

# AESOP Plan of Activities: 2001

The following topics are included in AESOP's Plan of Activities for 2001:

- 1.0 [CSREES Budget](#)
- 2.0 [Farm Bill](#)
- 3.0 Issues
  - 3.1 [Agriculture and the Environment](#)
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  - 3.4 [Communities](#)
  - 3.5 [Science Policy](#)
- 4.0 [Emerging Issues](#)

Two of these topics, the CSREES Budget and the Farm Bill, are “process-oriented.” The CSREES Budget is an appropriation's process, which will include a number of issue areas. The Farm Bill is an authorization process, which will also include a number of issue areas. The Issues that we've identified (Ag/Environment thru Science Policy) may fit into either of these processes, but they can also be addressed in other appropriation and appropriation's bills. Accordingly, we have developed a Plan of Activities (POA) for each issue area as if it was standing on it's own. Each issue area might fit into the CSREES budget or the Farm Bill, but each can be pursued independently of these two “vehicles.” By developing these so that they can stand on their own, the POA for each topic could be shared with the appropriate ECOP/ESCOP Committees for further development.

The format varies a bit from one topic to the next, but we've tried to keep the same fundamental characteristics. For each topic we provide a description of why this is an important issue and identify what needs to be done in the area of research and extension. Next we look at what needs to be done to pursue this topic, including—

- Activities to help brainstorm and develop new ideas
- Development by the appropriate ESCOP/ECOP Committees to build the legislative and/or budget agendas
- Coordination with appropriate agencies and Coalition building with appropriate groups,
- Finding Champions and implementing specific advocacy activities.

The CSREES Budget section does not have an issue statement since these issues are defined by the ECOP/ESCOP/BA Budget Committees. The Farm Bill “issue page” will need to be further developed as the Legislative Committees and the new Task Force gets underway. It is our understanding that USDA/CSREES and several foundations' might be interesting in helping host the “brainstorming” and concept building phases of these activities. The Agriculture and the Environment component has been taken from the paper developed by AESOP for the joint ECOP/ESCOP/CSREES Environment Initiative. The “implementation phase” will need to be further discussed with the Task Force and with the ECOP/ESCOP Chairs. ESCOP may wish to consider offsetting the costs of specific activities (workshops, forums, etc.) out of the remaining SUNEI assessment. The Bioenergy / Bioproducts topic may be the most straightforward of the

topics; the challenge will be to further build the linkage between our capacities and the opportunities afforded by DOE's interests and the recently passed legislation. The Biotechnology component was developed as a combination of AESOP's recent activities in the areas of Genomics and the joint ECOP/ESCOP paper on Biotechnology (GMO's). The idea here is to develop a vigorous public education and research program to address public concerns about biotechnology, while building the capacity to engage in genomics research, particularly as it relates to functional foods. Issues of food safety and nutrition would be critical subcomponents of any efforts in this arena. We struggled with the breadth of topics covered in the Communities topic; we settled on "local leadership develop" as an organizing principle, that interfaces with a number of critical issue areas facing communities. Information Technology would be an important subcomponent. Science Policy remains as a monitoring activity.

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## **1.0 CSREES Budget**

### **Issues**

The issues to be addressed in the CSREES Budget are developed by the ECOP/ESCOP/Board on Agriculture Budget Committees.

### **AESOP Activities**

#### Engaging the Land-Grant University Family

##### *ECOP and ESCOP Budget Committees*

- Participate in meetings and teleconferences
- Brief the Committee on Washington events and opportunities
- Work with the Committee Chairs to prepare for BOA Budget Committee Activities

##### *Board on Agriculture Budget Committee*

- Participate in meetings and teleconferences
- Work closely with the Chair and Chair-Elect of the Committee
- Assist in the development of BOA Budget Committee documents
- Assist Chair and Chair-Elect in presenting the BOA Budget Committee documents and process to other components of the land-grant system and support groups, including:
  - Participants in the NASULGC annual meeting
  - The AHS / CARET meetings
  - CGA, CARET and Lay Leaders

##### *CARET*

- Meet with CARET Executive Committee and speak at CARET meetings, as requested

- Except in those states where the administrative head has specified that direct communication to the CARET delegates is not desired:
  - Provide electronic news updates to CARET delegates
  - Work directly when needed with key CARET representatives to communicate with Congressional Members and staff
  - Facilitate targeted visits by CARET staff to key offices at critical times

### *Lay Leaders*

- Speak at the annual Lay Leaders meeting in Washington, if requested

### *NASULGC*

- Collaborate with NASULGC staff in the production of BOA Budget Committee documents describing recommendations for CSREES funding. AESOP will work with the BOA Budget Committee regarding content of the documents
- Collaborate with NASULGC staff and ECOP / ESCOP Budget Committee Chairs regarding funding recommendations for other federal agencies
- Collaborate with NASULGC staff regarding the delivery of Congressional testimony and land-grant system budget recommendations to Congress

### *University Leadership*

- While assisting in building support for the BOA Budget Committee recommendations, AESOP will work with the offices of Land-Grant Presidents, Vice-Presidents, Deans, Directors and Administrators as appropriate to the issues and the management practices of the specific institution

### *Communication*

- AESOP will routinely communicate the status of the agricultural appropriations process via “News from the Hill” and will keep the system informed regarding needed actions

### Coalition Building

- Collaborate with CGA ad hoc agriculture group
- Participate in presentations to the total CGA with the ad hoc CGA group
- Facilitate meeting and communications with outside interest groups to identify priorities and build support
  - Facilitate survey of interest groups and compile results
  - Engage in a series of interactive small group meetings with Washington representatives of interest groups
  - Facilitate interest group participation in BOA Budget Committee meetings
  - Explore opportunities to speak or facilitate presentations at interest group meetings, coordinated through the AHS liaisons, CARET and other contacts

- Monitor progress of National C-FAR effort and President's Initiative at NASULGC
- Participate and partner with stakeholder groups whenever possible
- Identify grassroots potential in addition to CARET and Lay Leaders with access to key people

#### Finding Champions

- Representative Eva Clayton – Ms. Clayton was a driving force for the 1890's formula funds increase
- Senator Richard Lugar – Initiator of the IFAFS program
- Senator Tom Daschle – Initiator of the Fund for Rural America and major advocator for formula funds
- Representative James Walsh – Was considered for the Subcommittee Chair position; he and Mr. Hinchey will work closely
- Senator Thad Cochran – Driving force in the Senate for the system priorities
- Senator Robert Byrd – Explore West Virginia State College situation and how they intend to gain permanent status as a 1890 institution. This might put Senator Byrd in a situation to help the entire system

#### Advocating

- Facilitate meetings and discussions with the White House, OMB and USDA leadership
- Assist in the development of congressional testimony
- Facilitate meetings with key congressional staff and Members with BOA / ECOP / ESCOP Budget Committee leadership, as needed
- Assist BOA Budget / Education Chair in developing special events with congressional leadership to strengthen relations with Washington leaders

#### **Conclusion**

Given the current volatile political environment, this may prove to be a very challenging year. We will have to be agile, delicate and persistent as we seek to chart some very stormy weather over the coming two years. Our tactics may have to be modified a number of times.

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## **2.0 Farm Bill**

### *Agricultural Research and Extension Challenges for a New Age*

The Federal Agricultural Improvement and Reform Act of 1996 is up for reauthorization. The 107<sup>th</sup> Congress will shape the new Farm Bill that is to replace FAIR 1996. The Land-Grant University system plans to be engaged in Congress' deliberations about the future of American agriculture. The authority for research and education in agriculture was re-established separately from the last Farm Bill under the Agricultural Research, Education and Extension Reauthorization Act (AREERA) of 1998, and is due for reauthorization in 2003. However, planning for both bills needs to be considered together, as the research and education agendas exist to create opportunities and resolution of problems in American agriculture. Generally, there is not an expectation that the Farm Bill will be rewritten in 2001; however, there will be extensive "positioning" as the debate about the fundamental character of the farm programs is vigorously debated. We have been counseled to be active participants in the coming year of Congressional Hearings and to use the time well to prepare for legislation in 2002.

