds.

REEport does not handle "project reporting" for extension, just like CRIS Webforms do not. There is currently no reporting requirement in REEport that requires Extension to submit or report on projects.

Q: In the Plan of Work, does NIFA use the quantitative outcome measure that is reported in the "actual" box or the information that is included in the Qualitative Statement?

A: We use both. While we primarily use the qualitative statements for reporting up to OMB and Congress, as well as other stakeholders and partners, the quantitative data reported is used by the NPLs to gauge whether or not certain programs are realizing success and to determine whether changes should be suggested for new evaluation methodologies or whether new/additional indicators should be instituted for programs.

Q: Why does it seem that research outcomes can be speculative in nature (i.e. this research should have an effect on…") whereas extension outcomes have to be actual changes?

A: If this presentation or any other guidance from NIFA has led you to believe that this the case, then let this answer be clarification that we do not expect research outcomes vs. extension outcomes to vary from each other in terms of what they can or can't be. When it comes to speculation, either research or extension based outcomes could contain a touch of speculation, but that speculation should be connected to an actual change in knowledge, action, or condition. In other words, it is not necessarily a bad thing to make a speculative statement about what the results of an activity "might" lead to happening. Of course, having definitive results and numbers is usually better, but if you have an outcome statement that talks about changes in knowledge (whether research/lab based or extension based), you could follow up the statement of change in knowledge with a statement such as: "this change is likely to have major impacts on…". It is even better if the follow up statement is more definitive, such

as: "this change in knowledge has already had major impacts on (fill in the blank) as indicated by the (X amount) of farmers who signed up for training on (fill in the blank). In this example, you can see how a RESEARCH outcome resulting in a change in knowledge could lead to an extension outcome (maybe to be reported in the following year) in which a change in action/behavior will eventually take place as a result of training they took.

Q: Can you please give us some examples of research outcomes? That seems to be the hardest thing for our Experiment Station folks to deal with.

A: NIFA acknowledges that it is often difficult for the research community to articulate outcomes in the way that extension is able to do. This is simply the nature of research vs. extension, as research is usually dealing with changes in knowledge only (although not always), whereas extension is able to use various combinations of knowledge, action, and condition changes to craft meaningful impact statements. That being said, here are some examples of solid research outcomes that have been distributed by NIFA in the past:

> Increased profits for the beef producers can be achieved through a higher percentage of cows calving during a more concentrated time frame and earlier in the calving period, as well as an improvement in genetics resulting from use of high accuracy, genetically proven, superior sires. Research programs in 2011 at the University of Florida were aimed developing cow-calf production systems which reduce unit cost of production while still producing high quality beef that meets the demands of today's consumer; developing and integrating reproductive management technologies into management systems. A significant impact from such programs shows that it costs $0.75 to $1.50 per day to raise one post-weaned calf, and 70% of that cost is feed related. In addition, a calf is usually backgrounded for 90 to 120 days. If a supplement during the backgrounding period does not exceed $0.05 per day yet results in a 7% to 8% reduction in feed with no reduction in performance, then cattle producers will save between $3.65 to $9.24 per head during the backgrounding phase (90 to 120 days) or $1.9 to $7.0 million savings to the state of Florida cattle industry each year.
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> Disease agents such as listeria can cause widespread havoc on ready-to-eat foods, while mold on cheese can cause allergic reactions and respiratory problems. Researchers at the New York Agricultural Experiment Station and Cornell University looked at whether they could combine an alternative to thermal processing of ready-to-eat foods, pulsed-light technology, with natural protectants against listeria and mold on ready-to-eat meat and dairy products. They looked at this technology being used against listeria and mold growth. For listeria, the newly developed treatment showed no significant listeria over 28 days of refrigerated storage. For mold, pulsed light treatment reduced molding by 33-40%. These findings and the recommendations provided, once incorporated into industry standards, will lead to safer, more nutritious food and longer shelf life, saving money (including healthcare costs) for consumers and the food industry both, while protecting invaluable industry reputations.
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> Current climate models assume that vegetation will soak up much of the extra carbon dioxide we put into the air from fossil fuel burning. A joint research project with the University of

Wisconsin and University of Minnesota studied 13 plant species common in U.S. Midwestern states. The researchers added extra carbon dioxide to the plants' environment to discover how, in the higher carbon dioxide world of global warming, the plants would respond. The results suggest that plants' capacity to absorb extra carbon from the atmosphere as carbon dioxide levels rise may be less than expected, implying that today's carbon cycle models are likely under-predicting the pace of increase of future carbon dioxide levels, and therefore the pace of climate change. This research has major implications for models of future climate change mitigation and adaptation strategies.