

2008 University of Missouri Extension Annual Report of Accomplishments and Results

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2008 University of Missouri Extension Annual Report of Accomplishments and Results

I. Report Overview

1. Executive Summary

University of Missouri Extension (MU Extension) had a very productive year in achieving its goals set out in the 2008 plan of work. MU Extension's 2008 programs addressed such issues as: the growing obesity problem in Missouri; building a sustained holistic economic development model in Missouri that addresses the need for vibrant communities, retention of jobs, and viable businesses; food productivity and safety in Missouri's agricultural arena; and building tomorrow's leaders through our 4-H Youth program.

Our stakeholders continue to articulate the need for more programming from us at a time of diminishing budget. We continue to incorporate the use of technology in our delivery systems in order to leverage the human capacity that we have. MU is contributing to programming efforts in eXtension as well as developing a more comprehensive and accessible website for our stakeholders. We are also seeking alternative funding from grants, gifts, and fee generation to further leverage the resources that we receive from our state, federal, and county partners.

Our goal is to be reliable, responsive and relevant. We accomplished that goal in 2008 by providing research-based knowledge to Missourians that was aligned with their priorities of jobs, health, and education.

Total Actual Amount of professional FTEs/SYs for this State

Year:2008	Extension		Research	
	1862	1890	1862	1890
Plan	262.0	0.0	0.0	0.0
Actual	235.3	0.0	0.0	0.0

II. Merit Review Process

1. The Merit Review Process that was Employed for this year

- Internal University Panel
- External Non-University Panel

2. Brief Explanation

In addition to reviewing the stakeholder input from all 114 counties, regional and state faculty surveyed current literature to identify state-wide demographics, national and state trends, and discipline specific research related to program effectiveness. Based on this review, state-wide priority needs were identified and programs in response to those priorities were developed by faculty. The program priorities along with their program logic models were then reviewed by the appropriate state program leader to assure that the programs are both relevant and of high quality.

State-wide program priorities will be utilized by regional faculty as they develop a local programming response to their county's identified needs. The resulting proposed county program plan will then be taken to the county council for their acceptance. Once approved, the programming will be delivered and the impact evaluated.

By establishing this ongoing merit review process of: stakeholder needs identification; program response by faculty; stakeholder feedback; and outcome assessment, the quality and relevance of programs will be maintained.

III. Stakeholder Input

1. Actions taken to seek stakeholder input that encouraged their participation

- Targeted invitation to traditional stakeholder groups
- Targeted invitation to non-traditional stakeholder groups
- Survey of traditional stakeholder groups
- Survey of traditional stakeholder individuals
- Survey of the general public
- Survey specifically with non-traditional groups
- Survey specifically with non-traditional individuals

Brief Explanation

University of Missouri Extension has gathered opinions of Missouri residents in a variety of ways to assist us in determining the critical issues of strategic importance. Our goals in developing the methodologies for the stakeholder input process were to: diversify the audiences in order to gain a better perspective on the reach and effectiveness of our programs; to diversify the gathering process so that we could utilize the feedback for both program prioritization and also to gain knowledge as to preferred delivery methods as well as general awareness of our programs; and finally to gather some program specific information and diversity needs information in a more substantive way in order to gain a better understanding of the issues underlying the needs in order for us to be more effective in our programming response.

The methods used in our stakeholder input gathering were as follows:

- Statewide telephone Survey
 - o 1,005 urban and rural residents participated in a random-sample telephone survey.
- Community Conversations on Economic Development
 - o 200 people were engaged in 16 regional community conversations on economic development
- Diversity Discussions
 - o 130 African Americans, Latinos and other under-served individuals provided input at 12 diversity discussions.
- Web-based Survey
 - o 6,839 people completed a satisfaction survey on our Web site content.
- County and Regional Needs Assessments
 - o 1,133 county extension council members identified issues of concern at local and regional needs assessment sessions.
- Meetings with State Agencies
 - o Meetings with directors of state agencies to receive feedback on their priority issues and where we might partner in the future.

