CSREES Administrator's Report to the Partnership

Summer 2008

The mission of the Cooperative State Research, Education, and Extension Service (CSREES) is to advance knowledge for agriculture, the environment, human health and well-being, and communities.

United States Department of Agriculture

LOOKING AHEAD—CSREES, Partners Work to Stem Tide of CCD, pg. 4

Message from the CSREES Administrator

Quality, relevance, and usefulness are the pillars underlying planning, execution, and evaluation of agricultural science and education. Each of these factors is fundamental to assuring public investments are both scientifically credible and important to continuous improvement in agriculture, the environment, human health and nutrition, and communities. As needs, opportunities, and costs of conducting research and delivering knowledge in agriculture expand much faster than new resources, the return on public investment must be high. However, in seeking to advance knowledge and address critical needs we cannot focus solely on "sure things" in science. We need to take risks, especially where the potential return is extraordinary.

There have been few times in recent history when the potential returns to research and education have been higher. We are at the nexus of era-defining challenges—global climate change, transformation to biobased fuels, and growing worldwide demand for high quality diets. This is occurring in an environment of tightening natural resources, especially of land and water, and exploding public concern about food quality and safety, health, environmental sustainability, and equitable and affordable access to food. What characterizes all of these concerns? They can be addressed meaningfully and effectively through well-focused investments in agricultural science and education. The knowledge and applications generated through this investment can substantially contribute to real solutions to some of the world's most pressing problems.

Never before have we been positioned better to renew the argument for science-based solutions. The recently passed Farm Bill allows us to recast and elevate the value of science in agriculture. The legislation makes the USDA Under Secretary for Research, Education, and Economics the Chief Scientist of the department, establishes a coordinating office for the science mission of USDA, and establishes the National Institute for Food and Agriculture (NIFA) to equate the extramural research funding programs in agriculture to other science support agencies in government. The way we design and implement these institutional changes will help enable a renaissance in agricultural science to fuel the creativity and talent of researchers and educators across the nation.

The challenge of creating a new system to support agricultural science is, first and foremost, a challenge of elevating a culture of excellence focused on clear mission mandates. The public we serve—from fellow scientists to consumers—needs to trust the rigor and objectivity of every scientific endeavor that is publicly supported. They must also see the relevance of these activities—both over the long term and in some cases immediately—to address current and emerging, often interrelated problems. Agricultural science contributes knowledge to a system of activities, and its mission must be system sensitive.

continued next page >>

As a mission-focused effort, what we must be—and be seen as—is useful. The principles of quality, relevance, and usefulness have guided us to support programs that demonstrate the value of public investment, whether through the ipmPIPE (integrated pest management platform for integrated pest education and extension), the new Colony Collapse Disorder CAP project, the partnership underlying the Operation Military Kids (linking 4-H and extension to military families facing deployment), or the new USDA/NRI and EPA jointly-sponsored grant program on ecosystem services. These investments show that agricultural science and education are a critical service to people across the spectrum of our nation and truly represent "science at your service."

As we reinvent ourselves, let us keep the principles of quality, relevance, and usefulness at the forefront.

Integrated Programs Sets the Focus for Stakeholder-Driven Research

The integration of research, education, and extension is a highly effective approach to solving problems for the American people. CSREES supports this kind of work with competitively awarded grants from the Section 406 Integrated Research, Education, and Extension Program and National Research Initiative.

The strength of the integrated approach is its focus on measurable outcomes, achieved by the direct transfer of knowledge to those who need it. In other words, the needs of the stakeholder must be central to the project, and educational programs must be appropriate to the audience. Extension education takes science-based information to citizens where they live and work, while degree-oriented educational programs train students in the classroom for future employment. Research must, therefore, support educational programs by addressing gaps in knowledge needed to develop solutions.

Effective integration can be achieved only by building partnerships across the elements of the land-grant mission, engaging extension, education, and research to solve problems. That is our challenge.

Measurable outcomes that make a difference in people's lives are what differentiate integrated work from the curiosity-driven research funded by other federal agencies. That is our opportunity.

Contact Deb Sheely, interim Deputy Administrator for Competitive Programs, at 202-401-5024, for more information.