The next Farm Bill needs to affirm several key points. The United States needs an agricultural research, extension and education policy that—

- Continues to advance productivity for goods and services needed domestically and abroad in balance with the environment.
- Employs new sciences and technologies that solve production and environmental problems in productive ways.
- Increases agricultural science literacy by educating the public here toward reducing fear and doubt about the safety of agricultural products.
- Addresses the impact of changes in agricultural practices on rural America, as well as suburban and urban communities.
- Develops strategies for assisting farmers and ranchers to make productive transitions when agricultural practices and markets change.
- Improves agricultural scientific education while generally American 12<sup>th</sup> graders lag far behind the international average in math and science.

The United States needs an agricultural research, extension and education policy that balances the important job of educating children about agriculture with the quality of life needs of people who live in all communities as well as the rural places where America's food and fiber supply is produced. This policy must be fashioned in a manner that recognizes food is both a local and global issue. This fact heightens the need for all people to have access to sound science-based, trustworthy information about food.

### **Benefits of Research, Extension, and Education**

New technologies will dramatically change agriculture in the future. From the products we raise to the manner in which they are produced, science will be a catalyst for constant change and development. Demand is expected to increase based on population growth, and agricultural products may be able to hold their position as the leading export from the United States perhaps only because of America's lead in related technology. Education is the mother of research and technological development, and Ag education provides human capital development and access to

applications of new technologies. It is clearly in the public interest to maintain accessible education, research and information about food and fiber.

America can expect a great deal from its investment in agricultural science. Advances in genomic science, through the development of genetically enhanced plants, animals, and microorganisms, can help assure global health and well being. Agricultural science will help rural communities thrive while risk management tools will help rural people face their economic challenges better prepared. America's energy security will be enhanced through the development of biomass and other renewable energy technologies and products. Biobased products will be central to sustaining the economy and the environment in the future. Indeed, agriculture should be viewed as "the solution" to the nation's environmental challenges.

The Land-Grant University system has been and remains today based on the public need to access education, research, and information. No nation has benefited more than the United States from its investment over the past 138 years in the LGU system. ***The system's success is proven in the casual expectation of affordable, abundant food and fiber, however the dynamics of American agriculture require changes in the context of the new Farm Bill.*** The new bill must accommodate changes in production practices, access to markets, public responses to change and impacts on communities and the environment.

### **What needs to be done?**

#### Identify key Players

- House and Senate Leadership
- House and Senate Agriculture Authorization Committee Members  
House members from Agriculturally strong districts that are not on the Agriculture Committee (particularly any with close 2002 elections)
- Administration

#### Engage the Land-Grant University Family

- Work with the NASULGC Farm Bill Task Force  
This task force may:
  - Hold orientation workshops beginning with a Farm Bill 101
  - Discuss thematic areas of the farm bill
  - Hold a "brainstorming roundtable" to explore new approaches
  - Hold a discussion/conference inviting stakeholder and other outside groups explore partnership opportunities
  - Develop concept papers outlining system priorities and policy
  - Develop "implementation" drafts of "near" legislative language for Congressional staff
- Make Farm Bill 101 session available to entire LGU system via webcast or video tape
  - Explore ways to engage students in process

- LGU Family to assist with planning : USDA, University Presidents, Relevant Existing NASULGC tasks forces and committees including subcommittees of ECOP/ESCOP, Tribal Colleges/AIHEC, and policy research centers.

### Coordination and Coalition Building

To the extent appropriate, we will seek to communicate and coordinate with our partners in USDA/CSREES, as we explore new venues and opportunities working with USDA/NRCS and FNS. Similarly, the Farm Bill may provide a platform for leveraging increased activities with EPA, HHS and other federal agencies, which will require ongoing discussions with these agencies.

### ***Relevant Outside Organizations***

Just as we will need to seek to coordinate with NASULGC's Food and Society Initiative, we will need to be in on going communication with a number of outside organizations, including—

- National C-FAR
- Farm Bureau
- NAREEEAB
- National Academy of Sciences
- CoFARM
- CFARE
- Water and Soil Conservation Group
- National Rural Network
- Commodity Groups
- Others from Stakeholder Survey list

### Finding Champions

We will need to look back at the last farm bill effort and identify those that will truly carry our message. Some of these might be: Charlie Stenholm, Eva Clayton, Richard Lugar, Tom Daschle

### Advocating

- AESOP Enterprises will develop a web library of past and present Farm Bill resources for system review. This will be a growing resource that will provide information for testimonies, hill meetings, and general background information.
- Hill Briefings – ideally we should coordinate with some of the groups listed above and hold hill briefings. In addition, partnering with collaborating groups on receptions and events in DC to gain recognition.
- Facilitate development of some state specific one-pagers with a link to extension and research website of the Land-Grant university for more information. These documents could serve as examples of what has been done and what needs to be done but resources are not available.
- Facilitate development of a website specifically for Congressional staff and interest groups, so that they can readily find additional information about our positions.

- Continue to grow the grassroots effort, including CARET and lay leaders, to find supporters for our positions.
- The essential part of advocating will be getting our message to our champions as quickly as possible. We will work closely with key Members and staff, their University Leadership, and key supporters back home.

## **Conclusion**

Success or failure of the next farm legislation will greatly depend on adequate research, extension, and education funding and programs. Our role on farms, in communities, and throughout the country is vital to the agricultural system of the United States. The farm bill priorities we identify must relay this message.

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## **3.1 Agriculture and the Environment**

### **Environmental Management Systems**

*ECOP/ESCOP/CSREES Environmental Initiative Task Force*

#### Executive Summary

In August 2000, a task group was named by ESCOP, ECOP and CSREES to explore the concept of creating an environmental "think tank" to define how the Land-Grant University System might organize to better address environmental issues. The charge sets a big expectation and the task force struggled to describe definably unique contributions that could be made by the Land-Grant System; the task force sought to draw on the breadth of the system's expertise, and yet define a unique set of skills and resources that our combined research and extension system brings to addressing critical environmental issues. As well, the task group was looking to identify clear funding opportunities that would enable the land grant system to address these critical environmental concerns.

The product that emerged is a template for an Environmental Management Systems approach to a range of issues. This initiative takes advantage of unique capabilities of our system:

ECOP - Extension would play a critical and pivotal role in facilitating the development of educational materials, programs and implementation processes for Environmental Management Systems.

ESCOP - Research capabilities would be targeted to address risk assessment and environmental / ecological research priorities, in consultation with EPA's Office of Research and Development

Private Sector – Built in collaboration with the private sector should provide a “reality check” on the practical and economic feasibility of developed systems, as well as building ownership and use of the environmental management systems that are developed.



CSREES and other Federal Cooperators – Collaboration with the federal agencies should demonstrate that good information and good outreach through the Land-Grant structure can enable agriculture to co-exist with a healthy environment, minimizing the need for regulatory solutions.

This proposal would establish and fund a program that stimulates interagency/university/private sector partnerships in developing proactive environmental management assessment systems that identify and address environmental risks in farming operations. This will be a joint research / extension effort to provide science-based responses to current policy issues. This program will:

- Support the incorporation of the latest research and technical recommendations into environmental management system tutorials and programs that aid producers with various scales of production in identifying environmental risks on their properties and applying the best available technology to reduce or eliminate those risks.
- Increase producer access and understanding of the latest research findings and policy requirements related to environmental risks.
- Identify limitations of existing technology in preventing environmental degradation and research needs to address those limitations as well as attempt to identify future challenges for timely research-based development of solutions.
- Utilize mini-think tanks to develop a framework for addressing each issue that is identified.

Specific proposed projects include: (1) developing a capacity to respond to national policy issues on an ongoing basis, such as responding to EPA's proposed animal waste regulations; (2) developing an Environmental Management Systems initiative, with a target goal of at least \$40 million in new funding involving several federal agencies, including USDA/CSREES, EPA and NASA. These efforts would be coordinated with ECOP/ESCOP activities regarding the USDA/CSREES budget; particularly in regards to waste management. Funds remaining from the SUNEI project and from the FY 2001 assessment would be used to pilot the initiative.

