

## **2007 Internal Annual Review: Agricultural Markets and Trade Portfolio**

### **Economic and Community Systems and Competitive Programs**

#### **I. Background**

This 2007 annual review of the Agricultural Markets and Trade Portfolio focuses on the previously defined (FY 2007 – 20012) objective, Provide Information, Knowledge, and Education to Help Expand Markets and Reduce Trade Barriers. In the current Strategic Plan this is now Objective 2.1 Provide Research, Education, and Extension to Expand Domestic Market Opportunities.

Successful marketing – getting raw and finished products from producers to domestic and international consumers, is a complex chain of activities crucial to the economic survival of farms and agribusiness. CSREES funds and supports higher education, research, and extension activities related to marketing and domestic and global trade. The agency partners with the public and private sector to promote successful marketing and trade methods and strategies including alternative markets, products, policies, and institutions.

An agency strategic goal is to enhance the competitiveness and sustainability of rural and farm economies. To accomplish this CSREES funds universities and others to conduct research, education and extension in marketing and trade. Several disciplines cross into the area of marketing, including risk management, consumer economics, entrepreneurship, nutrition, sustainable agriculture, and other agricultural and social sciences. CSREES supports work to increase awareness of marketing and its many opportunities, and supports this program by providing information, knowledge and education to help expand markets and reduce trade barriers; supporting trade capacity building through research and technical assistance; providing science-based knowledge and technologies to generate new or improved high-quality products and process to expand markets for the agricultural sector; providing science-based information, knowledge and education to facilitate market risk management; and promoting an efficient and economically viable agricultural production system.

Agriculture, in the broad sense, is in a revolution that will change how food and fiber are produced, processed and distributed. This revolution is played out in the marketplace. It impacts farms and ranches, agribusinesses, and rural communities, requiring strategic and tactical decisions to make them successful. Several hundred economists nationwide do research, teaching and extension in marketing and trade. The portfolio includes three CRSREES Knowledge Areas:

- Foster understanding of markets, productivity, agricultural competitiveness, and inter-regional trade and provide insight to the role and function of markets and their regulation (KA 603)
- Increase knowledge and understanding of distribution of products, goods, and services, the practices of buying and selling and development and improvement of markets (KA 604)
- Increase understanding of economic and social impacts of domestic programs and policies, including the effect of government actions on the U.S. (KA 610).

#### **The Markets and Trade Logic Model**

CSREES program planning, design, and evaluation is guided by the logic model, a graphic depiction of the relationship between program activities and intended effects. The primary value of a logic model is to make the program clear, to map potential strengths and weaknesses in program design and implementation, to identify potential gaps in programming that impede goal attainment, and to make explicit the relationships among the many players—planners, stakeholders, research, education, and extension communities, and program beneficiaries. The logic model situates the program within a

problem-solving context; it identifies problems to be addressed by the portfolio of programs, external factors that influence portfolio and program design, assumptions implicit in program design and conduct, and the activities that comprise the portfolio.

CSREES mobilizes financial and human capital to support international engagement activities at the federal, state, and local levels, as well as internationally. Activities include proposals and plans of work, research projects and publications, curriculum and education of baccalaureate, graduate and post-doctoral students, policy and decision makers, and outreach to producers and communities, all with the goal improving agricultural sector marketing. These activities will produce outputs of new science-based knowledge, methods and technologies, information and skills, in addition to building capacity within the agricultural sciences and the food, feed, fiber, and fuel sectors of the agricultural economy. The expected outcomes will include gained knowledge and changes in management behavior.

The knowledge gained will increase understanding of the importance of markets to U.S. agricultural and educational institutions and our ability to recognize opportunities for domestic and international trade in agricultural products including food, fiber, feed, and fuel, and services, including environmental benefits resulting from agricultural land use activities.

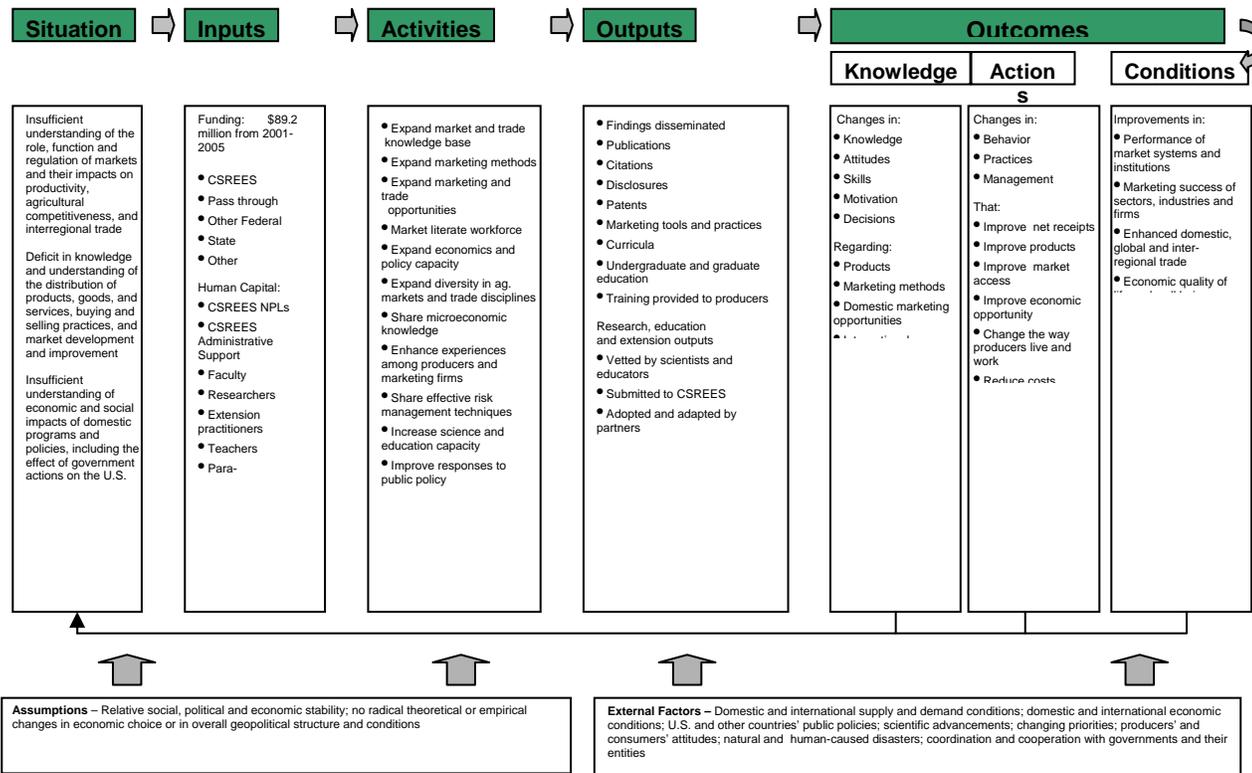
This new knowledge will enable analyses of and response to the competitiveness of food, fiber, and bio-based products in domestic and foreign markets; market institutions, policies and practices; producer and consumer attitudes and their implications; trade, marketing mechanisms, market disruptions and market access; and policy options relevant to agriculturally related issues.

In the long-term, this investment is intended to change conditions in agriculture, international economic development, and trade capacity development including: Improvements in performance of market systems and institutions; marketing success of sectors, industries and firms; enhanced domestic, global and inter-regional trade; and improved economic quality of life and well being.

- Portfolio score from the annual review in February 2006: 81
- Portfolio score from the annual review in July 2007: 78

<b>Table 1 Scoring of 2006 PREP Expert Panel</b>			
<b>Criteria</b>	<b>Recommendations imported from the External Panel are actually included in the full report at <a href="http://www.csrees.usda.gov/about/strat_plan_portfolio.html">http://www.csrees.usda.gov/about/strat_plan_portfolio.html</a></b>	<b>2005 Annual Score</b>	<b>2007 Annual Score</b>
<b>Relevance</b>			
1. Scope		3	3
2. Focus		1	1.5
3. Emerging Issues		2	2
4. Integration		3	3
5. Multi-disciplinary		3	3
<b>Quality</b>			
1. Significance		2	2
2. Stakeholder		3	3
3. Alignment		2	2
4. Methodology		2	2
<b>Performance</b>			
1. Productivity		3	3
2. Comprehensiveness		2	2
3. Timeliness		2	2
4. Agency guidance		2	1.5
5. Accountability		1	2
<b>Overall score</b>		<b>81</b>	<b>78</b>

## Portfolio: Agricultural Markets and Trade



Version 1.2

A Portfolio Review Panel convened in Washington, DC July 20-22, 2004, charged with evaluating the effectiveness of several portfolios including Agricultural Markets and Trade, and made recommendations to the Administrator and to National Program Leaders (NPLs). The Panel considered research, teaching and extension activities of the CSREES/Land-Grant partnership and CSREES' leadership role, and developed an assessment on the basis of OMB's research and development criteria of relevance, quality and performance. Recommendations were provided to enhance portfolio management.