CSREES Addresses Critical and Emerging Pest and Disease Issues with Targeted Grant Program

The Critical Issues Program has funded time-critical research activities related to emerging plant and animal pest and disease issues since 1996. Over the last 7 years, an average of $550,000 per year has provided one-time seed funding to help initiate work that requires immediate attention until other longer-term resources can be secured. CSREES solicits proposals to address specific new or emerging issues. Examples of work initiated through this program include:

SOYBEAN APHID AND RUST MANAGEMENT. After discovering the soybean aphid (SBA) in 2000, key seed grants helped initiate research and extension activities to address management of SBA. Studies on overwintering distribution, spring migration, disease transmission, and the development of an Internet reporting and mapping system help growers manage SBA today.

CSREES recognized the need to evaluate fungicide coverage in post-flowering soybeans prior to the confirmed presence of soybean rust (SBR) in the United States.

Research funds helped determine coverage that could be expected in field applications using available equipment and tested the efficacy of registered fungicides for SBR control. Later, funds were allocated to support the modeling and documentation platform known as the ipmPIPE. The combined results enable growers to respond quickly and effectively to SBR.

COLONY COLLAPSE DISORDER (CCD). The current phenomenon of significant honeybee losses, without a recognizable underlying cause, has been termed "Colony Collapse Disorder." In 2006, key start-up research and planning activities were funded to address CCD. Initial work utilized microarray analysis to assess potential causes of CCD. Recently, three additional grants have been funded to assess the impact of agricultural and in-hive pesticides, including insecticides and miticides, on honeybee health, and diseases.

PREVENTION AND CONTROL OF SPRING VIREMIA OF CARP. Spring Viremia of carp (SVC) is a recently introduced, contagious, and potentially fatal, viral disease affecting carp and koi. Spread of this disease could have profound economic consequences for a variety of U.S. aquaculture enterprises. Studies conducted from 2003–2006 led to development of two different novel, rapid, definitive, DNA-based diagnostic tests to detect and remove infected fish. This proto-type technology is expected to lead to improved laboratory diagnostic methods, as well as a rapid pond-side test that can be easily and reliably performed by farmers to help prevent the spread of SVC and minimize losses due to this threat.

VETERINARIANS TO SERVE IN RURAL AMERICA. The food supply veterinary medical community is critical for protection of animal agriculture from intentional (agro-terrorism) and naturally occurring high-consequence disease threats, such as foot and mouth disease and avian influenza. However, there is an alarming shortage of veterinarians serving rural areas of the United States. To address this growing need, a study was funded in 2005 to improve the visibility of opportunities for graduating veterinarians across the nation. As a result, experienced rural veterinarians have mentored 2,000 veterinary students. The initiative will continue beyond grant termination through the missions of the Academy of Rural Veterinarians, a group whose formation was enabled, in part, by support of this project.

Contact Rick Meyer, at 202–401–4891, or Gary Sherman, at 202–401–4952, for more information. Both are CSREES NPLs for Plant and Animal Systems.

Lessons Learned from the Spinach Recall of 2006

The U.S. Food and Drug Administration (FDA) issued an advisory to consumers on September 14, 2006, warning them to avoid eating fresh spinach because of potential contamination with *E. coli* O157:H7. E. coli contamination can cause illness and death in high-risk populations, which includes young children, the chronically ill, older Americans, and those who are immune-compromised. The advisory resulted in immediate voluntary recalls of fresh spinach nationwide.

Food recalls in the U.S. are no longer a rare occurrence but, in a number of ways, the recall of *E. coli*-contaminated spinach in 2006 was very different from most other recalls. In many ways, the recall actually brought into question the entire process of government issuance of food advisories.

American are rarely, if ever, told to avoid an entire commodity, but initial media advisories were so comprehensive that they included all spinach products sold in the United States. In this instance, consumers were told to completely discard any raw spinach and they were given no instructions on how to make the product safe to eat. To make matters even more confusing, consumers were told that washing the spinach before eating it would not necessarily make it safe for consumption.

The FDA advisory came only after a cluster of related illnesses were identified, and a number of deaths followed. At the time, consumers were confused and frightened by what they heard in the media about the recall. Even now, 2 years after the event, questions remain about how the recall was communicated to the public, which products were actually affected, and what consumers could have done, if anything, to protect their health and the health of their families.