## **Environmental Management Systems**

ECOP/ESCOP/CSREES Environmental Initiative Task Force

The Environmental Initiative Task Force has been charged by ECOP and ESCOP to explore how Extension and research might work together to better address interactions between agriculture and the environment. The Task Force is examining how their unique partnership with each other and USDA/CSREES can be better leveraged in working with other federal agencies, including USDA/NRCS, EPA, the Department of Interior and NASA.

### **Guiding Principles**

In discussing possible new directions and activities, the following principles were developed and followed by the Task Force —

- Any new effort to address agriculture and the environment should be developed jointly by research and extension and any new initiatives should integrate both functions from

the onset. Any new initiatives should build on the competitive advantage that the Experiment Stations and the Extension system have from working together.

- Any new efforts should be developed in communication and coordination with USDA/CSREES, but our thinking should not be limited to those areas or issues where CSREES has established funding resources. New initiatives should not be limited only to topics where USDA/CSREES will have funding resources that it can put on the table to partner with other federal agencies. The universities may need to work with other federal agencies directly on some projects. On the other hand, if there is the opportunity to create funding resources within CSREES that it can use to leverage funding opportunities with other federal agencies (such as within Sec. 406), then all the better.
- Any proposal for new activities would have to balance between two competing goals. On one hand, the initiative should be broad enough to take advantage of and benefit the many diverse areas of environmental expertise that exists with the Experiment Stations and the Extension system. On the other hand, the initiative should be specific enough so that it is unique and that it has clearly identifiable purposes and outcomes.
- The final outcome of any activities proposed should result in increased funding for research and extension to address critical environmental issues.
- Proposed activities should be coordinated with the ECOP and ESCOP Legislative and Budget Committees, but any proposed Environmental Initiative should be unique and distinct from existing activities. It should be clear that this is “additive effort,” which builds on current activities but that has a unique mandate and purpose.

### **Environmental Management Systems: A New Integrating Theme**

As one of its recommendations, the Task Force suggests that a new ECOP/ESCOP initiative be launched that addresses “Environmental Management Systems.” A first draft description of this initiative follows. The advantages of “environmental management systems” as a coordinating theme for a new initiative are

- It requires the expertise, activities and skills of both research and extension.
- It is central to a number of critical policy issues currently facing both USDA and EPA, and it is pertinent to other agencies as well.
- It is related to and draws on the data and experiences of a number of related areas, including water and soil quality, waste management, nutrient management, and pesticide management. As well, it links to an array of environmental and health sciences.
- It can provide farmers and ranchers with immediate and tangible assistance in meeting local, state and federal environmental requirements. It can also assist producers and processors meet international trade requirements.
- There are extension and research programs that demonstrate our capacity to apply environmental management and the related use of risk analysis and risk management to specific agriculture and environmental problems. These successful models can serve as the starting point for expanded programs and services through out the country.

- There is already interest by farmers, ranchers and environmentalists in some of our current programs and a potential support base for expanding individual projects to a national network of projects and programs.

### **Developing a Capacity to Respond to Policy Issues**

The Experiment Stations and the Extension System contain considerable expertise on the technical and practical implications of environmental policy choices. The Task Force proposes creating a “Think Tank” approach to develop a “quick response” capacity to addressing these issues. As topics or issues emerge that require a response, appropriate technical teams can be formed, including appropriate Research and Extension Administrators. These efforts would be different from any existing groups in that they would specifically address the role that the Experiment Stations and the Extension system have to play in solving or responding to the issue under study. Once a specific issue or project is addressed, the particular technical team involved would be dissolved.

#### Animal Waste

There is an immediate opportunity and need for a quick policy response in the area of Animal Waste Management. A New EPA draft animal waste regulations is due out for public comment on Dec. 15, 2000. The comment period will run for 60 days. The regional research and extension committees could be valuable in providing a scientific and economic analysis. Nearly 20 regional committees have been identified that have some role in animal waste management issues through engineering, land application, animal nutrition, and other topics. The expertise of these committees should be utilized and applied.

The current draft regulation is over 250 pages. It is expected to have a major impact on the livestock and ultimately the feed grain industry. Regional committees could be convened either face-to-face or by conference call and email to compile major scientific issues that could be raised in a focused effort. Clearly, the workload of responding to this lengthy regulation could be shared across the existing committees. An executive summary of all the committees could be prepared along with extensive specific comments as a joint effort of the land grants.

#### Plant Pesticide Rule

There has been a long debate on EPA’s Rules on Plant Pesticides. The House Agriculture Committee has recently objected to EPA’s recent elimination of exemptions from their draft rules. EPA’s current plans could have a dramatic impact on traditional plant breeding programs and current efforts to develop environmentally friendly agronomic production processes. There may be a need to participate in a further examination of EPA guidelines in this area.

#### Timelines

There are a number of exciting and critical project areas that could be addressed in the coming year. The most pressing opportunity will be responding to Animal Waste issues, since the public comment period will begin on December 15, 2000.

### **A Draft Initiative: Environmental Management Systems**

In addition to developing a framework for quick response to environmental policy issues, the Task Force is proposing that a new initiative be developed.

#### Situation and Need

Agriculture is recognized as having significant impacts on the environment. Major programs and policies are in place and being proposed to address the negative impacts of agriculture on the environment, including:

- Stronger policies to address animal feeding operations and nutrient impacts on hypoxia and pfiesteria.
- Development of total maximum daily load (TMDL) criteria that include nonpoint sources from agriculture.
- Community drinking water protection programs that identify pollution risks from agriculture, including disease risks from microorganisms.
- Nonpoint source pollution programs that identify risks from pesticides, nutrients, oxygen demanding materials and soil erosion.

#### The Role of Environmental Management Systems

An international standard, (ISO 14001), has been created to incorporate environmental management into international trade decisions. Environmental management systems (EMS), most particularly ISO 14001, can bridge gaps in traditional voluntary approaches to environmental management by integrating environmental responsibility into the business of farming, stressing continuous improvement and providing a reliable method to document adoption of environmentally-sound practices. While farmers face challenges in developing EMS's, they stand to gain benefits beyond reduced impacts on the environment. Programs such as Farm\*A\*Syst, the Environmental Farm Plan and the Australian Cotton Best Management are examples of current research and extension programs that provide key components required for an EMS. Farm organizations and government agencies can play a supportive role in helping individual farmers develop effective management systems.

For most producers, the central challenge in meeting ISO 14001 involves systematically identifying the environmental impacts from their activities and developing a plan to manage these risks. According to Wall and her colleagues, the Ontario Environmental Farm Plan, satisfies basic elements required for ISO 14001:

- Identifying the environmental impacts (aspects) arising from the organization's past, existing or planned activities, products or services.
- Identifying the relevant legislative and regulatory requirements.
- Identifying priorities and setting appropriate environmental objectives and targets (which includes taking into account the concerns of public interest groups affected by the environmental aspects of the organization).

- Establishing a structure and program(s) to implement policy and achieve objectives and targets.

An Environmental Management System provides a way for farmers to apply best management standards. Using assessment worksheets, farmers have the capacity to evaluate their operations to identify areas of environmental concern. On this basis, they can develop plans for implementing corrective actions. This system of environmental management fits the ISO 14001 model. With its audit provision, ISO 14001 can provide legitimacy and credibility to this assessment framework by showing that it is being used properly and is having a positive impact.

Farmer adoption of environmental management systems depends on leadership and support from different quarters. Farm organizations can work with university research and Extension faculty to refine best management practices in an industry and develop assessment tools for farmers to apply this information on their property. They identify opportunities and stimulate interest among members in environmental management systems. Farmers may not be ready to make the leap to full-blown management systems but farm organizations can move them along in the process of increased responsibility for environmental management.

For government agencies, ISO 14001 offers the opportunity to move education to a new level of disciplined application and accountability. Wisconsin is among 10 states participating in pilot programs to evaluate the benefits of ISO 14001 for farms and other businesses. Jeff Smoller, Wisconsin Department of Natural Resources, sees ISO 14001 as a vehicle for government to more effectively address environmental concerns. It can promote partnerships to insure that best management practices reflect the most advanced research at universities and the practical experience of private sector groups in agriculture.