In 2005 an internal review of the portfolio was conducted by Economic and Community Systems and Competitive Programs to address the recommendations from the external review. This 2007 report continues the annual assessment of progress toward the overall research and development criteria. In the interest of brevity, only the specific Portfolio Review Panel recommendations and the CSREES responses for 2007 are provided in this annual report.

## **Section II. PREP Recommendations and CSREES Response**

Parts II, III, and IV of this report present the written results of the Portfolio Review Expert Panel evaluation and the CSREES response of corrective actions and future directions.

### **Background**

In 2004 a panel comprised of independent experts from the field of economics was convened to assess and score the current state of the CSREES portfolios in Agricultural Markets and Trade, International Economic Development, and Structure of the Agricultural Sector and Farm Management. The Portfolio Review Panel convened in Washington, DC July 20-22, 2004. The Panel was charged with evaluating the effectiveness of the three portfolios and making recommendations to CSREES Administrator Colien Hefferan, Deputy Administrators, Directors, and National Program Leaders (NPLs). The Panel sampled the broad range of research, teaching and extension activities by the CSREES/Land-Grant partnership and CSREES' leadership role, and developed an assessment on the basis of several criteria designed to meet OMB's overall research and development criteria of relevance, quality, and performance.

The Panel provided considerable feedback to CSREES. In response, the agency conducted an internal review in 2005, and prepared a report which responded to the Panel's comments. Since that time, the USDA has updated its Strategic Plan and distinguished International Agriculture with a separate Strategic Goal 1. Marketing activity has been moved to Goal 2.

This document provides the 2007 update to the previous year's internal review. Throughout this report, Portfolio Review Expert Panel comments and recommendations appear as bold italics and are identified as Panel Comment, while agency observations and response appear in regular script and are identified as CSREES Response. Note that responses to some of the Panel's comments required no update this year.

### **CSREES Responses to Panel Recommendations**

#### **II. PREP Report Summary and Specific Panel Recommendations**

The panel found that CSREES staff in Economic and Community Systems make a significant difference and add considerable value to the work of both the agency and the partnership. The evidence presented in this portfolio reflects hard work and indicates high levels of productivity. There is evidence of increasing emphasis on integration and that CSREES staff are becoming more creative and determined about planning and reporting as forms of accountability.

The panel recommends continued effort in partnerships with 1890 and 1994 institutions. Many opportunities exist for programming on critical issues, expanding urban track issues and the issue of rural-urban interface. National needs can often be met by working in international collaborations and contexts. The panel suggests that the partnership continue to expand interactions with stakeholders to include "emerging stakeholders." It is as important for planning processes to identify new stakeholders and partners as it is for the process to identify emerging issues and priorities. Further, players throughout the partnership should examine all federal reports across states within program areas in order to document the synergistic effect of integrated funding on levels of research, education and extension productivity.

There is a need to standardize and expand the documentation and evaluation metrics across program areas and increase the archiving and accessibility of research project data (in the CRIS and other systems). This is necessary in order to permit meta-analysis of the data. The panel recommends training on the logic model for agency employees and external and internal partners. Instead of just evaluating past performance, the panel also suggests developing strategic plans for each problem area and increasing

stakeholder contributions by including panel members and other stakeholders in the development and review of CSREES strategic plans at the portfolio level. Finally, the panel suggests increasing the documentation of outcomes. Formative evaluations to document program implementation successes and challenges should be performed.

### **III. CSREES Response to PREP Recommendations that Cross all Portfolios**

In response to directives from the Office of Management and Budget (OMB) of the President, CSREES implemented the Portfolio Review Expert Panel (PREP) process to systematically review its progress in achieving its mission. Since this process began in 2003, fourteen expert review panels have been convened and each has published a report offering recommendations and guidance. These external reviews occur on a rolling five-year basis. In the four off years an internal panel is assembled to examine how well CSREES is addressing the expert panel's recommendations. These internal reports are crafted to specifically address the issues raised for a particular portfolio; however, despite the fact that the expert reports were all written independent of one another on portfolios comprised of very different subject matter, several themes common to the set of review reports have emerged. This set of issues has repeatedly been identified by expert panels and requires an agency-wide response. The agency has taken a series of steps to effectively respond to those overarching issues.

#### **Issue 1: Getting Credit When Credit is Due**

For the most part panelists were complimentary when examples showing partnerships and leveraging of funds were used. However, panelists saw a strong need for CSREES to better assert itself and its name into the reporting process. Panelists believed that principal investigators who conduct the research, education and extension activities funded by CSREES often do not highlight the contributions made by CSREES. Multiple panel reports suggested CSREES better monitor reports of its funding and ensure that the agency is properly credited. Many panelists were unaware of the breadth of CSREES activities and believe their lack of knowledge is partly a result of CSREES not receiving credit in publications and other material made possible by CSREES funding.

#### **Issue 1: Agency Response:**

To address the issue of lack of credit being given to CSREES for funded projects, the Agency implemented several efforts likely to improve this situation in 2007.

First it developed a standard paragraph about CSREES' work and funding that project managers can easily insert into documents, papers and other material funded in part or entirely by CSREES.

Second, the agency is in the process of implementing the "One Solution" concept. One Solution will allow for the better integration, reporting and publication of CSREES material on the web. In addition, the new Plan of Work (POW), centered a logic model framework, became operational in June 2006. The logic model framework is discussed in more detail below. Because of the new POW requirements and the POW training conducted by the Office of Planning and Accountability (also described in more detail below), it will be simpler for state and local partners to line up the work they are doing with agency expenditures. This in turn will make it easier for project managers to cite CSREES contributions when appropriate.

#### **Issue 2: Partnership with Universities**

Panelists felt that the concept of partnership was not being adequately presented. Panelists saw a need for more detail to be made available. Questions revolving around long-term planning between the entities were common as were ones that asked how the CSREES mission and goals were being supported through its partnership with universities and vice versa.

**Issue 2: Agency Response:**

CSREES has taken several steps to strengthen its relationship with university partners. First, to the extent possible, implementing partners will be attending the CSREES strategic development exercise which is intended to help partners and CSREES fully align what is done at the local level. Second, CSREES has realigned the state assignments for its National Program Leaders (NPLs). Each state is now assigned to one specific NPL. By reducing the number of states on which any individual NPL is asked to concentrate and assigning and training NPLs for this duty, better communication between state and NPLs should occur. Finally, several trainings that focused on the POW were conducted by CSREES in geographic regions throughout the country. A major goal of this training was to better communicate CSREES goals to state leaders which will facilitate better planning between the universities and CSREES.

**Issue 3: National Program Leaders**

Without exception the portfolio review panels were complimentary of the work being done by NPLs. They believe NPLs have significant responsibility, are experts in the field and do a difficult job admirably. Understanding the specific job functions of NPLs was something that helped panelists in the review process. Panelists did however mention that often times there are gaps in the assignments given to NPLs. Those gaps leave holes in programmatic coverage.

**Issue 3: Agency Response:**

CSREES values the substantive expertise that NPLs bring to the agency and therefore requires all NPLs to be experts in their respective fields. Given the budget constraints often times faced by the agency, it has not always been able to fund needed positions and had to prioritize its hiring for open positions. In addition, because of the level of expertise CSREES requires of its NPLs, quick hires are not always possible. Often, CSREES is unable to meet the salary demands of those it wishes to hire. It is essential that position gaps not only be filled, but be filled with the most qualified candidate.

Operating under these constraints and given inevitable staff turnover, gaps will always remain. However, establishing and drawing together multi-disciplinary teams required to complete the portfolio reviews has allowed the agency to identify gaps in program knowledge and ensure that these needs are addressed in a timely fashion. To the extent that specific gaps are mentioned by the expert panels, the urgency to fill them is heightened.

**Issue 4: Integration**

Lack of integration has been highlighted throughout the panel reviews. While review panelists certainly noted in their reports where they observed instances of integration, almost without fail panel reports sought more documentation in this regard.

**Issue 4: Agency Response:**

Complex problems require creative and integrated approaches that cut across disciplines and knowledge areas. CSREES has recognized the need for these approaches and has undertaken steps to remedy this situation. CSREES has recently mandated that up to twenty percent of all NRI funds be put aside specifically for integrated projects. These projects cut across functions as well as disciplines and ensure that future work will be better integrated. Finally, integration is advanced through the portfolio process which requires cooperation across units and programmatic areas.

**Issue 5: Extension**

While most panels seemed satisfied at the level of discussion that focused on research, the same does not hold true for extension. There was a call for more detail and more outcome examples based upon extension activities. There was a consistent request for more detail regarding not just the activities undertaken by extension but documentation of specific results these activities achieved.

**Issue 5: Agency Response:**

Outcomes that come about as a result of extension are, by the very nature of the work, more difficult to document than the outcomes of a research project. CSREES has recently shuffled its strategy of assigning NPLs to serve as liaisons for states. In the past, one NPL might serve as a liaison to several states or a region comprised of states. Each state will be assigned specific NPLs, which will help to ensure that more attention is paid to extension activities.

