CULTIVATING RESILIENT COMMUNITIES AND RURAL PROSPERITY IN A DYNAMIC AND UNCERTAIN ENVIRONMENT

"We will secure the homeland when your hometown is secure. When every hometown is secure, when we've identified risk and secured ourselves as best we possibly can, the homeland will be secure." – Homeland Security Director Tom Ridge, 4/23/02

"Our challenge today is to address the vital forces of change while at the same time modernizing the foundations of our farm and food system to ensure continued growth and development for the 21st century." -- USDA Secretary Ann M. Veneman, 9/19/01

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INTRODUCTION

Rural Americans are living through a period of remarkable change. They face challenges and new opportunities few could have predicted even a decade ago. Agricultural and non-agricultural sectors are restructuring. New domestic and global markets, rapid transportation, and communication technologies are affecting all sectors of the economy. Environmental interests and concerns are opening up consumer-driven markets and influencing policy directions. Demographic shifts are creating an increasingly diverse population, and migration patterns are contributing to community decline, stagnation, or rapid growth. Rural, suburban, and urban places are linked, rather than distinct localities. And concerns about food safety, foodborne illnesses, and terrorist threats challenge a long-held assumption that the country's food supply is the world's safest.

Principles for Policy and Practice

Rural leaders agree that rural community and economic development needs to be entrepreneurial, community-driven, and anchored in local and regional assets. Practitioners and policymakers alike call for holistic approaches that simultaneously value and invest in economic opportunity, family and human capital, community vitality, infrastructure, and natural resources and environmental stewardship. People are harmonizing and modernizing approaches, creating innovative and thoughtful collaborations, and drawing on the comprehensive research and extension resources of the Land-Grant University System.

Uncertainty and Urgency

Since September 11, 2001, a new climate of uncertainty and urgency weighs heavily over our thinking about rural and community development. Bedrock assumptions held by civic, business, and government leaders have shifted to a new awareness of vulnerability. Rural leaders embrace homeland security as a central priority and are re-thinking how we raise and distribute our food, care for our forests, grow the economy, and nurture our communities, towns, and families. In the post-9/11 environment, the country has lost a sense of invincibility and an assurance that solutions to difficult problems can be found through

science and modernization. What has not changed is the need to nurture a diverse and vital rural economy, cultivate thriving and resilient communities and families, and care for the environment.

Addressing these pre-9/11 priorities is our first line of defense, a proactive strategy that addresses vulnerability and builds prosperity. Still, addressing post-9/11 threats, even identifying them, is a daunting task. Threats of terrorism to the food supply and public health, to the physical infrastructure such as roads and bridges, and to the energy supply are obvious. Less obvious threats come from the lack of relationships among governments, across agencies, and between the public and private sector that limits our ability to respond quickly, decisively, and competently when needed.

Constants and REE Investments

There are many ways to respond to vulnerabilities, including searching for technical solutions, international cooperation, and policy changes. Solutions share in common the need for good information and data systems, community planning systems, good decision-making processes, effective leadership, broad and inclusive civic engagement, technical assistance, new knowledge, and full communications across jurisdictions, agencies, and localities. In addition, a more secure and sustainable food system is needed. These are the arenas in which CSREES can make significant contributions. In this paper, we argue that pre-9/11 innovations must proceed with increased support and urgency in light of current security threats. We focus on the economy, community, and environment. We recommend that CSREES increase and target research, education, and extension investments that reduce vulnerabilities, build resiliency, and enable people and communities to respond to emerging opportunities.

CULTIVATING RURAL ECONOMIC PROSPERITY

CSREES is positioned to help rural communities approach economic development through a new lens — as a process that increases the quality of life of all residents and enhances security at the same time, rather than as a jobs creation or smokestack-chasing strategy. Rural economic development needs to be entrepreneurial, rooted in locality, environmentally sound, and based on participatory, inclusive community planning.