In 2007, shortly after the spinach recall, CSREES' National Integrated Food Safety Initiative awarded a $2.5 million grant to a group of researchers led by Dr. William Hallman, at the Rutgers University Food Policy Institute. Hallman and his project team looked specifically at how the recall was handled, how the media and consumers reacted to the recall, and what lessons were learned from this unique and challenging situation.. Their findings highlight important issues that may need to be addressed more clearly in future incidents.

Contact Jan Singleton, NPL for Food Science and Food Safety, at 202–401–1954 for more information.

It's called *ipm*PIPE

It has been called "unprecedented" by those who have never seen USDA agencies, land-grant universities, Cooperative Extension Services, the farm sector, and its support industries work together so seamlessly.

It has been called "indispensible" by extension specialists, crop advisors, and farmers.

It has been called "the new paradigm of integrated pest management (IPM)" by those who crafted the ipm Roadmap.

What is it? It's a monitoring and early-warning system to advise farmers and others of the status of soybean rust. It's called the *integrated pest management* Pest Information

Platform for Extension and Education, *ipm*PIPE.

The USDA agencies (Animal and Plant Health Inspection Service, Agricultural Research Service, CSREES, Risk Management Agency, Economic Research Service), land-grant universities, grower organizations, and private industry have worked in concert, based on their individual roles and missions, to manage the Asian soybean rust (SBR) that entered the continental United States in late 2004. This partnership has proven to be highly effective in protecting vulnerable agricultural industries from this economically limiting soybean disease, which has resulted in an enormous savings to producers and the American people.

*ipm*PIPE has greatly enhanced the ability of crop producers and advisors to manage pest risk(s) in the maintenance of their crop. In addition to soybean rust, *ipm*PIPE has potential to revolutionize pest risk management in numerous other crops across the country. Soybean aphid has already been added, high-value legume crops are being supported, and new components to assist pecan and cucurbit producers are in development. *ipm*PIPE will add more crop/pest combinations to leverage the development work already done on a Web-based interface, training materials, epidemiologic research, and expertise in the system.

It's also been called 'a lifesaver.' "PIPE helps us know where rust is and where it's moving. It is what I use to determine if and when to spray." *Billy Wayne Sellers, soybean grower.*

Contact Kitty Cardwell, NPL for Plant and Animal Systems, at 202–401–1790.

CSREES: A Critical Partner in the USDA Energy Research, Education, and Extension Strategic Plan

Bioenergy and the production of biofuels are constantly in today's headlines. In March 2008, USDA Under Secretary for Research, Education, and Economics (REE) Gale Buchanan announced the official release of the REE Energy Science and Education Strategic Plan. Visit the REE Web site, at http://www.ree.usda.gov/news/bead/USDA_REE_strat_plan.pdf, for more information.

The plan, based on output from an expert workshop, promotes focus and collaboration among the four REE agencies (Agricultural Research Service, CSREES, Economic Research Service, and National Agricultural Statistics Service), CSREES' university partners, and coordination with other USDA, federal and state agencies and public and private energy sector entities. CSREES national program leaders (NPLs) Bill Goldner (chair), Carmela Bailey, Chavonda Jacobs-Young, and Processing, Engineering, and Technology Director Brad Rein, along with university partners Mike Harrington and James Wade, were part of the interagency team that drafted the plan. CSREES NPLs have lead roles on three of the four major Energy Plan Goal Teams: Sustainable Agriculture and Natural Resource-Based Energy Production (Goldner); Sustainable Bioeconomies for Rural Communities (Jill Auburn); Energy Efficiency and Conservation; and Bioeconomy Workforce Development (Audrey Trotman). CSREES NPLs (Goldner, Bailey, Trotman, Jacobs-Young, Auburn, Pat Hipple, Gail McLean, Richard Hegg, and Greg Smith) and university partners play important roles as co-leaders or team members on many of the Goal Action Teams under the above four goals.

Two CSREES-supported bioenergy research projects have recently gained notoriety. First, automotive giant General Motors and renewable energy biology firm Coskata, Inc., recently announced a new project to link thermochemical and biological conversion in order to optimize ethanol production from cellulosic biomass. CSREES helped support this project through research at Oklahoma State University. Also, Native Seedsters (NS), a Montana start up engineering company, used two USDA Small Business Innovation Research grants to develop a mechanized switchgrass seed harvesting system. The harvesting system has now gone commercial, with an agreement signed between NS and a major developer of switchgrass, a dedicated non-food cellulosic ethanol feedstock crop.