In addition CSREES also has been in discussion with partners and they have pledged to do their best to address this issue. The new POW will make extension-based results and reporting a priority. Placing heavy emphasis on logic models by CSREES will have the effect of necessitating the inclusion of extension activities into the state's POWs. This, in turn, will require more reporting on extension activities and allow for improved documentation of extension impact.

**Issue 6: Program Evaluation**

Panelists were complimentary in that they saw the creation of the Office of Planning and Accountability and portfolio reviews as being the first steps towards more encompassing program evaluation work; however, they emphasized the need to see outcomes and often stated that the scores they gave were partially the result of their own personal experiences rather than specific program outcomes documented in the portfolios. In other words, they know first hand that CSREES is having an impact but would like to see more systematic and comprehensive documentation of this impact in the reports.

**Issue 6: Agency Response:**

The effective management of programs is at the heart of the work conducted at CSREES and program evaluation is an essential component of effective management. In 2003 the PREP process and subsequent internal reviews were implemented. Over the past three years fourteen portfolios have been reviewed by expert panel members and each year this process improves. NPLs are now familiar with the process and the staff of the Planning and Accountability unit has implemented a systematic process for pulling together the material required for these reports.

Simply managing the process more effectively is not sufficient for raising the level of program evaluations being done on CSREES funded projects to the highest standard. Good program evaluation is a process that requires constant attention by all stakeholders and the agency has focused on building the skill sets of stakeholders in the area of program evaluation. The Office of Planning and Accountability has conducted training in the area of evaluation for both NPLs and for staff working at Land-Grant universities. This training is available electronically and the Office of Planning and Accountability will be working with NPLs to deliver training to those in the field.

The Office of Planning and Accountability is working more closely with individual programs to ensure successful evaluations are developed, implemented and the data analyzed. Senior leadership at CSREES has begun to embrace program evaluation and over the coming years CSREES expects to see state leaders and project directors more effectively report on the outcomes of their programs as they begin to implement more rigorous program evaluation. The new POW system ensures data needed for good program evaluation will be available in the future.

**Issue 7: Logic Models**

Panelists were consistently impressed with the logic models and the range of their potential applications. They expressed the desire to see the logic model process used by all projects funded by CSREES and hoped not only would NPLs continue to use them in their work but, also, that those conducting the research and implementing extension activities would begin to incorporate them into their work plans.

**Issue 7: Agency Response:**

Logic models have become a staple of the work being done at CSREES, and the agency has been proactive in promoting the use of logic models to its state partners. Two recent initiatives highlight this. First, in 2005, the POW reporting system into which states submit descriptions of their accomplishments was completely revamped. The new reporting system now closely matches the logic models being used in portfolio reports. Beginning in fiscal year 2007, states will be required to enter all of the following components of a standard logic model.

These components include describing the following:

- Program Situation
- Program Assumption
- Program Long Term Goals
- Program Inputs which include both monetary and staffing
- Program Output which include such things as patents
- Short Term Outcome Goals
- Medium Term Outcome Goals
- Long Term Outcome Goals
- External Factors
- Target Audience

The system is now operational and states were required to begin using it by June of 2006. By requiring the inclusion of the data components listed above states are in essence, creating a logic model that CSREES believes will help improve both program management and outcome reporting. Please note a sample logic model has been included in Appendix A.

The second recent initiative by CSREES regarding logic models concerns a set of training sessions conducted by Planning and Accountability staff. In October and November of 2005 four separate training sessions were held in Monterrey, California, Lincoln, Nebraska, Washington D.C. and Charleston, South Carolina. More than 200 people representing land-grant universities attended these sessions where they were given training in logic model creation, program planning, and evaluation. In addition, two training sessions were provided to NPLs in December 2005 and January 2006 to further familiarize them with the logic model process. Ultimately it is hoped these representatives will pass on to others in the Land-Grant system what they learned about logic models thus creating a network of individuals utilizing the same general approach to strategic planning. These materials also have been made available to the public on the CSREES website.

## **CSREES Responses to Panel Recommendations**

### **A. Review Panel General Comments and Recommendations, and CSREES Responses**

#### **Issue 1: Economics Leadership**

The Panel urges the Administrator of CSREES to address the deficit of leadership in the area of economics.

#### **Issue 1: Agency Response**

Since the external review, the CSREES Administrator has hired a permanent Deputy Administrator, transferred one economics National Program Leader to ECS, and actively supports the broader integration of economics<sup>1</sup> throughout the agency.

The Economic and Community Systems Deputy Administrator, a forest scientist with significant experience in administration, is liaison to the Experiment Station Committee on Organization and Policy's Social Science Sub-Committee and is CSREES representative to the Council on Food and Resource Economics. An economist is liaison to the National Association of Agricultural Economics Administrators, and another is president of the USDA Economists Group and serves on several American Agricultural Economics Association committees and sections.

Annual CSREES economics funding is nearly \$49 million, the largest single funding source to the food, agricultural and resource economics profession, about 36 percent of the total. The Plan of Work system does not currently provide a comparable figure for extension, but the economics extension portfolio is substantial. The agency economics portfolio (including policy but excluding consumer economics and community resource development) includes approx. 1,573 active research and education projects<sup>2</sup>. The total, including recently terminated, revised, extended, new, and pending, is 2,815 projects, largely administered by three NPLS.

Coverage in production economics, farm management, business management, finance, agricultural policy, trade policy, economic development, finance and taxation is diminished due to attrition over the past 10 years. Domestic non-agricultural policy analysis, international development, and community resource planning and development are covered by non-economists; a family economist NPL covers consumer economics.

The capacity in ECS requires that two economics NPLs spend a major amount of time on basic activities like Hatch and special project administration, institutional reviews, and multistate committees. They serve as NPLs in market economics, marketing and distribution practices, natural resource economics, environmental economics, and economic theory and methods. They also must service 20 Multi-state Research Committees (5 more are vacated by a recently retired economist NPL). They led 25 Agricultural Economics Department Comprehensive Reviews between 2003 and 2007. They administer special research and administrative grants, and serve as CSREES liaisons to a states with a total of 21 land grant institutions (four 1862, two 1890, eleven 1994). They have only limited time for developing more strategic and innovative linkages with other units dealing with emerging topics and opportunities.

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<sup>1</sup> Throughout this report the terms economics and agricultural economics are used interchangeably. Regarding CSREES and its partner constituencies, the economics profession includes agricultural, food, resource, forestry and other applied economics. The focus of the agricultural economics profession is primarily, but not exclusively, applied microeconomics.

<sup>2</sup> These numbers are approximate due to the lag time between project selection, approval, change in status (e.g., terminated, revised, extended, new, pending) and reporting to the CRIS system.

An agricultural economist provides the overall social science leadership for CSREES competitive programs, including the National Research Initiative (Markets and Trade, Agricultural Prosperity for Small and Medium-Sized Farms, and Rural Development programs), and Small Business Innovation Research (Markets and Trade, and Rural Development) program.

### **Issue 2: Pass Through Funding**

“Pass-through” funds demand and receive scarce CSREES leadership resources that might need to be used in other ways.

### **Issue 2: Agency Response**

There are no “pass through” funds in the marketing and trade and policy portfolio.

Congressionally mandated special research and special administrative grants are subject to the submission of a proposal and three levels of internal review within the agency prior to the release of funding. These projects also require annual progress and termination reports and are usually scrutinized by Congress during budget preparation.

### **Issue 3: Policy Work**

The Panel is concerned that all policy work (policy analysis, public policy education, etc.) is reported only in the Problem Areas<sup>3</sup> (PAs) in Portfolio 1.1 (PA 610) and Portfolio 1.2 (PA 611) (Strategic Goal 1). Local, state, national, and international laws and regulations have a significant impact on the portfolios that support increasing economic opportunities and improving quality of life in rural America (Strategic Goal 2), enhancing protection and safety of the Nation’s food supply (Strategic Goal 3), improving the Nation’s nutrition and health (Strategic Goal 4), protecting and enhancing the Nation’s natural resource base and environment (Strategic Goal 5). By gathering all policy work into two portfolios in Strategic Goal 1, too little attention is given to the impact of policy alternatives in all CSREES program areas. The Panel recommends the creation of additional PAs to capture these critical applications of policy work.

### **Issue 3: Agency Response**

The 2007 CSREES funded policy portfolio includes approximately 411 active research and education projects. The total, including recently terminated, revised, extended, new, and pending, is approximately 791 projects. Policy related projects under these codes focus on diverse topics ranging including agriculture, environment, trade, youth, fisheries, land use, intellectual policy and others. The plan of work system currently does not support developing a similar figure for extension economics activities.

Policy analysis and alternatives is a feature of the Rural Development program in the National Research Initiative, now offered on a biennial basis. Rural Development addresses previous Strategic Goal 2, increased economic opportunities and improved quality of life in rural America. Incorporation of human dimensions in the Human Nutrition and Obesity program provides potential for policy analysis to address previous Strategic Goal 4, improving the Nation’s nutrition and health.