2(A). A brief statement of the process that was used by the recipient institution to identify individuals and groups stakeholders and to collect input from them

1. Method to identify individuals and groups

- Use Advisory Committees
- Use Internal Focus Groups
- Use External Focus Groups

Brief Explanation

University of Missouri Extension has gathered opinions of Missouri residents in a variety of ways to assist us in determining the critical issues of strategic importance. Our goals in developing the methodologies for the stakeholder input process were to: diversify the audiences in order to gain a better perspective on the reach and effectiveness of our programs; to diversify the gathering process so that we could utilize the feedback for both program prioritization and also to gain knowledge as to preferred delivery methods as well as general awareness of our programs; and finally to gather some program specific information and diversity needs information in a more substantive way in order to gain a better understanding of the issues underlying the needs in order for us to be more effective in our programming response.

2(B). A brief statement of the process that was used by the recipient institution to identify individuals and groups who are stakeholders and to collect input from them

1. Methods for collecting Stakeholder Input

- Meeting with traditional Stakeholder groups
- Meeting with traditional Stakeholder individuals
- Survey of the general public
- Meeting specifically with non-traditional groups
- Survey specifically with non-traditional groups
- Meeting specifically with non-traditional individuals
- Survey specifically with non-traditional individuals

Brief Explanation

University of Missouri Extension has gathered opinions of Missouri residents in a variety of ways to assist us in determining the critical issues of strategic importance. Our goals in developing the methodologies for the stakeholder input process were to: diversify the audiences in order to gain a better perspective on the reach and effectiveness of our programs; to diversify the gathering process so that we could utilize the feedback for both program prioritization and also to gain knowledge as to preferred delivery methods as well as general awareness of our programs; and finally to gather some program specific information and diversity needs information in a more substantive way in order to gain a better understanding of the issues underlying the needs in order for us to be more effective in our programming response.

3. A statement of how the input was considered

- In the Budget Process
- To Identify Emerging Issues
- Redirect Extension Programs
- In the Staff Hiring Process
- In the Action Plans
- To Set Priorities

Brief Explanation

Brief Explanation of what you learned from your Stakeholders

Our stakeholders continue to emphasize three themes which have driven our strategic plan and thus our programming: economic viability; strong individuals, families and communities; and healthy environments.

Included in these broad themes, our stakeholders have specifically identified their desire for access to additional educational opportunities and the need for communities to retain their young adults in order to survive as a viable economic entity. Economic development that addresses the need for vibrant communities, the creation and retention of jobs, and viable businesses has also become an ever recurring priority as identified by our stakeholders.

IV. Expenditure Summary

1. Total Actual Formula dollars Allocated (prepopulated from C-REEMS)			
Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
7830731	0	0	0

2. Totaled Actual dollars from Planned Programs Inputs				
	Extension		Research	
	Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
Actual Formula	7830731	0	0	0
Actual Matching	7830732	0	0	0
Actual All Other	0	0	0	0
Total Actual Expended	15661463	0	0	0

3. Amount of Above Actual Formula Dollars Expended which comes from Carryover funds from previous years				
Carryover	{No Data Entered}	{No Data Entered}	{No Data Entered}	{No Data Entered}

V. Planned Program Table of Content

S. NO.	PROGRAM NAME
1	Watershed Management and Planning
2	Forage Production and Management
3	Home Horticulture and Environment
4	Individual Wastewater Systems-Implications for a New Rural Generation
5	Missouri Crop Management Systems
6	Missouri Master Wildlifer
7	Missouri Woodland Steward
8	Pasture Based Dairy Systems
9	MO-PORK: Increasing Pork Production in Missouri
10	Plant Protection for the 21st Century
11	Profit Focused Agriculture
12	Show-Me-Select Replacement Heifer Program
13	Applying Science and Technology
14	Building Character
15	Choosing Healthy Lifestyles
16	Creating Economic Preparedness
17	Enhancing Community Viability Through Youth Leadership
18	Volunteer Development
19	Improving Communications
20	Building Environments
21	Parenting
22	Strengthening Families
23	Building Better Childcare for Missouri
24	Food Safety
25	Personal Financial Management
26	Nutrition, Health and Physical Activity
27	Facilitating Community Decision Making for Youth and Adults
28	Ensuring Safe Communities
29	Community Leadership Development for Youth and Adults
30	Building Inclusive Communities
31	Creating Community Economic Viability
32	Aging
33	Business Development

