

April 29, 2009

Katherine Smith, Acting Deputy Under Secretary
Research, Education, and Extension Office
U.S. Department of Agriculture
3858 South Building
1400 Independence Ave., S.W.
Washington, D.C. 20250

Dear Dr. Smith,

The directors of the Regional Integrated Pest Management (IPM) Centers have collaborated on their responses to the request for written input on the roadmap for USDA research, education, and extension. Please accept our comments regarding the key questions you have posed.

1. What types of current and future critical issues (including those affecting citizens, communities and natural resources) does agriculture face that no USDA entity could address individually?

Of the many issues facing agriculture today, some of the most critical are as follows:

- Climate change and the subsequent effects on crops, pests, and communities
- Water availability and quality, including hypoxia, which could lead to eutrophication of important water bodies
- Land costs and scarcity of suitable land for conservation and agriculture, which could adversely affect the cost of food, the proliferation of natural enemies, and the preservation of endangered and threatened species.
- Scarcity of fuel (fossil fuel in particular), which will threaten agriculture and limit certain types of pest management, such as physical control of weeds
- Invasive species and our methods for managing them
- Profitability and the environmental tradeoffs to maintain it
- Fewer farmers than in previous decades, but more people on the planet
- Foreign competition and the regulations surrounding it
- Lack of public support, especially in regard to understanding the importance of farming

Given that many of these issues fit under the umbrella of “sustainability,” USDA may need to further define that term while addressing public demand for it.

2. What criteria should USDA use to prioritize agricultural science (i.e., research, education, and extension) investments to address these issues?

We believe some of the most important criteria for prioritizing research, education, and extension investments will be

- Risk reduction
- Close fit with a sustainable approach
- Demonstrated stakeholder need
- Quality of the research or extension proposed

- Ability to cut across disciplinary and other boundaries
- Public-private partnerships
- Likelihood the project will address the threats noted above in Question #1.

3. How might USDA better coordinate agricultural sciences among its various agencies and with its partners?

Some of the ways USDA might improve coordination of agricultural services would be to

- Synchronize RFA releases and due dates
- Reward collaborative projects
- Mandate collaboration among USDA entities
- Strengthen the working relationship between the Institute and ARS.

4. What are some examples where agricultural sciences are successfully coordinated for maximum benefit? Why are they successful?

Regional IPM Centers have successfully strengthened science and science leadership by bringing together research, extension, and education in funded projects, by improving coordination among states and regions, by serving as a conduit to the national IPM effort, and by enhancing outreach and awareness of IPM.

Centers compete for USDA funding that can be used for core activities; then they are able to apply for and attract millions of dollars in additional funding that benefits IPM nationwide. We involve many stakeholders across geographical and disciplinary lines. A few examples that illustrate both of these points are our work with the Risk Management Agency, the IPM Pest Information Platform for Extension and Education (ipmPIPE—which also includes grower funding), and our strong connections with APHIS. Centers have augmented state and federal funding through Experiment Station support and close associations with state IPM programs.

Why has this model been successful? First, it's a Regional IPM Center's primary responsibility to coordinate, network, and serve as a clearinghouse for information. Explicit designation of this responsibility creates an accountability stream that leads to success. Second, we assume responsibility for grants management, and in doing so, "adopt" the projects we help to fund; we want to see them succeed. We care about the impacts the project directors achieve with the federal funds we administer. Third, we stay "close to the action" through our various land grant locations, as opposed to being a single national program. Fourth, our multi-year funding cycle helps us to remain stable while planning for the future. Fifth, there is an expectation within IPM circles that people will collaborate across disciplines and regional lines. Center directors meet at least three times a year to share ideas and build on each others' successes.

Another success story has emerged from ARS. Tom Sappington, Iowa State University/ARS took the lead to develop a consortium to share information about genetic research and extension projects related to the genus *Diabrotica* (corn rootworm). The consortium signed off on an ARS Non-Funded Cooperative Agreement and there are currently 66 individuals, some from other countries, on the mailing list. They recently released a 23-page report detailing their

activities and organized the 2nd International Conference on Diabrotica Genetics, attended by approximately 120 individuals.

5. What are some examples where agricultural sciences are not coordinated effectively? Why is coordination lacking? What are the barriers?

In our experience, the National Resources Conservation Service, while perhaps effective at the state level, has struggled to bring about certain goals at the national level (for example, the 595 Standard). We sense that each state must reinvent the wheel in regard to such standards. However, this issue is not the result of NRCS management, but rather a consequence of its “grassroots up” program implementation.

It has also been a struggle for IPM programs and Water Quality programs to successfully collaborate, although in the past two years we have made some advances in this area.

Perhaps what is needed is a stronger commitment among the leadership at USDA to identify the commonalities and figure out ways to support meaningful linkages not only among USDA entities but also among the programs and Centers it supports.

6. What else might USDA do to improve coordination of science; enhance USDA's ability to identify issues and prioritize investments; and elevate its role in science implementation and coordination?

Some of our ideas are to

- Provide larger and lengthier grants
- Contribute to, or establish where necessary, libraries that identify integrated research and extension work on important topics
- Reward area-wide and multidisciplinary approaches to agricultural issues

Respectfully submitted,

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