Policy issues are also covered elsewhere in CSREES including the Natural Resources and Environment unit (natural resources, land use) and the Families, 4-H and Nutrition unit (nutrition, public health, etc.).

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<sup>3</sup> Now referred to as Knowledge Areas (KAs) to better capture the scope of CSREES supported research, teaching and extension.

Agricultural policy and trade policy no longer have active CSREES leadership support due to continued attrition, but work continues on these important topics through academic departments throughout the nation, much of which has direct funding support from the agency.

**B. Agricultural Markets & Trade Portfolio Criteria and Scores<sup>4</sup>; Review Panel Comments and Recommendations; and CSREES Responses and Corrective Action:**

**Relevance**

**Scope [3]**

**Issue 4: Undergraduate and Graduate Degrees**

The wide variety of projects exceeds expectations, but the declining number of undergraduate and graduate degrees awarded in agricultural economics, and declining number of degrees awarded to domestic Ph.D. students in agricultural economics may inhibit future research capacity.

**Issue 4: Agency Response**

CSREES administers the competitive Food and Agricultural Sciences National Needs Graduate and Postgraduate Fellowship Grants Program for graduate degree programs and postgraduate training to develop intellectual capital to ensure the preeminence of U.S. food and agricultural systems. Fellowships support students with a stipend and a cost-of-education allowance to the institution. In FY 2005 CSREES received 73 applications requesting \$15.2 million, and made 39 awards totaling \$5.672 million to support 22 Master’s and 75 Ph.D. fellows.

National Needs Graduate and Postgraduate Fellowship Awards Economics and Related Social Sciences, 2006	
Title	Institution
A Proposal to Meet the Need for Scientists Trained in Forest Products Marketing & Management	NC State
Sustainable Rural Communities National Needs Fellowships	Univ. MO
Meeting National Needs for Scholars Trained in the Economics & Management of Water Resources & the Environment	KS State
Training in Sustainable Sciences Through an Interdisciplinary Graduate Program in Rural Sociology	CO State
Linking Agriculture, Food & Environment: An Interdisciplinary Approach to Graduate Education	Tufts Univ.
Multicultural Fellows: Developing the Next Generation of Conservation Leaders at the University of Vermont	Univ. VT
Balancing Agricultural Economics for a Sustainable Agriculture National Needs Fellowship	Univ. MO

Source: CSREES Science and Education Resources and Development

<sup>4</sup> Numbers in [brackets] indicate Review Panel score for each criterion: 1 = does not meet expectations, 2 = meets expectations, 3 = exceeds expectations.

Degrees Awarded in Agricultural Business and Management Areas* at Reporting Institutions, 2001 - 2006					
Graduation Year	Associate	Baccalaureate	Masters	Doctorate	Total
2001-2002	37	2699	334	108	3178
2002-2003	29	3066	450	101	3646
2003-2004	85	2652	374	81	3192
2004-2005	190	2272	366	79	2907
2005-2006	60	2227	335	64	2686

Source: FAEIS

\* Agricultural Business & Management, Agribusiness/Agricultural Business Operations, Agricultural Economics, Farm & Ranch Management, Agricultural/Farm Supplies Retailing & Wholesaling, Agricultural Business Technology, and Other Agricultural Business & Management.

## Focus [1]

### Issue 5: Critical Issues

The portfolio lacks needed focus on critical issues. Too much attention is given to evaluating existing policy relative to the development of new policies and analysis of policy alternatives. Policy analysis should get relatively more attention in the Markets and Trade section of the NRI; policy analysis should get relatively more attention in other sections of all competitive grant programs (NRI & Sec. 406).

### Issue 5: Agency Response

Policy is one component of this portfolio, and the Markets and Trade NRI program does, in fact, actively support this area of work. Currently there are 42 funded NRI grants that focus on Knowledge Areas 610 (Domestic Policy) and 611 (Foreign Policy). System wide (from all funding sources) there are 418 active policy projects with focus on these two KAs.

Analysis and evaluation of existing policies is approached from a comparative perspective and results in new policy recommendations and alternatives. Policy options and practical solutions are central requirements for work done in Markets and Trade, and Rural Development in the National Research Initiative. Pending improvements in the reporting system (OneSolution and CRIS) will better distinguish between evaluation of existing policy and identification of policy options and alternatives.

CSREES funding for policy related projects (KAs 610, Domestic Policy Analysis and 611, Foreign Policy and Programs is primarily funded through Hatch, Special Research Grants (congressional), and Other monies. National Research Initiative funded three policy research projects in 2005: “Public Investment Policy and Industry Incentives in Agricultural and Life Science Research”; “Impact of Antidumping Regulations on Food and Fiber Trade”; “North American Trade Suspension Agreements and Winter Tomato Supply Response.”

Agricultural policy educational activities have accelerated as farm legislation is currently debated. Critical policy topics include maintaining compatibility with the agreements and mandates of the World Trade Organization, decoupling production related subsidies (and producer decision making to optimize benefits and minimize risk), and revenue protection. CSREES maintains a very active list server for policy specialists around the nation.

More broadly, this portfolio has a very extensive focus on critical marketing topics and issues (See Exhibit 2, below), with over \$8.5 million direct CSREES research and education investment the year of this internal review. This work is supportive of all scales of agriculture, with major focus on distribution

systems and value chains important to small and medium sized producers, specialty crops, and alternative and value added enterprises (including biofuels and environmental goods and services). Agency-sponsored marketing research is highly productive and very visible in the research literature, with a high proportion of published articles attributed to CSREES funding. Our Agricultural Market and Trade web site lists over 40 marketing resources (interactive web sites at land grant and AASCARR institutions) that reach hundreds of thousands of producers and marketers annually.

## **Identification of Issues [2]**

### **Issue 6: Emerging Issues**

Identification of contemporary and emerging issues is good. More could be done to provide incentives for research on emerging issues, such as creating a special category for such issues in the NRI.

### **Issue 6: Agency Response**

The agency has robust and specifically targeted Requests for Applications for competitive programs, especially for the National Research Initiative and the Small Business Innovation Research programs.

CSREES explicitly solicits stakeholder feedback and information in every Request For Applications: STAKEHOLDER INPUT: The Cooperative State Research, Education, and Extension Service (CSREES) is requesting comments regarding this request for applications (RFA) from any interested party. These comments will be considered in the development of the next RFA for the program. Such comments will be used to meet the requirements of section 103(c) (2) of the Agricultural Research, Extension, and Education Reform Act of 1998 (7 U.S.C. 7613(c) (2)). This section requires the Secretary to solicit and consider input on a current RFA from persons who conduct or use agricultural research, education and extension for use in formulating future RFAs for competitive programs. Comments should be submitted as provided in the DATES portion of this announcement.

The agency, primarily through Economic and Community Systems NPLs, is represented on Multistate Research Committees related to economics, trade and policy related topics. ECS NPLs serve 40 Multistate Research Committees, of which 19 are directly related to marketing, trade and policy topics. It is impossible to meet with these on an annual basis, and the unit does, in some cases, depend on Program Specialists to serve as agency representatives to some committees.

## **Integration of Functions [3]**

### **Issue 7: Integration**

This portfolio has achieved very good integration of research, teaching, and extension. Principal investigators should be given incentives to take more responsibility for extending research results.

### **Issue 7: Agency Response**

U.S. food, agricultural and resource economics departments are typically well integrated, with approximately two thirds of land grant university faculty holding joint appointments in research/teaching, research/extension or, increasingly, teaching/extension. The nature of applied economics work facilitates functional integration not only within the discipline, but also with the other food, agricultural and natural resource and environmental sciences, and the CSREES Social Science Working Group works toward that end within the agency.

More attention to competitive program integration accountability is included in Requests for Applications. Increased focus is placed on defining integrated proposals (per recommendations from the Developing and Implementing Integrated Research, Education, and Extension Projects: Lessons from our

Partners Workshop, August 2005), also in Hatch and Congressionally mandates special project review and approval, and in guidelines for state Plans of Work.

The USDA Small Business Innovative Research (SBIR) Program provides opportunities to integrate research and extension. SBIR is a highly competitive grant program for U.S. owned and independently operated for-profit businesses of 500 employees or less. USDA is one of twelve federal agencies required to reserve 2.5 per cent of research and development dollars for small businesses. NRI and other CSREES grant recipients are encouraged to transfer technology developed from their grants to real world applications through the SBIR. University faculty can serve as Project Directors (subject to certain conditions) or consultants on SBIR grants.

In terms of incentives for principal investigators to extend research results, the Markets and Trade program identifies “development of a creative dissemination plan” as an evaluation criterion for applications, and prospective applicants are encouraged to include modest estimates for creative dissemination of research results in their project budgets. This requirement is facilitated by the high proportion of social science applicants to the Markets and Trade program who hold joint appointments in research, teaching or extension.