Contact Bill Goldner, NPL for Small Business Innovation Research, at wgoldner@csrees.usda.gov, for more information.

CSREES, Partners Work to Stem Tide of CCD

Bee pollination is responsible for an estimated $15 billion in added crop value, particularly for specialty crops, such as almonds and other nuts, berries, fruits, and vegetables. However, the agricultural industry is in danger because bee populations throughout the nation are in serious decline due to invasive pests, diseases, environmental stresses, and a new phenomenon, tentatively termed Colony Collapse Disorder (CCD). CCD is threatening the honeybee industry and may impact the nation's food supply by making it increasingly difficult for beekeepers to meet the pollination demand for several crops—in addition, the cost of bees used for pollination services has more than doubled.

CSREES has taken a leading role in supporting scientists to determine causes contributing to CCD. In April 2007, CSREES and the Agricultural Research Service co-sponsored a 2-day CCD workshop in Maryland to identify research priorities and measures to address those needs. The CCD steering committee, composed of federal program leaders that included CSREES and land-grant university scientist/administrators, used information from the workshop to develop a plan of action. The largest component of the plan was to support hypothesis-driven research to determine the causes and to mitigate CCD. The plan identified four categories of candidate factors based on the most reliable information available concerning what impacts bee health: 1) new or re-emerging

pathogens; 2) bee pests such as Varroa mite; 3) environmental and nutritional stresses; and 4) pesticides.

In September 2007, CSREES' National Research Initiative released the FY 2008 RFA, which included a newly developed Coordinated Agricultural Project program focusing on the protection of managed bees. The sole priority of this new program was to improve the health of managed bee populations in agricultural systems. Applicants of this integrated program developed multidisciplinary research that could be applied to extension and/or educational programs in the near term. Applicants incorporated the fields of genomics, breeding, pathology, immunology, and/or applied ecology to clarify the interaction of population declines of managed bees with biotic and abiotic factors (e.g., pests, diseases, disorders, environmental stressors, or current management practices).

Leading scientists from across the country collaborated on the proposals. These groups, including both research and extension scientists, had to sift through what was known about CCD and what would be the best way to deal with this problem. An expert scientific review panel, including research extension scientists and educators, evaluated three competitive proposals in May 2008. These proposals included over 36 participants from 22 universities and 5 laboratories (4 federal and 1 state) across the country. Once underway, this project will use the best approach to determine the causes contributing to CCD and then quickly adopt strategies to improve the number and health of managed bees available for agricultural crops.

Contact Mary Purcell-Miramontes, NPL for Competitive Programs, at 202–401–5168.

Microbial Genomics is Transforming Our Understanding of Agriculturally Important Microorganisms

Microorganisms have a tremendous impact on the productivity and profitability of U.S. agriculture. As pathogens, they can kill humans, animals, and crop plants. Beneficial microbes can help animals digest their feed, obtain nitrogen for plants, and protect plants from disease. CSREES-supported microbial genomics and microbial biology research enhances fundamental understanding of agriculturally important microorganisms and their interactions with plant and animal hosts. This new knowledge is already improving our ability to detect agriculturally important microorganisms and is being translated into new methods of managing disease.

DNA sequencing is the foundation of microbial genomics. The genome sequence of a microorganism identifies the DNA base pairs and the order in which they appear in the microbe's genetic complement. This information can be used as the basis of methods for early detection of harmful microorganisms. Such early detection is a vital component of the response to new and emerging disease outbreaks. Incorporation of sequences from viral genomes into plant host DNA is already being used to enhance host resistance to viral pathogens.