Program #1

V(A). Planned Program (Summary)

1. Name of the Planned Program

Watershed Management and Planning

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	5%			
111	Conservation and Efficient Use of Water	5%			
112	Watershed Protection and Management	40%			
131	Alternative Uses of Land	10%			
133	Pollution Prevention and Mitigation	5%			
608	Community Resource Planning and Development	30%			
723	Hazards to Human Health and Safety	5%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	5.0	0.0	0.0	0.0
Actual	6.4	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
422623	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Invite people from Missouri watershed communities to participate in workshops to develop partnerships for watershed management as part of the Heartland 406 (b) USDA grant. Facilitate deliberative sessions with agency partners and others to discuss strategies for expanding collaborative efforts and roles each agency might fill in assisting communities in watershed management activities. Continue efforts to assist communities in the development of watershed management plans.

2. Brief description of the target audience

Target audience will consist of local watershed community citizens, elected officials, agency leaders and staff members with a concern or a part to play in watershed management activities. Extension state and regional specialists will have opportunities to attend regional workshops designed to keep abreast of the most current and reliable sources of information relating to a process of working with local communities to develop and implement watershed management plans.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	1200	7000	1800	3000
2008	1677	17761	1864	742

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Two educational classes will be held to help agency and Extension personnel to understand the process for involving local communities in the development and planning of watershed management plans.

Year	Target	Actual
2008	2	5

Output #2**Output Measure**

- Four workshops per year will be held at the regional level and at the multistate level on issues surrounding watershed management planning, the social dimension of watershed management and conflict management and deliberation.

Year	Target	Actual
2008	4	6

Output #3**Output Measure**

- One-on-one consultations will be given with those clients and agency personnel working directly with watershed planning and management and the selection and implementation of best management practices.

Year	Target	Actual
2008	3500	550

Output #4**Output Measure**

- Group discussion will be held with 15 watersheds in the developmental stages of watershed planning.

Year	Target	Actual
2008	15	25

Output #5**Output Measure**

- Two demonstrations per year will be held in watershed areas to demonstrate the effectiveness of best management practices for improving water quality.

Year	Target	Actual
2008	2	5

Output #6**Output Measure**

- 3 studies in MO will be conducted with assistance from Iowa State Univ and with funding through a USDA Water Quality 406 grant to determine the effectiveness of group process in long-term water quality protection by means of local watershed management.

Year	Target	Actual
2008	0	2

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Each year, three workshops (Watershed Management and Planning) will empower local people and agency personnel to organize watershed advisory groups to begin a process of evaluating, planning and implementing strategies for protecting water resources.
2	Collaborative partnerships will be expanded and strengthened in the development and delivery of science-based watershed information and resources to local watershed communities.
3	Each year, two watershed planning and management educational programs will be developed and implemented in identified watersheds.
4	Five watershed communities each year will be actively involved in the development of watershed management plans in various geographic regions of the state.
5	Three new watershed management advisory groups will be formed each year.
6	Each year, three watershed groups will implement watershed management plans that focus on improving water quality.
7	Each year, three watershed communities will develop watershed management plans that have been approved by the Missouri Department of Natural Resources.
8	Each year, three communities, with approved plans, are using the plans in the development of watershed management plans for total maximum daily loads (TMDLs), source water protection, and other land use planning decisions affecting their watershed.
9	Fifteen watersheds will be targeted for watershed management planning, development and implementation. An advisory committee will select the watersheds for the programming efforts.

Outcome #1**1. Outcome Measures**

Each year, three workshops (Watershed Management and Planning) will empower local people and agency personnel to organize watershed advisory groups to begin a process of evaluating, planning and implementing strategies for protecting water resources.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

There are accepted processes to be used in getting community involvement and empowering local people. Local groups and organizations need to be empowered with the resources and skills to develop watershed planning and implementation processes. It is critical that local citizens take responsibility for their actions and identify strategies to correct water quality issues. Local participation in developing and implementing watershed plans is vital for success.