### **Multidisciplinary Balance [3]**

#### **Issue 8: Multiple Disciplines**

This portfolio also has a very good mix of work with other disciplines. Further progress would occur if economic analyses were invited in other competitive program areas outside of Markets and Trade in the National Research Initiative.

#### **Issue 8: Agency Response**

Responding to requests from the social science community to make the opportunities for social scientists more visible in the RFA, there are several new NRI opportunities for social scientists. Primarily social science programs offered in FY 2008 are:

- (1) NRI 66.0 – Agricultural Prosperity for Small and Medium Sized Farms (expected funding maintained at \$5 million/year); and
- (2) NRI 62.0 – Rural Development (expected funding increased to \$5.1 million, program offered every other year). Several others were also funded.

#### **Social Science Research and Integrated Grant Opportunities**

There are an increasing number of opportunities in the NRI for those interested in funding for social science research and integrated projects. These include the three programs with opportunities for many different social science disciplines (Economics, Sociology, Geography, Human Sciences, Agricultural Education, etc.:

- Agricultural Prosperity for Small and Medium-Sized Farms (Program Code 66.0);
- Agribusiness Markets and Trade (Program Code 61.0);
- Rural Development (Program Code 62.0).

#### **The NRI also has opportunities for agricultural economists, rural sociologists, and other social and behavioral scientists in topics related to:**

- Markets for ecosystems services (Program Code 23.1);
- Water resources (Program Code 26.0);
- Economic efficiency of biobased products (Program Code 71.2);
- Social, behavioral and economic factors that influence the adoption of practices to reduce agricultural emissions to the atmosphere (Program Code 28.0);

- Economic costs of food safety regulations and its impacts on trade (Program Code 32.0);
- Social and economic factors that influence obesity (Program Code 31.5);
- Economic of invasive species management (Program Code 51.9); and
- Perception and acceptance of nanotechnology (Program Code 75.0)

To maintain program continuity, the FY 2008 NRI RFA includes a brief description of the NRI 61.0 – Agribusiness Markets and Trade program even though the program will only be offered in FY 2009.

CSREES Competitive Programs and the ECS Deputy have made exceptional efforts in working with agricultural economics leaders to identify priorities for Markets and Trade Funding program and integrate economics deeper into NRI portfolio—this involved many meetings, presentations, and discussions. There have been major advances in availability of funding to support economics work as a result. Recently the Competitive Programs NPL used cutting edge communication vehicles to engage agricultural economists in getting input into development of the RFP for the Markets and Trade Program.

Based on stakeholder input, the Rural Development program is now an integrated program and the long term goals are: (a) enhancing economic vitality of rural communities and in turn, reducing rural poverty; (b) protecting and enhancing economic growth and the natural resource base of rural areas by developing strategies that reduce the competition between economic growth and the environment; and (c) building a diversified workforce to meet the needs of the present and for the future. Building a diversified workforce includes topics such as youth development, migration, migrant labor, etc.

ECS NPLs have been engaged to expand disciplinary focus to include economics in contemporary issues, although this effort has been constrained by the size of the economics staff. These include ecosystem services, working lands, bioenergy, and invasive species. Several agency units have sought economics and other social science input through the use of shared faculty and IPAs, encouraging additional multidisciplinary activity.

## **Quality**

### **Overall Quality of Research [1]**

#### **Issue 9: Quality Control**

CSREES needs to work closely with land-grant universities to assure the highest quality research and education, communicate its strength within the scientific community, and revitalize the land-grant mission of high quality service to the Nation.

#### **Issue 9: Agency Response**

NPLs are heavily engaged with the profession to encourage high standards of relevance, quality and performance. Active measures include guidance in RFAs for competitive programs, review and suggestions for Plans of Work, merit and peer review of submitted proposals for competitive programs and congressional earmarks, and NPL review and approval of Hatch and other formula funded proposals. Less formal CSREES guidance is provided through communication with multistate research committees, project director's conferences, and interaction with professional association committees, C-FARE, National Association of Agricultural Economics Administrators, and the USDA Economists Group, and through routine communication with department heads, policy specialists, marketing economists, and extension economists.

NPLs serve as liaisons to each state to facilitate communication and responsiveness of the agency to Land-Grant partners. We have engaged in a structured, ongoing, system-wide discussion and debate about

the future of the Land-Grant system and how CSREES can facilitate and respond effectively, and we are part of the efforts of NASULGC and CARET to revitalize the land grant mission and services.

**Addressing Critical Emerging Issues [2]**

**Issue 10: NRI**

National Research Initiative (NRI) should set aside a portion of its funds (perhaps 10 percent) to address critical emerging issues, while allowing NRI to continue funding its ongoing lines of research. Proposals submitted for critical emerging issues could be interdisciplinary and multifunctional (research-teaching-extension).

**Issue 10: Agency Response**

Given the limited size of the NRI funding portfolio, it is not feasible to develop a larger number of targeted programs beyond those currently offered.

Congressional action authorized the NRI to commit a portion of its budget to integrated activities that weave interdisciplinary and multifunctional research, education and extension efforts into a unified response to critical emerging issues. Many of the critical issues identified earlier by IFAFS have been incorporated into existing NRI program descriptions, and ongoing RFA planning continues to consider critical emerging issues for incorporation into our competitive program solicitations. NRI created Coordinated Agricultural Projects (CAPs) to address agricultural emergencies.

**Significance of Outputs [2]**

**Issue 11: Public Goods**

Stakeholder needs are being met; however, relatively more attention should be given to projects that emphasize the “public good” rather than “private good.”

**Issue 11: Agency Response**

The public good is addressed in common RFAs for competitive grants, and guidance for extension and research Plans of Work. Guidance in the NRI-RFA for social science proposals encourages investigators to examine long term impacts and measure aggregate societal benefits that serve the public good.

By nature marketing and policy work results in public benefit. In a democratic market based economy, individuals, families and firms make decisions and take actions that, in the aggregate, have macro outcomes and impacts. This is consistent with the integrated tripartite research-based model integrating knowledge generation, dispersion, and choices:

Short Term	Intermediate Term	Long Term
change in awareness, need, opportunity, law, regulation and resource use	= change in individual behavior, management, technology adoption,	aggregate change results in macro public outcomes and impacts

**Stakeholder Assessment [3]**

**Issue 12: Stakeholder Influence**

Stakeholder input is at a high level, but there are times when some stakeholders have more influence than they should. CSREES and Land-Grant Universities need to do a better job of communicating stakeholder needs to individual faculty.

### **Issue 12: Agency Response**

There is no evidence of disproportionate stakeholder influence. Agency input is broadly solicited from the Council for Agricultural Science and Technology, the Council for Agricultural Research, Extension, and Teaching, the National Agricultural Research, Extension, Education, and Economics Advisory Board, the National Association of State Universities and Land-Grant Colleges and many other stakeholders.

CSREES NPLs actively participate in and contribute to the American Agricultural Economics Association, other international and regional economics associations, the Rural Sociological Society, the Association for Agricultural Education (and Communication), the Agriculture, Food, and Human Values Society, where they present CSREES displays, conduct grant and funding opportunities workshops, communicate science trajectories and solicit input for program design, and convey stakeholder needs to science faculty from land-grants institutions and other research, education, and outreach/extension providers.

ECS and F4-HN NPLs serve as liaisons to the ESCOP Social Science Subcommittee whose membership represents department chairs and members of the five traditional social science programs in the Colleges of Agriculture, agricultural economics, rural sociology, agricultural education, agricultural communication, and family ecology/family and consumer sciences.

### **Alignment with Current Science [2]**

#### **Issue 13: Scientific Alignment**

The alignment is generally good. Competitive grant projects (e.g., NRI) are more reflective of current science than are core-funded projects. The Panel is concerned that social scientists are much more critical than other scientists when judging competitive grant proposals; hence, a smaller proportion of proposals is deemed to be fundable. We are concerned that the phenomenon not be used as a signal to decrease funding allocated to this area at a time when socioeconomic issues increasingly drive the U.S. policy agenda reflecting citizens' concerns and needs.

#### **Issue 13: Agency Response**

Formula funded research covers a broader, more comprehensive portfolio than the NRI and other competitive programs. Review and approval of Hatch and Evans-Allen research proposals received suggests that these projects strongly reflect the current of state of science, and that appropriate theoretical and contemporary methodologies, including experimental markets, prediction markets and contingent valuation and conjoint analysis for neoteric products, are employed in the area of markets and trade. This is clearly supported by the consistently high number of top tier journal (including American Journal of Agricultural Economics) and regional journal articles resulting from Hatch funded research.

Currency of science in the NRI programs related to this portfolio is maintained through input from more than two dozen stakeholder groups who help identify long-standing critical and emerging issues in international economic development, trade policy, and domestic agricultural and rural policy, and as a consequence, the portfolio has had a broad base traditionally. Applicants from more than 20 disciplines send research proposals to the Markets and Trade program of the National Research Initiative

Awards competition for Agricultural Prosperity for Small and Medium Sized Farms program is conducted annually. Funding rates for this program increased from 20 percent in 2005 to 38 percent in 2006. In response to stakeholder concerns, outreach and changes to the application submission dates were made.