Points of vulnerability include:

- a narrow economic base underlying many communities;
- subsidy policies that increase the scale of commodity production but do not revitalize communities or stem economic erosion:
- concentrated and vertically integrated production, processing, and distribution favoring large centralized operations vulnerable to contamination (2% of farms create 50% of production);
- dwindling competitive possibilities for small and entrepreneurial farmers and ranchers;
- threats created by monoculture, declining biodiversity, and increasing corporate ownership of seed stocks, genomes, and intellectual property rights; and
- negative impacts of poverty and inequality that leave some families, children, and communities more at risk than others.

We can improve the broad economic context in which agriculture occurs through *economic diversification and rural and community entrepreneurship*. New measures and resources to create an entrepreneurial climate include: building equity-fund institutions; helping businesses tap into advanced technology; human capital improvement through youth and adult workforce development and education; networking farmers and rural businesses; technical assistance and resource toolkits appropriate for diverse communities and entrepreneurs; a cadre of extension educators skilled in value-added entrepreneurship, economic impact analysis, e-commerce, market development, business planning, and brokering

partnerships; and ongoing research to extend the knowledge base for rural entrepreneurship policy and practice. Digital capacity must increase if entrepreneurs and communities are to succeed in a technology-dependent economy.

We need to re-think the way we grow, distribute, and consume food and identify more secure approaches that also revitalize rural communities. Centralized commodity agriculture, although often productive in the past, provides vulnerable targets for intentional terrorist attacks. Community or regionally based production by farmers practicing sustainable agriculture is less vulnerable and less dependent on foreign oil for production and transportation inputs and protects and enhances the natural resource base.

CSREES needs to expand and target research, education, and extension programs that support *sustainable and value-added or product agriculture* and grow this sector to parallel commodity agriculture. This will provide stability and security and offer resources for recovery from attack or disaster. It is crucial for achieving greater food security and agro-ecological sustainability. It includes many opportunities to boost rural economies (grower and grower-to-consumer alliances, high-value products like "farmaceuticals," processing facilities, new uses for traditional crops, alternative value chains, certification for quality assurance).

A concept of a "foodshed" is emerging as a framework for thinking about this parallel sector and should be explored. Research, education, and extension needs include new business models based on partnering, updated policies for new kinds of cooperatives, alliances between the medical industry and producers and businesses, access to venture capital, competitive edges for communities and regions, and ways to attract skilled workers.

CSREES should advance strategies that *blend on-farm sustainable agricultural practices with off-farm community development*. CSREES' 2002 pilot and programs supported by private foundations document that this approach adds value to economic diversification and community vitality investments. USDA should immediately build on this evidence and establish an "open farm gate" economic and community development approach as an essential pillar of rural revitalization. Activities to date also demonstrate the need for specialists trained across subject areas and skilled in the foundations of community development. Experiments in holistic professional development can serve as a model for preparing extension to meet post-9/11 needs, including extending Extension Disaster Education Network (EDEN) capacity. The impetus for this pioneering work emerged regionally, from the field. CSREES needs to recognize, foster, and build on research, education, and extension innovations at the regional and community level.

CULTIVATING COMMUNITY RESILIENCE

Community is the focal point. It is where people adapt to change and where they can become change agents. It is where people feel a sense of involvement, take pride in their actions, and join with neighbors to secure the places where they live. Challenges facing communities in the post-9/11 context are immense, but ready and resilient communities are a first line of defense. Resilient communities improve the quality of life for all residents and are ready to handle a wide range of emergencies. Quality of life improvements include a wide range of economic and social development affecting individuals, families, firms, and communities. Emergency preparedness covers accidents, natural disasters, and terrorist events.

Points of vulnerability include:

- uneven access to communications technology and resources;
- communication failure among agencies and jurisdictions because of territoriality, turf battles, duplication, and non-uniform protocols;
- low levels of civic engagement;

- lack of knowledgeable, capable, and democratic local governance; and
- lack of physical, communications, technology, and social infrastructure (non-profit organizations, intermediaries, and networks).

CSREES needs to invest in research, education, and extension efforts that will establish a sound *community-level architecture of planning and decision-making systems*. Communities that are capable of planning, inclusive decision making, and self-direction will be quick and ready "first responders" to crises and ready to lead long-term recovery in the aftermath. When threats occur and emergencies come, there is no time to build relationships, deal with turf battles, or create inclusive decision structures. Immediate action is required. The urgency of homeland security means that neighbor communities need to resolve any divisions now and ensure they have the ability to act quickly and well, individually and in cooperation with each other. Leadership has to be secure. Relationships have to be in place.