What has been done

Approximately 100 people attended one of five watershed workshops on how to develop watershed planning groups. Pre-surveys demonstrate that few citizens understand their role, as well as the issues associated with watershed planning. The workshop focused on establishing locally led groups and plan development. Those who attended now have the knowledge and skills to organize and lead watershed planning and management efforts in their local watersheds.

Results

As a result of the workshops local citizens were more likely to become leaders for watershed planning and management efforts. Local people had a better idea of what was expected of them, as well as the purpose for citizen involvement in the watershed planning process. Agency personnel and local citizens have created partnerships for planning watershed management activities. Local citizens are excited about their role in developing a watershed plan that addresses local environmental concerns. Three new watershed groups were formed and are in the process of developing plans based on what they learned in the educational events.

4. Associated Knowledge Areas

KA Code	Knowledge Area
723	Hazards to Human Health and Safety
112	Watershed Protection and Management
111	Conservation and Efficient Use of Water
608	Community Resource Planning and Development

Outcome #2**1. Outcome Measures**

Collaborative partnerships will be expanded and strengthened in the development and delivery of science-based watershed information and resources to local watershed communities.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)****What has been done****Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
112	Watershed Protection and Management
723	Hazards to Human Health and Safety
111	Conservation and Efficient Use of Water
608	Community Resource Planning and Development
133	Pollution Prevention and Mitigation
131	Alternative Uses of Land
102	Soil, Plant, Water, Nutrient Relationships

Outcome #3**1. Outcome Measures**

Each year, two watershed planning and management educational programs will be developed and implemented in identified watersheds.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

For implementation of watershed plans to be successful, local citizens need to have buy-in. Most citizens want to have input in the process but many times lack the skill. Agency personnel have recognized the importance of local participation and input and encourage citizens to get involved. Citizens are reluctant to provide input without having a better understanding of what they are doing and what is expected of them.

What has been done

Educational classes have been held with selected watersheds citizen groups to develop an understanding and increase knowledge of watershed management planning and the role the plan and they play in long-term watershed health. The classes focused on the basics of watershed planning, identifying local needs, role of agency personnel, selection of best practices and implementation strategies for engaging citizens for improving water quality.

Results

Of 100 citizens attending MU Extension watershed management classes. The course evaluations rated the class as 4.5 out a possible 5 as being very good and extremely helpful. Participants increased their knowledge of watershed planning and management practices, had a better understanding of their roles, and had better understanding about how a watershed plan can be used to promote long-term water quality through community-based decision-making. The training empowered local watershed citizens who were willing to become leaders in watershed planning and management efforts. Participants became stronger advocates in recruiting other citizens to work with them in the watershed planning and management efforts. Ten watershed communities are actively trying to establish watershed groups to respond to water quality issues.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
723	Hazards to Human Health and Safety
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management

Outcome #4

1. Outcome Measures

Five watershed communities each year will be actively involved in the development of watershed management plans in various geographic regions of the state.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Water quality standards have been set at the federal level based on the intended use for those water resources. These standards must be met to insure a healthy and safe environment. For long-term water quality protection, local citizens must accept responsibility when developing and planning how to protect their watershed. Water quality is important for human health and economic development activities. Water is necessary for economic and community growth.

What has been done

A course on water quality education and planning was held for government agencies and nongovernmental organizations to emphasize the importance of using science-based information and developing locally led groups. Displays and presentations at state conferences and local activities have promoted the need for watershed planning and the role of local citizens and agency personnel. One-on-one consultation with individuals and watershed groups has increased awareness and understanding of the planning process for protecting water quality.

Results

Currently 10 groups are actively involved in the development of watershed plans for the purpose of responding to environmental degradation in their areas. Numerous planning meetings and group nominal process have been used to identify local concerns and establish priorities for corrective measures. These groups have received more than \$125,000 in planning grants from the Missouri Department of Natural Resources (DNR) to assist with the watershed planning process. A watershed template has been developed by MU Extension that is being used to assist these communities with identifying the nine elements recommended for a viable watershed plan. This template has been adopted by agency personnel who are assisting watershed groups with preparing their plans. Resource materials have been developed and distributed to group leaders on how to establish a watershed group and what are the components of a DNR/EPA acceptable watershed plan.