CSREES collaborates with the National Science Foundation (NSF) to jointly offer a competitive grants program that supports microbial genome sequencing projects. CSREES initiated the program in FY 2000 and has been partnering with NSF to offer the program since FY 2001. Over the years, this program has resulted in the sequencing of more than 100 new microbial genomes of importance to agriculture, the environment, and basic science. Genomes sequenced with funding from CSREES include *Aspergillus flavus,* a fungal pathogen of plants, animals, and humans that produces the potent carcinogen, aflatoxin; *Streptomyces scabies,* a plant pathogen that causes potato scab disease; *Edwardsiella ictaluri,* which causes enteric septicemia, the most economically important disease of farm-raised channel catfish; *Fusarium graminearum,* which causes wheat head scab, one of the most economically important plant diseases in the United States; *Fusarium verticilliodes,* a major pathogen of maize worldwide, and *Moraxella bovis,* which causes a highly infectious ocular disease of cattle.

Microbial pathogens of plants and animals are constantly evolving. It is critical that we harness the power of microbial genomics and microbial biology to increase our fundamental understanding of these pathogens and the ways that they interact with their hosts. This fundamental knowledge allows us to more rapidly find solutions to newly arising diseases so as to minimize their impact on U.S. agricultural productivity.

Contact Ann Lichens-Park, NPL for Competitive Programs, at 202–401–6460, for more information.

Extension Programming Anticipates Community Educational Needs

It may have taken what some would call an act of God, but Jody Johnson and Jim Becker, county extension directors in southern Illinois, got peoples' attention.

The pair, recipients of a 2007 Extension Special Needs Grant entitled, "Earthquake Emergency Preparedness," was looking at extremely low registration for their upcoming conference. Their goal was to develop an educational packet and to educate residents, business owners and political leaders, living in the New Madrid Seismic Zone (in the Southern and Midwestern United States), about earthquake preparedness with the intent of minimize the potentially devastating effects of a large magnitude earthquake. Working in collaboration with the extension services in Kentucky, Missouri, Arkansas, and Tennessee, a 2-day earthquake disaster conference was scheduled for May 6–7 at Harrah's Conference Center, in Metropolis, IL.

On April 17, less than three weeks prior to the conference, enrollment was lack-luster with only 20 people registered. Then, in the early morning hours, (4:36 a.m. CDT) of Friday, April 18, Mother Nature intervened, big time. Mount Carmel, IL, was the epicenter of a magnitude 5.2 earthquake, the strongest in that region in the past 40 years. The quake sent out shock waves that were felt up to 900 miles away.

It took Mother Nature to remind people that an earthquake was a real disaster possibility, even in this region, and they should consider planning for such an event!

Johnson, one of the co-directors of the event, was out of the country during the earthquake and his wife happened to be e-mailing him at the exact moment of the earthquake. Her email reads, *"It's about 4:30 am Friday morning. I slept with my phone, but I guess I didn't hear it vibrate. I tried to call, but you didn't answer, so I left a message. I just checked the yahoo account, but still no emails. Oh my gosh! I think we just had an earthquake. The whole bed is shaking. Very scary. It has stopped now. Everything is ok. Guess you had better come back and hurry up with your disaster planning conference."*

Becker, the other co-director of the Special Needs Grant, lives even closer to the epicenter of the quake. He and his wife were awakened by the earthquake; his home shook strongly for several seconds but damage was negligible. He was determined to make the most of nature's "wake-up" call. He immediately contacted the news media and found an audience ready to promote his earthquake conference in the print, radio, and television outlets throughout the five-state region.

The May Earthquake Preparedness Conference was a roaring success with a slate of 20 excellent presenters and over 100 program registrants in attendance. Local affiliates from all three major networks were there to cover the event and a professional videographer recorded the conference to produce an educational DVD for distribution to attendees, the Extension Disaster Education Network,(EDEN) and others who are interested. There will not be a copyright on the product, so copying and distribution is encouraged.

The earthquake was a very frightening event and fortunately nobody was seriously injured; yet that same earthquake provided two forward looking extension educators a teachable moment that has the potential of saving lives in the future.

Contact Jody Johnson, at 618–658–5321, or James Becker, at 618–242–9310, for more information about their program or the DVD. Article provided by Dennis Kopp, CSREES Assistant Administrator for program and analysis.

EDEN: Working Out Tomorrow's Disasters Today

The Extension Disaster Education Network (EDEN) seeks to reduce the impact of disasters by providing educational products and services on all five phases of disasters: preparedness, prevention, mitigation, response, and recovery. When one state has a particular need, EDEN delegates from other states can be relied upon to provide previously developed resources that were proven successful in similar events. This assistance prevents duplication of effort in a time of crisis. Also, EDEN proactively develops national resources with broad geographic appeal.