There are positive indicators that point to growth in environmental management systems in agriculture. The building blocks are in place. Research, pilot programs and the experience of early adopters will provide valuable feedback to shape future directions. Farmers will need to make a gradual transition. Support from both the public and private sectors will be critical to stimulating individual adoption.

Many states have current programs to address “whole farm planning.” Based on the nature of Farm Planning in each state, products from the Environmental Management Systems Initiative could be integrated into and build on current Farm Plan programs.

*Extension can play a critical and pivotal role in facilitating the development and adoption of Environmental Management Systems.*

#### Risk Assessment

Environmental Management Systems in turn utilize risk assessment, which provides the conceptual underpinning for evaluating and weighing environmental and agricultural production risks. Improved risk assessment and risk management are major goals of the U.S. Environmental Protection Agency (EPA) Office of Research and Development (ORD). The EPA ORD Ecological Research Strategy focuses on the single, broad goal: Provide the scientific understanding required to measure, model, maintain and/or restore, at multiple scales, the integrity and sustainability of ecosystems now and in the future. Their research is organized around four fundamental areas of research needed by the Agency and in which ORD has made significant contributions traditionally. These research areas are:

- (1) Ecosystem monitoring;
- (2) Ecological processes and modeling;
- (3) Ecological risk assessment; and
- (4) Ecological risk management and restoration.

Within this comprehensive framework, research objectives and priorities are presented in terms of what basic science capabilities are needed to maintain focused, core research competencies and for how these capabilities may be used to address high priority environmental threats.

Within this Environmental Management Systems Initiative, State Agriculture Experiment Station research capabilities can be targeted to address the risk assessment and ecological research priorities of EPA's Office of Research and Development.

#### Partnering with the private sector.

The need to develop pro-active approaches to address legitimate environmental concerns is recognized by the agricultural community. Most government water quality programs recognize the importance of private sector involvement in agricultural pollution prevention efforts, but no funding mechanism is available to support and stimulate their leadership in this area. Targeted investments to stimulate private sector activities through development and implementation of environmental management assessment systems through interagency/private sector partnerships can yield considerable returns in terms of promoting and supporting voluntary pollution prevention actions by individual producers.

There are various working research and extension projects underway that facilitate private sector involvement. Research on use of the Farm\*A\*Syst approach by Rick Koelsch et al published in the Journal of Extension, February 2000, Volume 38, Number 1, concludes that, "Close collaboration with livestock commodity groups proved to be the most effective method for delivering Livestock Systems Environmental Assessment (LSEA) to local producers based upon extension educator observations. Involvement of the commodity groups' leadership in the initial release of this tool within a county provided critical program support, peer promotion, and validation of the assessment process." Education strategies that use personalized self-evaluation tools, combined with feedback concerning appropriate recommendations, enhance motivation of individuals to take action. Self-assessment activity is one method of insuring active participation, a key to enhanced awareness and motivation. To be effective, this activity should be part of a systematic process to change behavior that includes learning measures to prevent health risks, goal-setting, and the provision of incentives and reinforcement.

Several federal government programs recognize the need to support voluntary action among agricultural producers. These programs include nonpoint source pollution elements of the Clean Water Act, drinking water (source water) protection elements of the Safe Drinking Water Act, the Environmental Quality Incentives Program of NRCS, and CSREES Section 406 Water Quality Grants. These government efforts do not sufficiently support the agricultural community in assuming leadership to prevent pollution by developing pro-active risk assessment and management approaches to address environmental issues.

*A mechanism is needed to support increased use of private sector partnerships in developing environmental management assessment systems to identify and address environmental risks. This mechanism could be developed in the next Farm Bill.*

## Geospatial Technologies

Geospatial technologies, GIS and new computer-based decision making tools are critical components of developing environmental management systems. This initiative will coordinate and build on the current efforts with NASA to develop Extension Specialists and program delivery capability in geospatial technologies.

We have experienced a virtual explosion in the availability and use of information technology over the past decade. This is especially true in the three primary "geospatial" technologies - remote sensing, geographic information system (GIS), and global positioning systems (GPS). Often, the technology has advanced so quickly that many potential users have been left behind. Among the most prominent potential users are those involved in the use and management of Earth resources, such as agriculture, natural resource management, and urban and regional planning.

Although there are a number of obvious direct uses of these technologies, such as resource inventory, there is also a good deal of valuable science that is built on the data they yield. For example, the ability to predict El Niño events based on observations of sea surface elevation and temperature is of considerable potential value to farmers, foresters, and emergency planners. Thus, the potential benefit that might be realized will be determined by our ability to use both the science and the technology in tandem.

The gap between the "haves" and "have-nots" in geospatial technologies will most likely widen. The National Aeronautics and Space Administration (NASA) has begun to launch a new fleet of Earth observing satellites that will usher in a new era in remote sensing over the next five years. As this trend accelerates, the challenge is to find effective and efficient means for bridging that gap. The NASA Space Grant Extension Specialist in Geospatial Technology is a pilot program to explore how best to meet the needs of farmers, ranchers, planners and others involved in agriculture, natural resource management, and rural development. It seeks to join the missions of the NASA Office of Earth Science and NASA Space Grant with the long-standing experience and existing infrastructure of the U.S. Department of Agriculture (USDA) Cooperative State Research, Education, and Extension Service (CSREES). The approach is to place an Extension Specialist in Geospatial Technology within CSREES of a Land Grant University. The specialist then characterizes the needs of the different constituencies in the state (e.g., farmers and foresters), and works with them to design solutions that meet their information needs within their budget and staffing constraints.

## Coordination with Existing Initiatives

The Environmental Management Systems Initiative would focus on funding opportunities in USDA/NRCS, EPA and NASA. It would be coordinated with current ECOP and ESCOP initiatives regarding USDA/CSREES. Efforts would be made early on to meet with our specialists and program leaders in related areas of environmental expertise, including – animal waste, water quality, IPM, sustainable agriculture, precision agriculture and risk management.

## **Proposal**

Establish and fund a program that stimulates interagency/university/private sector partnerships in developing and delivering environmental management assessment systems that identify and address environmental risks in farming operations. This program will:

- Support the incorporation of the latest research and technical recommendations into environmental management system materials and programs that aid producers in identifying environmental risks on their properties and applying the best available technology to reduce or eliminate those risks;
- Increase producer access to the latest research findings and policy requirements related to agricultural environmental risks; and,
- Identify limitations of existing technology in preventing pollution and research needs to address those limitations.

This framework will expand the Risk Management Agency's ability to aid producers in identifying and addressing environmental risks. Resulting partnerships with national, state and local farm organizations will produce commodity-specific environmental management systems and support use of those systems by producers. Resulting programs and materials will: help individuals identify environmental risks unique to their operations and apply the latest research findings and policy requirements when developing plans to reduce pollution risks; increase the availability of local applied research and demonstration sites on practices that reduces environmental risks; and increase knowledge of local support available for taking voluntary actions to prevent pollution. Data from assessments will assist in identifying research and education priorities related to reducing agricultural impacts on the environment and support the targeting of funds to those priorities.

### **Funding**

The funding level and funding mechanisms for this initiative will need to be developed in subsequent meetings and discussions. A mix of EPA, USDA/NRCS and USDA/CSREES mechanism might be appropriate. As an initial indication of scale, forty million dollars (\$40,000,000) would certainly be an appropriate target.

### **Time Frame**

A fairly quick time frame for this initiative would be to develop it so that it could be initiated in the next Presidential Budget cycle for FY 2003. This would require a series of meetings with appropriate agency officials prior to May 2001, as agency recommendations for FY2003 will begin about that time. Accordingly, meetings within the Land Grant Community and with interest groups would need to be underway in early 2001. Such activities in the Winter and Spring of 2000 would be consistent with a goal of including this Initiative in the next round of the Farm Bill.