4. Associated Knowledge Areas

KA Code	Knowledge Area
723	Hazards to Human Health and Safety
608	Community Resource Planning and Development
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management

Outcome #5

1. Outcome Measures

Three new watershed management advisory groups will be formed each year.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

A local advisory group establishes citizen's roles in decision-making process and ownership for the issue. The advisory group promotes constant local input and agency partnership development. Local leadership is key to identifying local concerns for establishing a long-term plan for watershed protection. The advisory group is seen as the key structure to establishing partnerships between agency personnel and local citizens.

What has been done

Watershed community meetings have been held where people were identified as wanting to work on a watershed committee. Consultation with local leaders has been done to help establish a core working group as the advisory committee that included local landowners and agency personnel. Meetings have been held to identify potential resource personnel, agency partners and sources of funding and to determine local priorities. The advisory groups keep local communication flowing to interested citizens and agency partners.

Results

Three watersheds have established advisory committees to promote partnerships, communication of activities, leadership and local support. The advisory groups have received resource materials to assist them with capacity building and buy-in by local citizens. Key agency personnel and resource people have been identified to work with the local watershed group in providing technical, educational and financial assistance. The advisory committee becomes the driver for many watershed committees and is responsible for getting input from local citizens and agency partners in plan development.

4. Associated Knowledge Areas

KA Code	Knowledge Area
723	Hazards to Human Health and Safety
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
608	Community Resource Planning and Development

Outcome #6

1. Outcome Measures

Each year, three watershed groups will implement watershed management plans that focus on improving water quality.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri citizens and agency personnel recognize the importance of a clean safe water supply that supports human and environmental health. Regulatory limits for certain pollutants can have an adverse effect on the economic base of some watershed communities. For long-term water quality local plans are implemented with identified concerns and practices that local groups believe will correct the problems. Watershed groups must understand the role that citizens play in improving water quality concerns that can affect the overall economic growth and health of the community and the environment.

What has been done

Watershed plans provide local citizens with the map of how they plan to correct water quality concerns. Implementation provides local citizens with the action activities that must occur to respond to local and state identified concerns for water quality. Local agency personnel have identified cost-share opportunities for implementing management practices, demonstration sites have been developed to show management techniques and the reason why practices are installed. Grants have been applied to financially support outreach, cost-share and implementation of watershed plans.

Results

26 watersheds have been involved in developing watershed management plans. Even before the plans are completed, agency partners are working with residents to find funding and identify science based management practices that are effective in protecting water quality. Three watershed groups with approved plans have secured approximately \$1.4 million in funds to implement practices to improve water quality. Agency partners have been instrumental in providing cost share and technical assistance in promoting management practice adoption. Educational events have occurred to inform local residents of water quality issues and what practices benefit water quality protection. Six field days and educational classes have been offered to explain and promote a better understanding of management practices, how these practices can be implemented, and how they will improve water quality. Through cost-share, practices have been installed that reduce or control soil erosion, nutrient and pesticide runoff and streambank degradation. By implementing practices identified by local residents, regulatory compliance for the watershed is close to being met.

4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management
111	Conservation and Efficient Use of Water
723	Hazards to Human Health and Safety
608	Community Resource Planning and Development

Outcome #7**1. Outcome Measures**

Each year, three watershed communities will develop watershed management plans that have been approved by the Missouri Department of Natural Resources.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

It is important to agency personnel that watershed plans contain nine recommended areas that should promote long-term water quality protection and evaluation. They also realize the importance of local citizens being involved in developing and implementing watershed plans. These plans become the basis for activities, management practice implementation and monitoring pollutant loads. Approved plans become the outline or plan of action for local citizens and agency partners to follow when ready to implement activities and practices.

What has been done

Meetings have been held with local watershed groups to assist with identifying the nine key elements of a plan and where they can find the information and resource people to assist them. A watershed plan template has been established for the criteria necessary for a plan. Agency personnel have provided input on the development of the template and a class to explain how to use the template in writing a successful watershed plan. Displays at soil and water and natural resource conferences target agency partners that provide financial and technical assistance.