Examples of recent EDEN activities include:

- EDEN, in collaboration with the Centers for Disease Control and Prevention, designed and developed the "Pandemic Influenza Preparedness for Faith-Based Organizations" course, to enable congregations, synagogues, mosques, and other places of worship to protect the health of their staff and the communities in which they serve, and fulfill their missions during an influenza pandemic. While everyone in a community can serve a role in pandemic preparedness, faith-based organizations provide unique characteristics to pandemic influenza preparedness. These include community outreach efforts (e.g., counseling, ministry, aid) and making useful facilities and resources available during outbreak response.
- EDEN leads the development of the eXtension "Agrosecurity and Floods" resources. Much of the effort in the agrosecurity Community of Interest (COI) focuses on Best Management Practices and preventative measures, including planning, prevention, surveillance, and detection that occur on a daily basis. Research-based information is available in subject areas from farm to fork, or producer to consumer. With unfortunate regularity, flooding occurs in many locations. This COI varies depending on which phase of flood disaster management is occurring—preparedness, mitigation, response, or recovery. Individuals, families, communities, elected leaders, agencies with responsibility for flooding may access valuable information on all phases of flooding, as can those who assist individuals, families, and communities that experience flooding.
- EDEN is working to improve pre-disease outbreak communication among state cooperative extension services, state veterinarian offices, the USDA Animal and Plant Health Inspection Service, state emergency management agencies, and state animal response teams (SARTs). Six EDEN Regional Animal Agro-Security Conferences bring these officials together to discuss potential extension roles and the roles of other participants. Penn State University, New Mexico State University, Clemson University, Colorado State University, and North Dakota State University have already hosted five of these multistate

conferences. The University of Missouri will host the final regional conference during the fall of 2008.

For more information contact Bill Hoffman at 202–401–1112, or Joe Wysocki at 202–401–4980. Both are NPLs for Plant and Animal Systems.

Ag in the Classroom Meets Educational Needs

The Cooperative State Research, Education, and Extension Service has since 1981 sponsored Agriculture in the Classroom, an outreach program for K-12 teachers to advance agricultural literacy and help students learn how food is produced and what it takes to get food to the dinner plate. USDA's Ag in the Classroom network of more than 90,000 classroom teachers, 20,000 pre-service teachers, and 20,000 volunteers work to advance agricultural literacy and nutrition education. These teachers and volunteers use Ag in the Classroom resource materials to teach more than 5 million students each year. USDA's investment in Ag in the Classroom serves a magnet that attracts annual contributions of more than $10 million in non-federal resources to support the program.

Ag in the Classroom (AITC) addresses new and emerging issues that face our nation, including childhood obesity. North Carolina AITC recently developed "The Farmer Grows a Rainbow," an agriculture literacy and nutrition education program. This companion resource to USDA's *MyPyramid* provides curriculum material to pre-K–fifth grade teachers who introduce appropriate nutrition education to their students. This knowledge results in improved food choices and eating and exercise behaviors in children. The lesson plans for this program are aligned with state and national educational standards, including science, literacy, math, and social studies. "The Farmer Grows a Rainbow" training kits are available in print and Web-based versions.

CSREES-supported Ag in the Classroom encourages K-12 educators to adopt science-based themes, which are outgrowths of recent scientific advances, address USDA priorities, and advance science-based knowledge in our nation's classrooms. Students so prepared will be better able to meet future U.S. manpower needs in science, technology, engineering, and mathematics fields. These seeds of knowledge will also help excite students about careers in science and will assure a competent science workforce for our nation and world.

These student learning benefits cost taxpayers less than 20 cents per student served per year.

To learn more about this initiative and other agriculture literacy programs, visit the Ag in the Classroom Web site at www.agclassroom.org, or contact Tom Tate, NPL, at ttate@csrees.usda.gov or 202–720–2727.

The Impact of Your Outcomes Fuels Future Budgets

Accountability is the watchword in Washington these days and, with increasing pressures on a shrinking pool of discretionary funds, decisionmakers are demanding more and better information on the results achieved from funds invested in agricultural research, education, and extension.