### **Next Steps**

Proposed activities must be coordinated with current ECOP/ESCOP/Board on Agriculture Committee processes and emerging efforts to support research and extension, such as the NASULGC Food and Society Initiative and the National C-FAR efforts.

### Decisions and Communication within the Land Grants



- Forward recommendations to the Chairs of ECOP and ESCOP. Resolve if the proposal needs to be forwarded to all of the Directors prior to the NASULGC 2000 meetings for discussion at the meetings. Also, before the NASULGC 2000 meetings—
  - Apprise the Chairs of the ECOP Budget and ESCOP Budget/Legislative Committees regarding the proposal so that they will be in a position to consider the implications of the proposal on their recommendations for FY 2002.
  - Apprise the Chair of the ECOP Legislative Committee, as the proposal may need to be integrated in the legislative agenda, particularly for the Farm Bill.
- If the decision is made at or after the NASULGC meetings to proceed with an Environmental Risk Analysis and Risk Management Initiative—
  - The responsibilities of the Task Force will need to be extended. The Task Force may wish to augment its membership with research and Extension specialists.
  - Discussions regarding the impact of the Initiative will need to be further discussed with the leadership of the other committees, particularly the budget and legislative committees.
  - There should be coordinating discussions with Sam Smith and the participants in the Food and Society Initiative.
- A teleconference or workshop should occur with key research and extension leaders of related environmental initiatives, including water quality, waste management, IPM and sustainable agriculture. The relation of this initiative to their respective areas of expertise needs to be discussed.

#### Coordination and Communication Meetings and Workshops

- *Political Leadership.* Meetings should occur with the Transition Teams for USDA and EPA. As the political leadership of the two agencies comes into place, briefings should be provided. In the interim, meetings should be scheduled with OMB and the senior staff of the authorizing and appropriations Congressional Committees.
- *Agencies.* There should be ongoing discussions with the Administrator of CSREES and her staff. Similarly, there should be good and ongoing communication with – ARS, ERS, NRCS, FSA and USDA’s Office of Risk Management. There should be ongoing discussions with EPA’s Office of Research and Development.
- *Interest Groups.* A meeting will need to be held with staff at the Natural Resources Conservation Society; they have been conducting workshops with farmers and environmentalists to discuss their respective interests in the next farm bill. There should be discussions with the leadership of the National CFAR effort. And in turn, discussions with specific farm and commodity groups, including the Farm Bureau, the National Cooperatives, the Farmers Union. As well there should be parallel meetings with appropriate environmental groups, including American Farmland Trust, the Nature Conservancy, the Natural Resources Defense Fund, and the Environmental Working Group.

## **Supporting the Initiative**

Staff support will need to be provided to arrange for and facilitate the numerous meetings and discussions that will need to be held to develop this initiative. A series of small workshops will be needed around the country to develop commodity and regionally specific projects and proposals, which would be incorporated in the Initiative. A "Think Tank" could be utilized to provide the staff support for the meetings and workshops utilized to develop the initiative. Funding remaining from the SUNEI Initiative would be utilized to provide this staffing and to cover the cost of the workshop series.

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## **3.2 Bioenergy / Bioproducts**

### *America needs renewable energy and bioproducts*

Americans have grown weary of oil's grip on our quality of life. For years, America forgot about the energy shock of the 1970s until recent prices commanded our attention again. Not only are we forced to remember our dependence on oil from some of the world's most unstable areas, but America's dependence on imports has grown from less than 50% at the time of the last crisis to an import rate today of almost 60%. This fact alone means it is time to renew America's support for the development of new energy technologies. Energy is important and its cost is a sensitive health measure for industries, for example, 60% of the cost of producing food and fiber. As everyone knows, new technology doesn't develop overnight, and it is time to make an enhanced national investment in the research and development of new domestic energy technologies.

### **What Needs to be Done**

Last year, the Administration issued, with bipartisan Congressional support, an important Executive Order that expressed a national policy to invest in expanding research and development for biomass through interagency collaboration which should be fully implemented. The Biomass Initiative, co-led by USDA and DOE, promotes clean energy research in order to develop renewable energy sources. The commercial viability of these fuels can be achieved over time through research refinements and innovations. We have developed clean energy technologies but need to spread their commercial use.

While a good start to funding for this research was approved by the last Congress, the program should be substantially expanded in the near future. The return on our quality of life and employment far outweighs the relative investment in basic research. In addition, extended tax credits for wind, methanol from animal waste, biodiesel fuel from soybeans and biomass ethanol production should be included in any future energy tax reform proposals. These efforts will help to reduce emissions and reliance on imported oil, while alternative agricultural markets for existing production will benefit the farmer.

Federal efforts to promote the development and use of bio-based energy technologies should be expanded, especially given our vulnerability to non-domestic oil. These new technologies convert crops, trees and other "biomasses" into a different source of energy. New fuels from these efforts

could help reduce reliance on foreign oil and cut greenhouse gas emissions by some estimates of up to 100 million tons per year in 2010 - the equivalent of taking 70 million cars off the road.

The Clean Air Act of 1990 mandated cleaner gasoline called “reformulated gasoline.” Part of that law established a requirement that reformulated gasoline contain oxygenates—fuel additives such as ethanol that allow gasoline to burn cleaner. Using ethanol which allows gasoline to burn cleaner without jeopardizing our water supplies can protect public health and the environment by ensuring that Americans have both cleaner air and cleaner water too—and never one at the expense of the other. Also, carbon sequestration research can help reduce the CO<sub>2</sub> content of the atmosphere and provide a renewable carbon source. Similar tax credits to those provided under the clean air program could prove valuable incentives to advance these pro-environment technologies.

### **Proposals for A More Secure Energy Future**

(1) Double the national commitment to USDA/DOE biomass research from \$120 million to \$240 million over the next five years. The USDA portion of this joint authority could be expanded in the Farm bill reauthorization. (2) Extend tax credits for alternative uses of ethanol from biomass, biodiesel from soybeans, and methanol from animal waste.

#### Concept Development

ESCOP and ECOP could play a major role in convening a workshop to explore relevant issue areas. A one to two day workshop including group talks and break-out sessions would be the most efficient way to reach consensus. These break-out sessions would include panels of experts to flush out specifically what adequate research can accomplish and how relevant education can play a role.

Immediately following this conference, ECOP & ESCOP budget and legislative committees should participate in a day session filtering out what was learned and formalize information for advocacy. Once this is done, an Energy Working Group could be formed from expertise throughout the LG system to finalize the Group’s position and gather examples and images for presentation to Hill and Administration.

#### Defining Opportunities

##### *Authorizations*

- Farm Bill

##### *Appropriations Bills*

- Energy
- Agriculture

##### *Congress*

##### Senate

- Agriculture, Nutrition and Forestry Committee
- Energy Committee

- Finance Committee

#### House

- Agriculture Committee
- Commerce Committee
- Ways and Means Committee

#### Engaging the Land-Grant University Family

ECOP & ESCOP – we can coordinate closely with USDA and DOE to plan the proposed workshop and make a commitment to utilize the workshop in developing programs. The workshop should serve the dual purpose of engaging the LGU family in planning and the coalition building by inviting other organizations as participants.

LGU Family to assist with planning: USDA, University Presidents, Relevant Existing NASULGC tasks forces and committees including subcommittees of ECOP/ESCOP, Tribal Colleges/AIHEC, 1890s ARD and AEA, and others.

#### Implementation Planning

Seek support and a firm endorsement of the Energy Working Group’s position. Attempting to have expanded representation on the Working Group from among:

- BOAB Committee
- ESCOP AND ECOP Legislative Committees
- Food and Society Committee
- BOA Farm Bill Reauthorization Committee
- CARET/CGA/Lay Leaders

#### Coalition Building and Coordination

We can begin with the Department of Energy programs that correspond to the Energy Appropriations Bills listed above. We can encourage discussions between USDA and DOE to coordinate policy and programs. This will reassure Congress and the Administration that we are serious about creating sound policy and begin the process of identifying specific opportunities in these agencies.