CSREES now offers the Markets and Trade NRI program in alternate years (with no change in the funding levels) to provide efficient use of time and human capital for CSREES and the science community. The program was not competed in 2006.

## **Appropriate Methodology [2]**

### **Issue 14: Methodology**

Current and appropriate methodologies are used in research, teaching, and extension.

### **Issue14: Agency Response**

The need for appropriate methods is specified in all CSREES RFAs, and is a selection criterion of peer review panels ranking proposals and for NPL review of formula funds proposals, Plans of Work, and special and administrative grants. Future RFAs for Integrated Programs (teaching, research, and extension) specify the need for current appropriate teaching, research and extension methods, as per recommendations from the Developing and Implementing Integrated Research, Education, and Extension Projects: Lessons from our Partners Workshop.

Due to the tripartite mission, a variety of methodologies are required for basic and applied research, undergraduate and graduate teaching, and for extension outreach. NPLs take care to elicit proper methodologies and peer and merit review includes attention to proposed methods. Economics as a discipline is unique in the inclusion of KA 609, Economic Theory and Methods<sup>5</sup> as a discrete Knowledge Area, and there is a multistate research committee (NC-1034, Impact Analysis & Decision Strategies for Agricultural Research) that is dedicated explicitly to focus on the scientific assessment and evaluation of agricultural research.

## **Performance**

### **Portfolio Productivity [3]**

#### **Issue 15: Visibility**

The portfolio has visibility despite few leadership resources devoted to it.

#### **Issue 15: Agency Response**

To increase attribution of Agricultural Markets and Trade Portfolio outputs, Agricultural Economics and related department heads, principal investigators, and journal editors have all been reminded on numerous occasions of the critical importance of including appropriate attribution statements for all CSREES-funded outputs. Major journals now include instructions to submitting authors to specifically include

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<sup>5</sup> KA 609 Economic Theory and Methods

This work includes the development of economic theory and methodology to improve the knowledge base in a variety of topics. Areas of work include but are not limited to:

- Property rights, including intellectual property rights
- Public choice
- Labor economics
- Welfare economics
- Location and decision theory
- Trade adjustment alternatives
- Econometrics and simulation
- Mathematics and statistics for economic research
- Economic history

funding attribution. In a recent issue of the American Journal of Agricultural Economics one third of published articles made reference to CSREES funding. Fully 60 percent of those citing funding sources included CSREES funding. Several major journals have subsequently updated their submission criteria to include funding attribution.

The ESCOP Social Science Subcommittee and C-FARE have improved the visibility of all social science projects. Likewise, CSREES works closely with the Markets, Trade, and Economics Division of the Economic Research Service and with other agencies to maintain high visibility for this portfolio and to effectively distribute outputs.

## **Portfolio Completeness and Timeliness [2]**

### **Issue 16: Timeliness**

Most projects are completed on time. However, Hatch research projects should be monitored more closely for achieving goals by expected completion dates. Furthermore, some Hatch projects may be allowed to continue for too many years.

### **Issue 16: Agency Response**

One year no-cost extensions are a common phenomenon in all types of publicly-funded research due to the uncertain nature of the flow of outputs and research results. Terms and Conditions state that such time extensions may be routinely granted at the discretion and request of the grant recipient institution without prior approval. No additional extension requests have been received, indicating that there are no problems with timely completion of funded work.

NPLs increased monitoring of economics (600 series Knowledge Area) Hatch and competitively funded reported in CRIS and improved post-award project management. Several low performing projects have been terminated as a result of NPL discussions with PIs and department heads; several others were revised and updated after funding approval was deferred. Faculty, department heads and journal editors are on notice that high levels of productivity and attribution are expected commitments to the receipt of federal funding.

## **CSREES Guidance [1]**

### **Issue 17: Human Capital**

There is an immediate need for leadership in the area of economics (Economic and Community Systems Deputy Administrator and economics NPLs). It is incomprehensible that economics programs have been allowed to languish with declining leadership of economists over the last five years. There is also a need to strengthen overall strategic leadership in economics programs across the portfolio. Economists could make significant contributions to addressing critical agricultural and societal issues and should be fully engaged with other NPLs.

### **Issue 17: Agency Response**

CSREES economics programs are in a maintenance mode. Previous organizational structure which provided for economists to represent areas of emphasis has been significantly diminished. The three remaining economist National Program Leaders, with about 2.5 FTE dedicated to economics, are called upon to cover many areas to support the workload, leaving limited time for leadership in all specific and emerging topic areas.

They work with other units, especially Plant and Animal Systems, Natural Resources and Environment, Families, 4-H and Nutrition. The advisory capacity of the Social Science Working Group strengthens internal leadership, coordination and collaboration in the area of economics. Economics and Community

Systems economics NPLs spend a considerable amount of time on basic activities like Hatch and special project administration, institutional reviews, and multistate committees, leaving limited time for developing more strategic and innovative linkages with other units dealing with emerging topics and opportunities.

CSREES Economist Human Resources, Late 1990s to 2007		
NPL Focus	Change	Outcome
Farm Management	Retired 2002	Replaced by Farm Financial Management
Farm Financial Management	ECS 2002 Retired 2007	Replaced by Ag Lawyer - Risk Management Education, Trade Adjustment Assistance, & Farm Financial Management
Domestic Marketing	ECS 1995 To HEP 1998 To ECS 2005	ECS position vacant 1999 - 2004
Global Marketing	ECS 1995 Retired 2002	Not replaced
Natural Resource Economics	ECS 1996	
Social Science, Competitive Programs	To CP 2003	
International Trade & Policy	ECS 1997 Resigned 1999	Not replaced
Agricultural Policy	ECS 1995 Retired 1999	Replaced by Family Economist - Urban Programs; Public Policy; Rural & Community Development
Economic Development	ECS 1995 Retired 1999	Not replaced

CSREES NPLs trained in economics: 8 in 1997; 7 in 1999; 6 in 2001; 4 in 2004; 3 in 2007.

While the quality, relevance and performance of the portfolio remains high, CSREES economics leadership sustainability remains at risk. Due to realignment and attrition, the agency has diminished coverage in farm management, production economics, finance, tax, agricultural policy, and developmental economics, although work in these areas continues at land grant and AASCARR institutions. This effect is compounded as the agricultural economics profession is going through a significant re-evaluation.

Nevertheless, CSREES economist NPLs remain involved throughout the profession. To the extent possible with limited personnel, CSREES maintains links with the Economic Research Service, Foreign Agricultural Service, Natural Resources Conservation Service, and other USDA agencies. They serve a number of functions with the American Association of Agricultural Economics and regional and international associations, and they interact routinely with the Council on Food and Resource Economics, Farm Foundation, National Association of Agricultural Economics Administrators, and the USDA Economists Group.

The ECS and CP leadership has been engaged with economics leadership. Deputy Directors in ECS and CP have participated in and presented at C-FARE meetings, agricultural economics department head meetings, and ESCOP Social Science Committee meetings. The ECS Deputy administrator has given two papers at the AAEA; ECS sponsored one of best attended sessions at the 2007 American Agricultural

Economics Association meeting<sup>6</sup>, and also gave a presentation at recent international land use conference. Economist NPLs have given papers, presided over and participated in symposia at AAEEA meetings. National Program Leaders in CP, NRE, and ECS have been very active with agricultural economics department heads and in attending meetings, giving presentations, and conducting discussion sessions.

## **Portfolio Accountability [1]**

### **Issue 18: Reporting**

There is a critical need to be able to report outputs and impacts according to criteria established by CSREES for meeting OMB requirements, and a need to effectively communicate the impact of CSREES programs to all stakeholders via scholarly and stakeholder-oriented communication channels. Teaching and extension activities need to be included. An improved post-award evaluation process needs to be implemented.

### **Issue 18: Agency Response**

Significant progress has been made improving the reporting of outputs, outcomes and impacts. Attribution of funding is a priority. Updates to the CRIS reporting system include more inclusive reporting of scholarly outputs beyond serial publications (journal articles) and books; this substantially increases the opportunity to report teaching and extension outputs. Improved review and oversight of CRIS and Plan of Work reports has been accomplished. This has resulted in the refocus of project efforts and in some cases the termination of products with limited productivity.

CSREES is refining post-award management processes and procedures, along with development of Customer Service Standards and new NPL Guidelines for Reviewing Hatch, McIntire-Stennis, Evans-Allen, and Animal Health and Disease Proposals.

Project Directors meetings are a required component of competitive funding, and PIs are expected to include sufficient funding in their proposed budgets, and to attend such meetings as scheduled throughout the effective life of their funded projects.

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<sup>6</sup> CSREES economist NPLs usually sponsor and participate in several AARA symposia each year.