Results

Extension developed a template for watershed planning that contains the nine EPA-recommended components. Five classes have been held statewide to teach the use of the template and provide resource Web links and location for water quality data. Participant evaluations give the training a 4.5 out of 5 for usability. Three-fourths of those attending stated they would use the information directly with watershed management plan development. One hundred percent of those surveyed stated they would use the class information as a resource for other components of their work. A Web site link has been established to assist with identifying critical map layers for the general information within watersheds. Watershed plans from three watersheds have been submitted for approval. Several grants have been submitted for implementation of plans based upon these DNR-approved plans.

4. Associated Knowledge Areas

KA Code	Knowledge Area
723	Hazards to Human Health and Safety
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
608	Community Resource Planning and Development

Outcome #8**1. Outcome Measures**

Each year, three communities, with approved plans, are using the plans in the development of watershed management plans for total maximum daily loads (TMDLs), source water protection, and other land use planning decisions affecting their watershed.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Missouri DNR is mandated to complete total maximum daily load (TMDL) documents on 75 bodies of water. These documents have a public participation component and identify all but the implementation component of watershed protection. If the TMDL is not addressed, mandated practices may be implemented that may not be acceptable to local citizens. This requirement not only gives local citizens an incentive to have input in the decision-making process but also helps improve environmental and economic viability for the watershed.

What has been done

Meetings have been held with local watershed groups to assist with the development of a watershed plan to address the TMDL issues. Agency personnel have provided input on the development of the proposed successful watershed plan. Displays at soil and water and natural resource conferences target agency partners that provide financial and technical assistance.

Results

Through informational sessions, local groups have focused their watershed plan development on addressing TMDLs. Local groups use newsletters, news articles and displays at local events to promote implementation to respond to TMDL concerns. With input from local citizens and advisory board members, management practices have been identified that effectively mitigate the TMDL concern. Grants totaling more than \$1.4 million have been received to implement practices that will address the TMDL for the watersheds. Management practices have been installed that reduce or control pollutant loading. Load reduction determinations are made based on the practices being implemented. Source water protection for drinking water reservoirs with TMDLs have been developed in two watersheds to directly address contaminants that adversely effect drinking water quality. Citizen groups are actively engaged in working with agency personnel in providing information, education and technical support in implementing plans to address TMDL issues.

4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management
111	Conservation and Efficient Use of Water
608	Community Resource Planning and Development
723	Hazards to Human Health and Safety

Outcome #9**1. Outcome Measures**

Fifteen watersheds will be targeted for watershed management planning, development and implementation. An advisory committee will select the watersheds for the programming efforts.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	6	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Citizens of the state and agency personnel are directly involved in trying to improve state water resources through locally developed watershed plans. DNR, NRCS and DoH are working with MU Extension to identify priority watershed areas on the state 303 (d) list that need to address water quality concerns.

What has been done

Extension is working with agency personnel to establish criteria for determining priority watersheds that are found on the state 303 (d). Modeling and GPS data layers of watershed characteristics are used to determine critical areas that have high potential for water quality degradation. These areas are targeted for watershed plan development and funding opportunities. The MU Extension Water Quality program is assisting these watershed communities to organize, evaluate, develop and implement a watershed management plan to address the TMDL for their watershed.

Results

Meetings were convened with agency personnel to develop criteria for selecting watersheds needing to develop plans. Working with agency partners and advisory groups, 15 high-priority watersheds have been identified. These areas are listed on the 303 (d) of impaired waters. Another 10 watersheds have been identified as areas of concern that must start taking action to improve water quality. Once the list of watersheds was compiled, meetings were held in 22 of the watersheds to discuss reasons for their ranking as a priority watershed. Local groups have formed to discuss setting goals for their local watershed and how to address water quality concerns. Advisory groups have been formed to begin developing a watershed plan with the nine elements required by DNR. Several groups have applied for planning grants to assist with writing the watershed plan.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
723	Hazards to Human Health and Safety
608	Community Resource Planning and Development
112	Watershed Protection and Management

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges

Brief Explanation

DNR changes in priority watershed have resulted in a need to re-evaluate which watersheds need to be addressed first. Another key factor is work responsibilities of agency personnel who work directly with local watershed planning efforts. As funding becomes tighter for agency personnel, fewer personnel might be available to assist local communities needing to develop watershed management plans. Funding cycles and the timelines need to be established so that all partners know what to expect. For long-term water quality protection, local citizens who own the land must buy-in to the process and voluntarily work with the agency to address the issues. Buy-in requires the development of partnerships between watershed citizens and agency personnel and local citizens.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- During (during program)
- Case Study
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.