#### ***Relevant Outside Organizations***

- National C-FAR
- CoFARM
- CROPs
- National Governor’s Association
- National League of Cities
- National Association of Counties
- Biomass Caucus
- Farm Bureau
- Farmers’ Union
- Regional Transportation Authorities

- EPA

### Advocacy

Create a National Energy Security Coalition (NESC) inviting all groups listed above. The NESC may have a broader message than the LG developed position.

### Grassroots Effort

Identify people in key districts/states that want to partner with the universities but are limited because of resources or that have great success stories that needs to be replicated. They can tell their local story better than anybody and a member will be able identify with why they should care about this problem.

Implement advocacy at all levels of the LG System including Presidents, Deans and Directors and faculty on campus and in the field.

### Targets

Target state delegations with representation on the Ag Committee's Research Subcommittee and Appropriations Energy Subcommittees and seek champions from among the following targets:

Appropriators  
(Energy Subcommittees)

Authorizers  
(Ag Research Subcommittees)

### Finding Champions

An education process in the House might be necessary to locate champions but some prospects might include - Congressional Rural Caucus leaders (Jo Ann Emerson & Eva Clayton), Tom Latham and Sam Farr

Senate – Lugar, Harkin, Daschle, and Grassley

Administration (to close to call)

### Advocacy Steps

Hill Briefings – ideally we should coordinate with some of the groups listed above and hold hill briefings. In addition, partner with collaborating groups on receptions and events in DC to gain recognition.

Testimony – place ourselves in a position to be asked for testimony as hearings develop on farm bill and each issue area

Develop state specific one-pagers with a link to extension and research website of the Land-Grant university for more information. This document will contain an example of what has been done and what needs to be done but resources are not available.

Website should be available for staff to find program examples along with system needs

Continue to grow the grassroots effort and go beyond CARET and lay leaders to find participants in land-grant programs that personify our mission.

Set up a fly-in during appropriations process for specific participants from the conference to meet with congressional staff on system outcomes from the conference and needs.

The main advocacy decision is how to address Members of Congress and move the multiple elements of this initiative. The centralizing them is “national energy security.”

## **Conclusion**

Creating the central message of “agriculture as the solution” to energy security through biomass technology research and development, we unify a national coalition process that provides Congress and the Administration with a specific program to enhance the quality of life and national security.

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### **3.3 Biotechnology** *Biotechnology in the public interest*

At the beginning of the new millennium there is an unprecedented array of new scientific tools available to enhance the quality of the food supply and its availability. Never before have so many options been available to increase production capacity, develop new products, and enhance product quality. Not only is it possible to increase nutritional quality of food, but also there is potential to eradicate human, animal and plant diseases through genetic modification of food and fiber sources. Effective use of these scientific tools has great potential for enhancing human well being and the agricultural economies around the world.

Unfortunately, the full potential of biotechnology is being limited by: 1) lack of public understanding of the science involved when it is applied to food and fiber products, 2) public fear for the safety of genetically modified products, 3) cost of access by most farmers to biotechnologically modified inputs and of uncertainties about their regulation, and 4) fear of unfair economic competition in national and international markets.

Many efforts to clarify the issues and seek solutions are emerging in Congress, universities, and public and private organizations; however, resolution is not yet in sight. Related bills which have been introduced address: 1) a consumer food safety (Sens. Dorgan, Durbin, Harkin), and (Reps. Pallone, Brown) (4/99); 2) consolidation of food safety, labeling and inspection into one Federal agency (Sen. Durbin), and (Rep. DeLauro, et al) (6/99); and genetically engineered food safety (Sens. Moynihan, Dorgan, Durbin, Harkin) and (Reps. Kucinich, et al) (3/00). No bill has been reported out of committee to date. The Senate Foreign Relations Committee held a hearing on biotechnology as a tool in combating poverty and hunger in developing countries led by Sens. Hagel, Sarbanes, Ashcroft, Lugar. Seminars have been held by the Georgetown Center for Food and Nutrition Policy, International Food Information Council, Environmental and Energy Study Institute and many others. An ESCOP/ECOP Task Force issued a comprehensive report on Agricultural Biotechnology: Critical Issues and Recommended Responses from the Land Grant Universities, and the ESCOP subcommittee on social science has developed positions on biotechnology and food safety.

## What Needs to be Done

To ensure continuing development of benefits of biotechnology to human health and the global economy, the major gaps in public understanding of these new sciences must be closed and a new level of public trust in their use developed. Major investments must be made to improve public scientific literacy, and to understand consumer motivation toward risk and change. Further, consumer behavior must be understood in cultural contexts if world markets are to be achieved. Further research into biotechnological applications of food and fiber must include in the research design elements of ethics and social implications of the outcomes. Information thus generated can become the basis for more informed public education, outreach programming, and economic policy.

### Proposals

- Launch a major coordinated research and education effort to close the gap of public understanding of the science and use of biotechnology in the production of the food and fiber supply.
- Accelerate collaborative efforts with other Federal agencies to assure a more seamless research agenda from basic genetic and biotechnological research to applications in agriculture; health, nutrition and food safety; energy and other biobased products; and environmental conservation.
- Accelerate research efforts on behalf of appropriate agencies and others to assure the best science available as the basis for regulation, public health and education, and the media.
- Enhance publicly supported applied research to make genetically modified inputs available and affordable to all farmers and food processors.
- Ensure that agricultural economic policy, national and international, is based upon scientific understanding of culturally based consumer perceptions of risk and acceptance of change.

### Developing the Concept

USDA should convene a series of high level summit meetings to define the issues and opportunities for agricultural research and education in the era of biotechnology, genomics, and other new sciences and technologies. Participants should include leadership from science agencies (NIH, NSF), university scholars, foundations, industries, Administration (OSTP), and Congress. Both biotechnologists and social scientists must be involved in the discussions. Further, international governments, trading partners and potential trading partners, must be involved. Summit emphases should include: 1) advancement of new sciences, 2) application of scientific concepts to production of goods and services, and 3) assurance that public information and public policy be based on sound science.

The Land Grant University system, its ECOP and ESCOP committees, should devote follow-up working conferences to evaluate and use findings from the summits as a basis for both advocacy and budget strategies.

### Defining Opportunities

#### Farm Bill—House and Senate

Preliminary indications are that biotechnology will be a leading issue for House and Senate agriculture committees in the 107<sup>th</sup> Congress. In the 106<sup>th</sup> Congress, the House and Senate proposed bills to create: 1) a consumer food safety act, 2) a separate Food Safety Agency, 3) and

a genetically engineered food safety act. Preliminary discussions suggest that the Senate may possibly be considering proposing a separate Biotechnology agency.

*Appropriation Bills*

- Agriculture
- Commerce
- Labor, HHS—nutrition and food safety
- Energy and water
- Foreign Operations

*Authorization Possibilities*

Senate

- Agriculture, Nutrition and Forestry
- Commerce, Science and Transportation
- Energy and Natural Resources
- Foreign Relations
- Health, Education, Labor and Pensions

House

- Agriculture
- Commerce
- Education and workforce
- International Relations
- Science

Engaging the Land Grant University Family

(See Developing the Concept above)

Coalition Building

(See Developing the Concept above)

Engaging relevant outside groups:

- NIH
- NSF
- AAAS
- Scientific societies—American Institute of Nutrition, Institute of Food Technologists, American Society of Agronomy, Tri Societies, AVMA, FASEB, COSSA, AAHS, RSA, ASA, etc, etc, etc.
- OSTP
- Key Congressional Leadership
- Rockefeller Foundation, Environmental and Energy Study Institute, International Food Information Council, Georgetown Center for Food and Nutrition Policy, etc., etc.
- National C-FAR, CoFARM, NASULGC (Food and Society)
- World Trade Organization, World Bank, United Nations, etc, etc, etc.

Finding Champions



It will be important to link LG leadership and key stakeholders with Congressional and other champions. To be effective these links must be carefully chosen and nurtured accompanied by an active feedback structure.