#### IV. Reference to updates of the self-review paper

Exhibit 1

#### Funding for Economics Sciences

For clarity and due to the strong interaction between economics topics and issues, total funding for the 11 Economics Knowledge Areas is provided over a multiple year period. Depending on the funding authority, research and education projects can have an active lifespan of 3 to 5 years; in some circumstances projects may receive a one year no-cost extension, and in some very rare circumstances other temporal extensions may be granted.

Economics Knowledge Areas, CSREES Administrated Obligations, Dollars, Fiscal Years 1999 – 2005, as Reported to CRIS								
KA	1998	1999	2000	2001	2002	2003	2004	2005
601 Prod. Econ. & Farm Mgt.	\$3,215,314	\$3,152,987	\$3,510,720	\$3,913,570	\$4,713,463	\$5,818,162	\$6,067,168	\$7,244,566
602 Bus. Mgt., Fin., Tax, Estate Plan.	\$1,130,479	\$1,104,884	\$1,347,678	\$1,807,031	\$1,840,144	\$1,671,422	\$2,128,733	\$2,251,958
603 Market Economics	\$3,431,858	\$3,727,662	\$3,867,459	\$4,094,786	\$3,668,760	\$3,999,276	\$3,706,772	\$3,389,430
604 Mkt'g. Distribution	\$2,768,492	\$3,470,709	\$3,149,435	\$4,497,343	\$6,451,463	\$6,328,092	\$6,683,417	\$5,286,029
605 Nat. Res., Envir. Econ.	\$3,586,627	\$3,760,973	\$4,089,140	\$4,246,860	\$4,076,497	\$5,069,336	\$5,338,442	\$5,923,916
606 Int'l. Trade, Dev.	\$3,061,349	\$2,450,714	\$2,746,383	\$3,156,064	\$3,579,438	\$2,505,523	\$1,901,618	\$1,895,550
607 Consum. Economics	\$719,075	\$946,258	\$969,848	\$1,375,410	\$1,632,069	\$1,174,830	\$1,453,232	\$1,498,326
608 Comm. Res. Dev. Economics	\$2,067,812	\$2,874,998	\$2,896,432	\$2,329,243	\$2,686,749	\$2,774,806	\$3,446,675	\$3,549,341
609 Econ. Theory	\$242,480	\$214,095	\$294,984	\$495,562	\$502,027	\$750,989	\$656,151	\$656,854
610 Domestic Policy	\$4,237,059	\$3,836,168	\$3,613,453	\$4,397,745	\$3,548,979	\$4,861,280	\$6,498,100	\$5,659,005
611 Foreign Policy	\$722,081	\$673,574	\$613,092	\$925,452	\$849,289	\$522,174	\$785,577	\$665,396

Economics Knowledge Areas, All Expenditures, Dollars, FISCAL YEARS 1999 – 2005, as Reported to CRIS								
KA	1998	1999	2000	2001	2002	2003	2004	2005
601 Prod. Econ., Farm Mgt.	\$17,751,179	\$18,608,255	\$16,563,237	\$18,610,770	\$27,032,255	\$27,194,589	\$33,011,797	\$35,311,610
602 Bus. Mgt., Fin., Tax, Estate Plan.	\$8,291,815	\$,754,598	\$7,365,312	\$7,721,011	\$11,584,053	\$12,169,773	\$12,753,873	\$14,247,586
603 Market Economics	\$28,036,562	\$29,541,126	\$21,421,231	\$22,190,596	\$31,690,594	\$31,306,133	\$25,958,857	\$25,714,122
604 Mkt'g., Distribution	\$20,899,667	\$21,426,152	\$20,175,425	\$20,881,742	\$24,229,518	\$23,925,415	\$24,041,050	\$24,270,681
605 Nat. Res., Envir. Econ.	\$40,121,662	\$40,508,460	\$28,928,847	\$29,378,576	\$40,094,761	\$39,545,765	\$41,438,180	\$40,992,295
606 Int'l Trade, Dev.	\$28,473,967	\$27,990,811	\$16,485,225	\$15,804,580	\$19,069,089	\$19,453,644	\$17,130,765	\$21,114,978
607 Consum. Economics	\$10,273,220	\$11,714,158	\$6,411,714	\$6,309,676	\$10,467,761	\$7,720,029	\$8,539,008	\$9,094,159
608 Comm. Res. Dev. Econ.	\$15,471,781	\$16,512,207	\$12,284,250	\$10,839,532	\$11,687,346	\$11,385,561	\$11,845,818	\$13,440,107
609 Econ, Theory	\$764,314	\$844,162	\$1,461,741	\$2,737,794	\$4,147,466	\$5,021,548	\$5,487,064	\$6,035,015
610 Domestic Policy	\$25,648,124	\$26,930,134	\$15,242,654	\$14,754,754	\$25,819,061	\$31,809,962	\$28,728,275	\$33,845,978
611 Foreign Policy	\$14,958,354	\$14,075,290	\$9,819,299	\$7,916,164	\$7,743,016	\$6,618,768	\$6,248,439	\$3,712,815

### Funding Tables for the Agricultural Markets and Trade Portfolio

Table A: CSREES Funding for KA 603 – Market Economics

CSREES Funding, KA 603 – Market Economics, 2000 – 2005						
Funding Source	Fiscal Year (\$000)					
	2000	2001	2002	2003	2004	2005
Hatch	\$2,306	\$2,434	\$2,068	\$1,673	\$1,471	\$1,286
McIntire-Stennis	\$148	\$167	\$154	\$76	\$71	\$61
Evans Allen	\$131	\$134	\$153	\$109	\$172	\$161
Animal Health	\$0	\$0	\$0	\$0	\$0	\$0
Special Grants	\$1,364	\$1,747	\$1,539	\$1,775	\$1,098	\$1,171
NRI Grants	\$219	\$256	\$33	\$367	\$78	\$305
SBIR Grants	\$0	\$131	\$99	\$149	\$98	\$30
Other CSREES	\$1,357	\$540	\$549	\$1,126	\$978	\$1,030
Total CSREES	\$5,525	\$5,409	\$4,595	\$5,274	\$3,967	\$4,044

Table B: Total Funding for KA 603 – Market Economics

Total Funding, KA 603 – Market Economics, 2000 – 2005						
Funding Source	Fiscal Year (\$000)					
	2000	2001	2002	2003	2004	2005
CSREES	\$5,525	\$5,409	\$4,595	\$5,274	\$3,967	\$4,044
Other USDA	\$1,246	\$1,152	\$833	\$711	\$374	\$950
Other Federal	\$634	\$548	\$716	\$862	\$491	\$647
State Appropriations	\$10,884	\$9,694	\$10,322	\$7,842	\$6,841	\$6,214
Self Generated	\$369	\$408	\$345	\$569	\$572	\$525
Independent/GR Agreement	\$1,451	\$1,443	\$1,311	\$808	\$889	\$871
Other Non-Federal	\$845	\$845	\$1,106	\$1,035	\$1,006	\$745
Total KA 603	\$20,954	\$19,500	\$19,227	\$17,101	\$14,140	\$13,995
CSREES as % of Total	26.4%	27.7%	23.9%	30.8%	28.1%	28.9%

Table C: CSREES Funding for KA 604 – Marketing and Distribution Practices

CSREES Funding, KA 604 – Marketing and Distribution Practices, 2000 – 2005						
Funding Source	Fiscal Year (\$000)					
	2000	2001	2002	2003	2004	2005
Hatch	\$1,659	\$1,665	\$1,676	\$1,563	\$1,229	\$1,216
McIntire-Stennis	\$43	\$150	\$132	\$138	\$112	\$187
Evans Allen	\$319	\$364	\$349	\$481	\$484	\$422
Animal Health	\$0	\$0	\$0	\$0	\$0	\$0
Special Grants	\$2,154	\$2,684	\$2,004	\$1,695	\$2,236	\$2,315
NRI Grants	\$575	\$399	\$192	\$219	\$180	\$377
SBIR Grants	\$313	\$412	\$537	\$152	\$515	\$623
Other CSREES	\$4,838	\$2,552	\$541	\$553	\$301	\$2,830
Total CSREES	\$9,901	\$8,227	\$5,430	\$4,802	\$5,057	\$7,970

Table D: Total Funding for KA 604 – Marketing and Distribution Practices

Total Funding, KA 604 – Marketing and Distribution Practices, 2000 – 2005						
Funding Source	Fiscal Year (\$000)					
	2000	2001	2002	2003	2004	2005
CSREES	\$9,901	\$8,227	\$5,430	\$4,802	\$5,057	\$7,970
Other USDA	\$1,202	\$1,193	\$1,390	\$770	\$659	\$1,131
Other Federal	\$1,773	\$773	\$925	\$1,165	\$816	\$448
State Appropriations	\$7,472	\$7,250	\$7,420	\$6,535	\$5,769	\$5,481
Self Generated	\$254	\$294	\$359	\$283	\$298	\$589
Independent/GR Agreement	\$1,088	\$1,116	\$954	\$838	\$935	\$748
Other Non-Federal	\$436	\$632	\$506	\$707	\$894	\$1,006
Total KA 604	\$22,125	\$19,484	\$16,985	\$15,101	\$14,428	\$17,372
CSREES as % of Total	44.8%	42.2%	32.0%	31.8%	35.0%	45.9%