Many of the programs and projects that CSREES funds do not lend themselves well to quantitative performance measures. Therefore, the agency makes maximum use of outcome statements provided in reports when it provides information to decisionmakers about the impact of CSREES funding. CSREES reviews these reports throughout the year and identifies key changes in the nation's knowledge, action, or condition of national significance. This information is used in many reports and communications. Particular emphasis has recently been placed on performance information in the agency's budget submission as part of the administration's Budget-Performance Initiative.

CSREES is required to document key outcomes that result from funded activities for each objective in its strategic plan to demonstrate that these funds are having the desired impact. Further, any requests for increases in funding must not only document the outcomes from past funding, but what additional anticipated outcomes will result from the additional, requested funding.

Since our partners do the work in support of CSREES' mission from the funds we receive, the outcomes they supply are critical in preparing our budget and other information for decisionmakers. The agency also uses outcomes to plan and assess its portfolios of programs (http://www.csrees.usda.gov/about/strat_plan_portfolio.html) to ensure that CSREES programs achieve the intended results and that the agency makes the most effective use of the funds the agency receives.

As a result, CSREES has received top marks in Office of Management and Budget assessments and has maintained its budget during very tight times.

Contact Bob MacDonald, Director of the Office of Planning and Accountability, at 202–720–5623 for more information.

One Solution Develops Electronic Standard Report Prototype

The U.S. Office of Management and Budget requires all federal agencies to formally integrate performance with budget decisions as a prerequisite for continued funding. Through its One Solution Initiative, CSREES is responding to this challenge for greater accountability by integrating several different reporting systems within the agency.

The guiding principles for One Solution include

- Every investment must be reported in the database and we must be able to explain how every dollar was spent;
- Report only once and reuse the information collected;
- The data collected must meet the requirements of federal reporting;
- Information collected must be of value to the agency and grantees asked to report;
- The agency and partners will be able to go back into the database after the grant has ended and enter the outcomes that were not captured at termination; and
- The agency will be able to reliably answer detailed questions in a manner that is consistent over time and across different functions.

In October 2007, the release of the CRIS Transition Standard Report enabled CSREES to take the first steps toward compliance with the federal government-wide reporting standard Research Performance Progress Report (RPPR) as the foundation for the One Solution Standard Report. A copy of the categories and guidance is available at: www.csrees.usda.gov/onesolution.

One Solution is gaining ground in consolidating the various reporting systems. An electronic prototype of the new standard report should be ready for demonstration in August 2008. The working prototype is planned for October 2008 with full deployment expected by October 2009. The new system will have the look and feel of the current electronic Plan of Work system.

CRIS completed the movement of data to a new structure in early June to more effectively integrate with other CSREES applications. This data migration sets the foundation and facilitates the progress for many of the One Solution initiatives, such as the ability to pre-populate forms.

The electronic submission version of the Agricultural Research, Extension, and Education Reform Act of 1998 Plan of Work now includes the online annual report, electronic workflow, and e-mail notification features for both agency staff and partners. The agency's Planning and Accountability staff is developing protocols for analysis and better use of this data. Partners may access these protocols through the Research, Education, and Economics Information System to conduct their own searches and analysis in the near future.

The Leadership Management Dashboard (LMD) is currently be used by agency staff to manage large numbers of funded projects as part of the One Solution workflow requirement and will be made available to partners in mid 2009. The Plan of Work and Annual Report are currently being integrated into the LMD for use in early 2009.

CSREES is working toward the requirement that all financial assistance awards, including formula grants, originate with the submission of an application package through Grants.gov. This will allow the agency to store complete applications in databases for reuse during the review, award, reporting, and termination cycle for all funds.

The agency formed a stakeholders group so the partners can offer suggestions and advice during the transition to the new CSREES Information System. This group is assessing the effects of the proposed implementation plans, and steering alignment with state reporting systems.

To stay abreast of One Solution and other reporting topics, please participate in the bimonthly CSREES Reporting Web Conference Series at: http://www.csrees.usda.gov/about/strat_plan_web.html

For further information on One Solution, go to www.csrees.usda.gov/onesolution or contact Greg Crosby, NPL, One Solution, gcrosby@csrees.usda.gov or 202 401-6050.