Community-led development has taken on new urgency since 9/11. Communities need help in developing the capacity to envision, implement plans, and engage a diverse group of people, organizations, and institutions in civic life. People from all walks of life need to learn new skills and acquire tools for sophisticated and modernized community development. Extension, with its history as a neutral broker of science-based information that aids planning and decision making, is an essential resource if communities are going to make successful transitions in this era. Research is needed that expands the rural development knowledge base, as is the opportunity for extension professionals to retool or deepen competencies. Cultural and racial diversity needs special attention, as does variation in the rural landscape and the ability to tailor programs to locality and population.

A comprehensive multi-year *community development capacity initiative* is needed. Extension professionals need to serve as community resource brokers and create partnerships with public and private entities to expand financial and other resources and offer specialized technical assistance. They need to work across state boundaries and assemble variable, quick-response teams to meet diverse stakeholder needs. They need current, science-based information to help them design programs and form policy. And they need training in substantive areas relevant to challenges and opportunities today.

Educational opportunities and resources need to be updated with cutting-edge materials and web-based and distance education opportunities. Close relationships between extension professionals and scientists are needed in all program areas. Training and resources are needed in community-building skills, planning tools, civic engagement, leadership development, local government issues, public conflict management, disaster preparedness, GIS (geographic information systems) applications, economic diversification, impact analysis, value-added entrepreneurship, local governance, tourism, service infrastructure, and youth and adult workforce development. E-commerce training needs to be adapted for local government, agriculture, and community planning. Web-based resources need to include courses, downloadable policy briefs, research publications, newsletters, data, and information and data links.

To enhance community development capacity, a national professional development is needed. A new professional development initiative in the South can serve as the model. It was developed by the Southern Rural Development Center and Community Resources and Development program leaders in the South. CSREES needs to expand funding for the Regional Rural Development Centers (RRDCs) in order to launch this as a national initiative.

A *community entrepreneurship* approach to basic services, infrastructure needs, and competitive advantages is needed. This includes creating community alliances for communications, technology, housing, water, sewers, utilities, transportation, fire and police protection, rescue and ambulance service, health care, education, community enrichment programs, and innovative adult and youth workforce development. Alone, rural communities cannot meet the full complement of infrastructure and service

needs they have. Community alliances can also help communities succeed in the global economic environment.

Place-based approaches are a priority. Place or locality-based education, health care, food systems, cultural systems, tourism, and value-added enterprises increasingly strengthen many rural communities. They, and the successful Community Food Projects program, serve as models for new CSREES research, education, and extension that can increase community resilience through a development strategy based on place rather than commodity or economic sector.

For communities to prosper, *families and businesses* must be ready to weather periods of income decline or market disturbances. Education and training could help these target audiences understand insurance needs and benefits, cash flow consequences, and planning (cash reserves, asset accumulation, credit lines) to maintain long-term resilience through troubled times. Partnerships with the Federal Emergency Management Agency (FEMA), Small Business Administration (SBA), and the U.S. Departments of Treasury and Labor would help to develop and deliver effective programs. The outcome would be individuals, businesses, and organizations prepared for those events with potentially devastating economic consequences. Further, technical assistance response plans could prepare for events such as food contamination, water quality threats, preparation of financial assistance applications, and other types of actions associated with disasters.

CULTIVATING A HEALTHY, SUSTAINABLE ENVIRONMENT

The environment is our essential basis for rural prosperity and security over time. We need to take immediate steps to insure environmental stewardship of the country's natural support system of watersheds, woodlands, wildlife and habitats, open spaces, and forests and restore the natural infrastructure where past practices have damaged it.

Points of vulnerability include:

- regional droughts, water shortages, declining water aquifers, water rationing, water rights issues, and source and groundwater contamination;
- aging or outdated infrastructure for flood control, transportation, financial development, and telecommunications; and
- lack of adequate safeguards for hazardous materials use, shipment, and storage.