- Senate—Lugar, Dorgan, Durbin, Harkin, Cleland, Mikulski, Torricelli, Hagel, Sarbanes, Bond
- House—DeLauro, Kucinich, Pallone, Bonior, Brown, Carson, Conyers, Crowley, Cummings, Davis, DeFazio, Doyle, Faleomavaega, Frost, Hinchey, Jackson-Lee, Jones, ST, Kaptur, Kildee, Kilpatrick, Latham, Lee, Lipinski, Lowey, McDermott, McGovern, Metcalf, Olver, Owens, Rangel, Rivers, Roemer, Roybal-Allard, Rush, Sanders, Serrano, Stark, Udall, Waxman, Waters, Woolsey, Wynn
- Administration—possibly Arthur BeninStock, Cliff Gabriel, etc
- Appropriate science societies
- Appropriate non-governmental organizations

#### Advocacy

- Develop strategies together with game plans to advance the key themes identified for biotechnology and genomics. These may include:
  - Hill briefings—especially in collaboration with champions from the districts of legislators holding the hearings, key stakeholders, key scientists, appropriate support groups.
  - Testimony—place ourselves in a position to be asked for testimony as hearings develop on farm bill and each issue area.
  - Develop state or issue specific one-pagers with links to extension and research websites of the LGU's, giving site specific examples of what is being done to support the issue or solve a problem.
  - Websites—make websites available to Congressional staff and others for information on the issue and what is currently being done to address it.
  - Face to face—arrange fly-ins at appropriate times in the legislative processes for LGU leadership to meet with key legislators. Likewise, arrange opportunities for legislative staff to visit appropriate research and extension sites to reinforce key issues.

#### **Conclusions**

A central message for a new genomics and biotechnology initiative is to realize the full potential of these new sciences/technologies to benefit health, nutrition, the agricultural economy and the environment by removing the impediments of public fear and doubt about their use and safety as well as their cost. This requires major new approaches to assure public understanding of science involved when biotechnology is applied to food and fiber products, both domestically and in international markets and to level the playing field for access.

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## **3.4 Communities**

### *Revitalized Communities*

What makes a community and a country prosper? *Engaged citizens!*

All communities (urban, suburban, and rural) face a multitude of diverse challenges. What city services does an aging population need? Where do you find multilingual teachers in Nebraska?

What is the digital divide and how does it affect our community? How does Wal-Mart expect us to build a sewer line all the way out there?

Providing community leaders with the resources to resolve these and many other issues is the key. Community leaders have grown weary of claims of ‘one-stop shopping for all your city managerial needs’, yet, they still lack the resources to visit all the stores. This is where land-grant university personnel can help.

Given the mission, diversity, and local presence of land-grant university personnel in tribal, rural, suburban, and urban communities, these institutions are in the best position to partner with other local organizations to coordinate and facilitate local resources. A variety of expertise is needed to improve healthcare access, assist with conflict management, promote economic development, ride the technology wave, and provide needed support for strong families. Quality research data and capable extension personnel enable under-served communities to assess their needs, establish short and long term goals, and access resources necessary to accomplish those goals.

### **What is Leadership Development?**

Leadership development programs provide access to information and resources that prepares local residents to assume active, responsible roles in their communities. Several communities, states, and regions have developed programs that combine leadership skills training with community and economic development strategies. Land-grant universities provide two essential elements. First, the compilation of relevant research data on programs throughout the country analyzing success and failure which prevents communities from repeating the past missteps of others. Second, extension specialists, linked throughout the land-grant system, who take this research information out to the community. Thus, allowing a small town in upstate New York to learn from the actions of a city in Wisconsin. Developing action plans, articulating vision, understanding others’ leadership styles, facilitating change, and working together through teams are applied skills participants learn through case study documentation, instruction modules on local government, and mentoring groups.

With the continuing emphasis on local control and the growing gap between the have and have-nots, it becomes essential that communities become efficient and the land-grant system can help.

### **How can Leadership Development make a difference?**

#### Bring Information Technology to Every Citizen

Rural, suburban, and urban communities each face challenges toward ensuring access to information technology for their citizens. Urban and suburban communities face a racial digital divide. Several studies have shown a significant gap in internet access between white and non-white individuals regardless of economic status. Researchers and urban extension specialists can bring community leaders together to continue collecting relevant data and begin exploring solutions to this perplexing problem. In rural areas the access problem is more basic. In rural areas, many of the local government employees and civic leaders lack significant computer skills much less adequate equipment. In this environment, universities can provide everything from computer courses to establish the technology infrastructure in a remote area to coordinating community leaders on how to engage their community.

#### Strengthen and Secure Economic Development

Building adequate infrastructure, educating a workforce, providing small business development strategies, creating quality recreation and cultural activities, are all necessary components of community economic development. Growth in suburban areas have created the phenomenon of people demanding services the city has not created. In addition, many rural communities are trying to be proactive as sprawl continues. Parks for children, community centers, land fill space, and quality roads are amenities businesses require to locate in an area and young families look for when moving to a community. These services require extensive planning to create which are significant costs before anything gets built. Land-grant university personnel can link communities with civil engineers, park planners, and architects with experience in their circumstances and help alleviate some of the substantial costs.

#### Provide Needed Family Support Services

State, regional, and county-level educators can deliver basic consumer education; teach personal financial management skills to youth, limited-resource families, and young families; and promote comprehensive financial planning. Extension specialists provide an overview of the base program in this subject matter area. Some county Extension offices also help families in financial crises through one-on-one consultation. Issues receiving increased attention are basic life skills leading to job retention for welfare-to-work individuals, saving for retirement, personal finance education for youth and employees, and electronic benefits transfer if citizens choose not to use banks. These are services vital for urban, suburban, and rural communities to succeed as populations grow and diversify.

#### Educate People Throughout Their Lives

Preschool, elementary, secondary, and continuing education are all important to an individuals success. With the separation of civil government from school oversight, it is essential that a partnership develops. Research indicates that a child's access to quality pre-kindergarten instruction is a strong indicator of that child's success in school. In addition, technology and industry changes dictate that people recognize that learning does not end with high school or college, we have to continually advance and learn throughout our lives. Universities are increasing their distance learning capabilities and short courses for career development. Increased investment ensures continuation of research on curriculum development and lowers costs for participates which allows greater access to programs.

#### Deliver Necessary Social Services

Welfare-to-work programs, quality healthcare, access to law services, children programs, and community shelters are essential services for many communities. Although many people think sprawl issues are new, suburban communities have existed for the last 50 years. Many of these older communities are facing problems previously thought of as urban issues. Concentrations of poverty and low-income citizens are developing in these older parts of town which these communities have never had to deal with and do not have the resources to address. How to revitalize neighborhoods and empower residents, are skills land-grant university personnel can give civic leaders.

#### Ensure Quality Healthcare

Researchers at land-grant universities monitor the impacts of market forces on rural health infrastructure and rural health delivery, and they analyze impacts of changes in federal policy on rural consumers, rural health infrastructure and rural communities. In addition, researchers seek

to identify and model the economic impacts of the rural health care sector on rural economies and articulate the potential importance of health care as a vehicle for economic growth and development in rural communities. This provides a community access to information they would not otherwise have the capacity to gather. Thus, providing indicators to that community's future given the healthcare infrastructure and allow a community the opportunity to seek expertise to reverse economic trends before they take place.

### **What Needs to be Done?**

Over the past year, various legislation concerning communities has moved through Congress. Apart from tracking this legislation, the system was unable to give direction on specifically how the land-grant universities should be included. Given the breath of system work on communities issues, it was difficult to identify something specific to ask for inclusion in any legislation. Therefore, we are proposing leadership development as the overarching theme for land-grant communities initiative opportunities in the upcoming year. For example, if the rural health caucus sponsors legislation to address access to quality health care the land grant component we would advocate would be building capacity for leadership development. This includes supporting research on how rural areas are impacted by healthcare variables and how extension/outreach efforts can make a difference. Regardless of the topic area : economic development, information technology, family programs, etc. the unifying land-grant mission will be building leadership development capacity so local communities can solve local problems.

In order to formalize this mission, several steps are necessary: concept development, defining legislative opportunities, engaging the entire land-grant system, coalition building, and advocacy.