Table E: CSREES Funding for KA 610 – Domestic Policy Analysis

CSREES Funding, KA 610 – Domestic Policy Analysis, 2000 – 2005						
Funding Source	Fiscal Year (\$000)					
	2000	2001	2002	2003	2004	2005
Hatch	\$1,016	\$1,132	\$1,561	\$1,435	\$1,649	\$1,395
McIntire-Stennis	\$104	\$132	\$199	\$174	\$262	\$309
Evans Allen	\$121	\$131	\$47	\$305	\$252	\$233
Animal Health	\$0	\$0	\$0	\$0	\$0	\$0
Special Grants	\$1,766	\$847	\$1,214	\$3,052	\$2,812	\$4,139
NRI Grants	\$426	\$211	\$216	\$329	\$24	\$288
SBIR Grants	\$0	\$0	\$0	\$0	\$0	\$0
Other CSREES	\$199	\$570	\$862	\$738	\$1,124	\$693
<b>Total CSREES</b>	<b>\$3,633</b>	<b>\$3,023</b>	<b>\$4,098</b>	<b>\$6,033</b>	<b>\$6,123</b>	<b>\$7,057</b>

Table F: Total Funding for KA 610 – Domestic Policy Analysis

Total Funding, KA 610 – Domestic Policy Analysis, 2000 – 2005						
Funding Source	Fiscal Year (\$000)					
	2000	2001	2002	2003	2004	2005
CSREES	\$3,633	\$3,023	\$4,098	\$6,033	\$6,123	\$7,057
Other USDA	\$1,150	\$752	\$1,445	\$1,261	\$945	\$5,705
Other Federal	\$1,324	\$803	\$949	\$700	\$1,010	\$1,361
State Appropriations	\$5,609	\$5,495	\$6,748	\$6,861	\$6,434	\$8,664
Self Generated	\$288	\$323	\$288	\$246	\$366	\$431
Independent/GR Agreement	\$1,585	\$1,038	\$702	\$655	\$728	\$992
Other Non-Federal	\$664	\$546	\$774	\$769	\$966	\$1,393
<b>Total KA 610</b>	<b>\$14,252</b>	<b>\$11,980</b>	<b>\$15,004</b>	<b>\$16,525</b>	<b>\$16,573</b>	<b>\$25,602</b>
CSREES as % of Total	25.5%	25.2%	27.3%	36.5%	36.9%	27.6%

**Exhibit 2**

Topic Focus of Marketing, KAs 603 & 604, and Domestic Policy Analysis, KA 610, 2006	
Global Competitiveness	Firms
Market Performance	Policy Analysis
Marketing Strategies	Environmental Policy
Marketing Alternatives	Rural Development Policy
Merchandising	Farming-Related Agricultural Policy
Value Chain Management	Bioenergy
Feasibility of Production-Marketing Alternatives	Food Policy
Consumer Preferences and Behavior	Trade Policy
Financial Performance of Marketing	Non-Market Valuation

## **V. 2007 Self Score for Agricultural Markets and Trade Portfolio**

The original score of the external review panel for the entire Goal 1 portfolio was 75. The score from the internal review of just the Agricultural Markets and Trade Portfolio in November 2005 was 81. The 2007 internal review score for Agricultural Markets and Trade Portfolio is 78. While there was no degradation in portfolio quality, relevance or productivity, the reduction reflects a slight decline (0.5 score reduction) in two areas: focus and agency guidance. Both are the result of constrained capacity of existing NPLs to maintain the core of the portfolio and to forge ahead with expanded and new topics to the degree that they like to. The overall 5 point portfolio score reduction is due to the weighting factors applied in computing the final score.

## **SUCCESS STORIES**

### **Livestock Marketing Information Center (CSREES Special Grant)**

The LMIC has provided economic analysis and projections about issues and conditions concerning the livestock industry, since 1955. Working primarily behind the scene providing data bases, analysis, forecasts, and teaching materials to government agencies, university faculty, and industry, LMIC provides a variety of specialized data and analysis services to participating partners. By nature, the LMIC takes a low profile, often without recognition, in carrying out its mission.

Center resources contribute to economic education, support applied research projects, and policy evaluation. Center staff continuously updates forecasts, projections and support materials related to market situation and outlook. The LMIC is a unique cooperative effort between state university extension specialists, USDA economists, industry cooperators and Center staff. Through cooperative efforts and programs, duplication of effort is greatly reduced while enhancing the overall quality and quantity of livestock market information for producers and other decision makers.

This cooperative effort has proven to be cost effective and successful. The American Agricultural Economics Association has recognized this effort for “Excellence in Extension Program Delivery.” Several widely recognized extension and research efforts have been supported by the LMIC. Center members represent 26 state Land Grant Universities, six USDA agencies, and seven Associate organizations – leading livestock industry organizations with missions that include supporting and conducting education and research.

### **Oklahoma Fed Cattle Market Simulator (CSREES Higher Education Challenge Grant)**

The Fed Cattle Market Simulator or packer-feeder game is arguably one of the most innovative tools to teach economic concepts to students and extension audiences. No other market simulator combines the realism and fast-paced nature of the real-world fed cattle market. As a result, students and adults make repeated decisions, learning from each experience, and thus “live” several economic concepts taught in the simulated market. Participants work in 2-4 person teams so also learn from each other. The simulator teaches ethical business practices or the consequences of unethical behavior. The simulator has the unique ability of teaching to the level of the participant – from youth with little exposure to economics to corporate executives who use economics daily, to professional economists who have studied economics for several years.

Eight feedlot teams of 2-4 people each market fed cattle, and four meatpacking teams of 2-4 people purchase fed cattle. Cattle supplies are exogenously controlled and cycle from larger to smaller to larger supplies. Cattle can be marketed or purchased any time during a five-week market window at live weights ranging from 1100-1200 lbs., and cattle genetics range from low quality, high yielding to high quality, low yielding. The feedlots are penalized for feeding to excessive weights, but packers have an incentive to purchase heavier cattle. Each packer has a different cost structure and minimum cost volume.

Feedlot and packer teams negotiate sale/purchase prices in seven-minute trading weeks, and cattle can be priced using a live weight, dressed weight, or grid method.

The simulator education program has reached over 2,000 producers, 1,000 agribusiness managers and employees, 350 educators, and 2,000 youth and students for an average of about 6 hours each. The effectiveness of the simulator and its use in extension, research, and teaching is evidenced by workshop invitations, publications, presentations, repeat grants, other universities using the program, and recognition from professional organizations.

### **Utah Diversified Agriculture Consortium (CSREES Smith Lever, Hatch Funds)**

The Diversified Agriculture Consortium is designed to provide producers and farm families with important, practical tools to aid in successful operation of their ventures.

The toolbox is intended to be a one-stop shop to help producers as they develop or expand their value-added agricultural products. Topics include legal and financial (Legal Information; I have an idea. Will it make money?; Breakeven Analysis; Sensitivity Analysis; Tax Laws; Legal Risks and Opportunities Associated with Food Supply Chains) and marketing (Competitive Analysis; Market Structure and Market Strategies; Market Potential; Importance of Product Packaging; Pricing; Importance of Product Differentiation; Promoting and Advertising; Value-Added Agricultural Products: An Introduction; Market & Price Risk Reduction; Supply Chains Management and Its Potential Impact).

An annual conference is designed to provide current and important information about a variety of topics, including finance, marketing, and value-added agriculture.

## **VI. Summary**

In response to the recommendations of the Agricultural Markets and Trade Portfolio Review Panel CSREES has taken a number of comprehensive steps to maintain the quality, relevance and performance of the Markets and Trade portfolio.

Limited steps have been taken to enhance agency leadership in the economics arena. CSREES visibility and participation in the Department, other agencies, and American Agricultural Economics Association has been maintained. Retirements over the past decade have reduced total CSREES economics coverage to three National Program Leaders. While the quality, relevance and performance of the portfolio remains high, agency leadership sustainability remains at risk.

The CSREES OneSolution effort is substantially improving the grants application, reporting and data management, and the Current Research Information System is being through the use of more comprehensive reporting taxonomies and coding systems that include higher education and extension work. Post award management of funded activities is being improved, and a thoroughly revised plan of work process is being introduced.

Newly funded research and education projects, regardless of funding mechanism, are more carefully monitored to ensure state of the art methods and appropriate are employed, and for continued relevance, outputs, impacts, and visibility. Annual and termination CRIS reports (from multiple funding sources) are actively monitored to ensure that work progresses in a satisfactory manner, that outputs are documented, and that actions are completed on time, and that impacts are assessed, captured, and reported.