We need a better understanding of the value of natural resources and environment to communities and society in order to adequately address environmental vulnerabilities in a cost-effective manner. Conservation, sustainable working lands policies, and environmental stewardship promise to safeguard the "public good." As entrepreneurship and new market opportunities related to natural resources expand, measures are needed to insure sustainable practice. Land use issues, farmland preservation, sprawl, agroforestry practices, and use of open spaces must become part of local government and community planning.

Clean, safe, secure *water supplies* are fundamental to a healthy, sustainable environment. Small flows technologies for wastewater treatment and drinking water systems developed by multiple public and private partners are much more appropriate for small communities and sparsely settled regions than older large flows technology currently the standard in many states. CSREES can develop knowledge and understanding so that rural citizens can advocate for the changes needed in laws and regulations to be able to employ these systems. New and innovative small flows technologies are more cost efficient and can be adapted for place-specific needs and built into community activities. Wastewater treatment plans can be tailored to locality and employ recycle practices that regenerate the environment and create entrepreneurial opportunities. Flood-control dams spread across the nation need to be secure from

deterioration, as well as from terrorist attack. Research and educational programs are needed to address the alternatives between dam removal and rehabilitation and to assess the safety and health consequences and social and economic impacts of these aging infrastructures.

As an alternative to *energy* disruptions and supply shortages, CSREES can support programs in *alternative fuels*, applying years of research on such methods as short rotation of woody crops for fuel and paper production and making use of biomass fuel production technology. With homeland security concerns and a closing price gap between fossil and biomass fuels close, the nation is finding greater interest in transitioning to local biodegradable and renewable natural resources and in exploring new energy sources such as wind energy. Preparation now for that transition is an additional homeland security measure.

THE OPPORTUNITY FOR CSREES

USDA Secretary Ann M. Veneman's 2/01 call for new thinking about the food system, new partnerships, and the broader context that supports the food and fiber system has new urgency since 9/11/01. A targeted multi-tiered initiative is needed to tailor and harmonize current work, increase targeted projects, re-tool and train extension educators, create a new competitive grants program, shape and balance the current research and development portfolio, and increase and direct formula funding.

The initiative will adapt existing and new programs to post-9/11 security issues and boost ongoing programs that revitalize the economy, build communities, and ensure wise management of natural resources and the environment.

It will develop:

- holistic, multi-sectoral approaches;
- collaborative public and private strategies; and
- innovative processes at the regional and community level.

It will:

- help farmers and rural entrepreneurs develop a parallel food and fiber system that is less vulnerable and contributes to rural revitalization;
- create entrepreneurial approaches to community-led development and community alliances;
- integrate environment and natural resource management with economic and community development for a whole systems approach to rural revitalization and security.

The competitive grants component will generate new knowledge and models; achieve cross-disciplinary and cross-agency professional development; and establish new private/public partnerships. It will provide "on the ground" examples of holistic strategies that link farming and rural entrepreneurship, community development, and sustainable environmental and natural resources management. A majority of the grants will be managed close to constituents in a regional structure through the RRDCs or jointly between the RRDCs and SARE (Sustainable Agriculture Research and Extension). Others should be managed nationally to address issues of common and national concern. Emphasis should be on projects that:

- take a whole systems approach;
- integrate research, education, and extension for short-term positive impacts on farms, ranches, businesses, communities, and the environment while contributing to the knowledge base of effective development and building capacity to tap that knowledge base long into the future; and
- explicitly build upon and leverage other CSREES programs (both competitive and base).

The initiative will be complemented by new foci in competitive grants programs (new program areas in IFAFS [Initiative for Future Agriculture and Food Systems], NRI [National Research Initiative], SBIR [Small Business Innovation Research], and tools in Integrated Programs). Formula funds should be increased and used to ensure that less competitive partners participate in the new program and the whole country is prepared.