#### Developing the Concept

USDA should play a major role in convening a workshop to explore relevant issue areas. A two-three day workshop including group talks and break-out sessions organized by subtopic would be the most efficient way to reach consensus. These break-out sessions would include panels of experts to flush out specifically what adequate leadership development can accomplish and how relevant research can play a role. There also must be discussion of both rural and urban issues and how the system wants to discuss the tension between them. In addition, there should be some discussion about whether we always present a united community effort (meaning rural, urban, and suburban always together) or will there come a time when we have to explain each separately.

Immediately following this conference, ECOP & ESCOP budget and legislative committees should participate in a day session filtering out what was learned and formalize information for advocacy.

#### Defining Opportunities

Farm Bill – especially in the Senate

Preliminary indications are that the Senate would like to take up community issues as a part of the farm bill, specifically rural problems.

#### *Appropriations Bills*

- Agriculture

- Commerce – Information Technology and Small Business
- Interior – Tribal Issues and land use
- Labor, Health, and Human Services, Education – Social Services, Family issues, and Education Research
- VA-HUD – Urban programs

#### *Authorization Opportunities*

Of course, it is difficult to predict where legislation will materialize. If a member wants to accomplish something they find a way sometimes in interesting places but here are some of the committees we will need to watch.

#### Senate

- Agriculture, Nutrition and Forestry Committee
- Banking, Housing and Urban Affairs Committee
- Commerce, Science and Transportation Committee
- Environment and Public Works Committee
- Health, Education, Labor and Pensions Committee
- Indian Affairs Committee
- Small Business Committee

#### House

- Agriculture Committee
- Commerce Committee
- Education and Workforce Committee
- Small Business Committee
- Transportation and Infrastructure Committee
- Ways and Means Committee

#### Engaging the Land-Grant University Family

ECOP & ESCOP – we will seek to work closely with USDA, possibly to plan a workshop and make a commitment to jointly filter information from workshop to develop a clear strategy

The workshop should serve the dual purpose of engaging the LGU family in planning and the coalition building by inviting other organizations as participants.

LGU Family to assist with planning : USDA, University Presidents, Rural Development Centers, Relevant Existing NASULGC tasks forces and committees including subcommittees of ECOP/ESCOP, Tribal Colleges/AIHEC, policy research centers such as RUPRI, FAPRI, and others.

#### Coalition Building

We must beginning with the federal agencies that correspond to the Appropriations Bills listed above. The system should facilitate discussions between USDA and these agencies to coordinate policy and programs. This will reassure Congress and the Administration that we are serious about creating sound policy and begin the process of identifying specific opportunities in these agencies.

### *Relevant Outside Organizations*

- Engage Urban groups
- US Conference of Mayors
- International City/Council Management Association
- National Governor's Association
- National League of Cities
- National Rural Development Partnership
- National Association of Counties
- National Association of Development Organizations
- National Association of Towns & Townships
- State Rural Development Council Directors (directly rather than just through the Partnership)

These organizations represent our clients for leadership development. They need to be informed and engaged in our process so if asked we know they support our message.

### *Grassroots Effort*

Identify people in key districts/states that want to partner with the universities but are limited because of resources or that have great success stories that needs to be replicated. They can tell the story better than anybody and a member will be able identify with why they should care about this problem.

### Finding Champions

- An education process in the House might be necessary to locate champions but some prospects might include - Congressional Rural Caucus leaders (Jo Ann Emerson & Eva Clayton), Rosa Delauro, and Charlie Stenholm
- Senate – Harkin, Daschle, and Cochran
- Administration (to close to call)

### Advocating

- Hill Briefings – ideally we should coordinate with some of the groups listed above and hold hill briefings. In addition, partner with collaborating groups on receptions and events in DC to gain recognition.
- Testimony – place ourselves in a position to be asked for testimony as hearings develop on farm bill and each issue area
- Develop state specific one-pagers with a link to extension and research website of the Land-Grant university for more information. This document will contain an example of what has been done and what needs to be done but resources are not available.
- Website should be available for staff to find program examples along with system needs
- Continue to grow the grassroots effort and go beyond CARET and lay leaders to find participants in land-grant programs that personify our mission.
- Set up a fly-in during appropriations process for specific participants from the conference to meet with congressional staff on system outcomes from the conference and needs.

The main advocacy decision is how to address Members of Congress and move the multiple elements of this initiative. Although it would be wonderful if we could find one member who understood all the aspects of our program and would support it, this is unlikely. Therefore,

finding different elements or topics that resonate with different members, while let those members know what each other is doing on our behalf, seems like the most effective course. The centralizing them is leadership development. However, Congresswoman Delauro might really identify with suburban community revitalization while Representative Clayton believes family support programs are what North Carolinians need. We still have the central message of leadership development; we are just emphasizing different aspects of leadership development. Given the unpredictable nature of legislation, we feel the more irons we have in the ready, the more likely one will catch fire.

## **Conclusion**

Creating the central message of building leadership capacity, we unite rural, urban, and suburban communities and provide Congress and the Administration with a specific way to effect change in their districts/states. Thus, illustrating the unique role the Land-Grant System plays throughout the country addressing the challenges of each and every citizen.

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## **3.5 Science Policy**

Until the new Administration or the Congress makes this a priority issues, AESOP will monitor the possible emergence of new science policy.

- If the House Science Committee begins to revise or move its science agenda forward, AESOP will meet with the ECOP and ESCOP Legislative Committees to identify appropriate actions to assure that SAES and ES concerns are addressed.
  - AESOP will meet with OSTP staff to stay apprised of Administration science policy. AESOP will monitor the activities of PCST and the President’s Science Advisor.
  - As appropriate, AESOP staff will meet with and participate in activities at NSF and NAS / NRC.
  - AESOP will monitor the activities of the Congressional committees with jurisdiction over general science issues.
  - AESOP will explore opportunities to collaborate with the Science Coalition and the Congressional working groups on “Doubling.”
  - AESOP may participate in ongoing “Century III” discussions, organized through NASULGC, as directed by the Chairs of ECOP and ESCOP.
  - AESOP may participate in the development of a “Science Roadmap,” as discussed by ESCOP.
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## **4.0 Emerging Issues**

This category is reserved for addressing unanticipated issues. The Chairs of ECOP and ESCOP may agree with AESOP to redirect time and resources to addressing these surprises before the

next quarterly plan is revised. In such matters, The Chairs of ECOP and ESCOP will jointly discuss with AESOP the need for such revised activities.

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## **Additional System Activities**

AESOP will participate in the following meetings unless there are critical events underway in Washington:

- ECOP and ESCOP meetings, as well as joint ECOP / ESCOP meetings.
- SAES Directors annual meetings
- ES Directors yearly meetings, when they occur.
- ESCOP / ACOP Leadership Training Sessions, as requested.
- Annual NELD meetings, as requested.
- NASULGC annual meetings
- Appropriate AHS / CARET meetings, in DC.
- CARET Executive Committee meetings in DC.
- Appropriate CGA meetings in DC.
- CFERR and CFERR Legislative Committee meetings, in DC.
- Appropriate BOA meetings, in DC.
- BOA Budget Committee meetings and teleconferences.
- BOA Science and Technology Committee meetings in DC and teleconferences.
- ECOP / ESCOP Image Enhancement Committee

As appropriate to the issues, AESOP will participate in the following ECOP and ESCOP committee meetings and teleconferences:

- ECOP
  - Budget Committee
  - Legislative Committee
- ESCOP
  - Budget and Legislative Committee
  - Partnership Committee
  - Media and Advocacy Committee
  - Science Committee

Depending on the Congressional schedule, AESOP will attempt to participate in at least one of each of the research and extension regional meetings each year. AESOP will tend to target regional meetings where research and extension are meeting at the same location and time, to minimize the time out of Washington.

AESOP is asked to participate in many additional workshops and activities outside of Washington. In general, AESOP may participate in a few workshops or activities that are deemed critical to carrying out its assignments for ESCOP and ECOP; these will be discussed between AESOP and the ESCOP and ECOP Chairs on a case-by-case basis

AESOP will provide routine electronic communications via News from the Hill and Action Alerts to the system regarding its activities and needed actions.

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