Cultivating Resilient Communities and Rural Prosperity in a Dynamic and Uncertain Environment, FY 2004

Area of Opportunity	Targeted Outcomes	Strategic Partners
Economic Prosperity Economic diversification Entrepreneurship New markets, trade barriers E-commerce Consumer trends Value-added enterprises Family enterprise portfolio management Youth/family supports for entrepreneurship	 Producers and extension professionals understand factors that influence the global and domestic markets and trade, cross-agency programs/resources. Students are prepared for a global and changing domestic economy. Producers who benefit from market opportunities are more entrepreneurial, receive a larger share of the consumer dollar, and collectively build a place-based production and distribution system. Consumers enjoy a more secure, high-quality food supply and are more closely connected to producers. Policy makers use research-based information on the value of conservation, biodiversity, and by-products of agriculture and see agriculture in terms of land and people resources. Extension professionals broker USDA and other resources to help entrepreneurs. Families examine a wide range of farm/non-farm economic activities and develop strategies for economic security and manage personal finances effectively. Youth are engaged in entrepreneurial activities and contribute to their local and regional economy. 	 USDA: FAS, AMS, RBS, NRCS, FS, ERS USAID Depts. of State, Commerce, Labor World Bank State Depts. of Ag & Trade Centers Economic Dev. NGOs Small Bus Dev. Centers, SBA Assn. for Enterprise Opportunity American Savings Education Council National Rural Funders Collaborative, other private foundations

Resilient Communities

- Community-led smart growth planning
- Community entrepreneurship
- Broad civic engagement
- Emergency preparedness
- Community alliances
- Place-based assets
- Homeland security

- Communities with new leaders and diverse citizens identify issues, manage conflict, prepare for security, and lead development activities.
- Communities integrate human, social, financial, environmental, and infrastructure assets.
- Communities support risk-taking by entrepreneurs and agricultural producers.
- Effective emergency preparedness plans and procedures are tailored to diverse communities.
- Communities develop plans and procedures to protect natural resources.
- Communities identify competitive edges and create durable economic/social improvements.
- Extension educators integrate youth, family, community and economic development, and natural resources and environment protection activities and facilitate partnerships.
- Healthy families have skills in parenting, stress management, and financial management.
- Youth engage in rural enterprises and community affairs

- USDA: RD, RHS, RUS, FS, NRCS
- Depts. of Commerce, Labor, Education, HUD, Transportation, HHS
- National Rural Health Association
- National 4-H Council
- Community Development NGOs
- NACo, NADO
- Council of State Governments
- Chambers of Commerce
- Corp. for
 National/Community
 Service
- National Rural Funders Collaborative

Healthy, Sustainable Environment

- Watershed protection
- Farmland, rangeland, forestland, wetland protection
- Wildlife habitat preservation
- Airshed protection
- Natural amenities preserved
- Biomass, biofuel, alternative energy development
- Dams repaired, removed

- Communities have clean, safe, and secure water supplies.
- Communities have soil, water, and air quality protection strategies.
- Communities have flood, fire, dust bowl, drought, and invasive species mitigation plans.
- Communities have sustainable land use and growth management plans.
- Farmland, rangeland, and forestland are preserved to ensure economic viability and quality of life.
- Wetlands are preserved for water quality improvement, groundwater recharge, and wildlife habitat.
- Open spaces are preserved, and communities capitalize on natural resources / environmental amenities
- Waste is converted to useable resources, increasing economic opportunities for communities.
- Dependence on foreign oil and petroleum inputs is reduced.
- Development approaches incorporate conservation and environmental stewardship.
- Community decision makers integrate rural, economic, social, ecological concerns.
- Sustainable healthy ecosystems exist, with multiple benefits for rural landscape and population.

- USDA: NRCS, FS, ARS, ERS, FSA
- EPA, NOAA, USGS, BOR, BLM, NPS, USFWS, U.S. Corps of Engineers, DOE, DOL, DOT
- Natural resources & environmental orgs.
- Soil & Water Conservation Districts, NACD, National Watershed Coalition, NRC&DC, National Assn. of State Conservation Agencies
- Conservation NGOs (Am. Farmland Trust, Ducks Unlimited, Land Trust Alliance, The Nature Conservancy, Trust for Public Land)
- National Rural Funders Collaborative, private foundations

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