Evaluation Results

Agency personnel determined a set of criteria for setting priorities among watersheds in which water quality concerns need to be addressed. Extension personnel designed a template for developing a watershed plan. This template was approved by DNR and is currently being used by priority watersheds.

Many of the watershed groups have submitted and received planning grants to develop watershed plans. More than \$125,000 was received for planning by local watersheds.

A template for developing watershed plans that include the nine EPA key elements has been developed and approved by the DNR. This plan is being used by all the watershed groups in writing their watershed plans.

A class has been offered in five locations on watershed planning and development. About 100 people have attended the classes. On a scale of 1-5 participants gave the class a 4.5 in being helpful and being usable in watershed management development.

Numerous meetings were held in different watersheds to increase public awareness, get public input and establish watershed working committees and advisory committees. These meetings led to a working group to develop a plan of action for developing a watershed management plan. These events included displays at local events, presentation and news articles to keep the general public informed of activities for watershed planning. Citizens have become actively engaged in decision making for their watershed and in working closely with agency personnel.

A Web page was developed by the University of Missouri to assist watershed groups in finding data layers for developing watershed plans. The Web link consists of data layers that are necessary to determine critical or priority areas within the watershed.

For those groups that have approved plans, more than \$1.4 million has been received in the past year to implement practices and provide information to watershed residents.

Key Items of Evaluation

Watershed management and planning must incorporate the human dimension throughout the entire process. Without local involvement in the selection and design of the watershed plan long-term water quality improvement may not occur. This may be the single most important criterion in watershed plan implementation. Case studies show that when local groups take ownership and have input, they are willing to continue to work toward water quality goals.

Watershed management development classes demonstrate that access to tools, templates and other resources is key to developing watershed management plans. The classes highlight the importance of local people becoming involved in the decision-making process and through understanding the reasons for the plan.

Science-based management practices are necessary to provide supporting evidence of why specific watershed management practices were selected but local input concerning which practices are most likely to be adopted is critical for implementation of any plan.

Watershed Training Workshops – One indicator of the success of the training workshops will be the number of efforts started and followed through by workshop participants to develop watershed management plans. Additionally, evaluation forms filled out by the workshop participants indicate that the workshops were successful in providing guidance and resources for completing plans.

Watershed groups have secured more than \$125,000 in grants for developing watershed plans. Watershed groups with approved plans in place have secured \$1.4 million in funds for implementing practices to improve water quality.

Program #2**V(A). Planned Program (Summary)****1. Name of the Planned Program**

Forage Production and Management

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
205	Plant Management Systems	40%			
307	Animal Management Systems	40%			
402	Engineering Systems and Equipment	20%			
	Total	100%			

V(C). Planned Program (Inputs)**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	10.0	0.0	0.0	0.0
Actual	3.2	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
211312	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

Forage Production and Management will use multiple delivery methods to reach the target audience: regional three-day schools on management-intensive grazing; pasture-based dairying core group meeting and "pasture walks"; winter feeding systems and summer pasture program using demos, clinics, and tours. Fescue toxicosis and management workshops; Missouri Forage and Grassland Council Forage Conference; field days at outlying research centers; MU forage websites and multistate websites (cooperating with Oregon State University), electronic guides; CDs with prepared presentations; in-service training (ISEs) for regional staff; news releases for the general public; and popular press articles.

2. Brief description of the target audience

The primary target audience includes Missouri forage and livestock producers. These are mainly producers of beef and dairy cattle, although the program does address forages for other livestock, such as sheep, goats and horses, and nonlivestock forage producers, such as hay producers and wildlife conservationists. The program also targets industry and government, as it presents current science, technology and training to agricultural business and policymakers.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	8000	20000	1000	0
2008	10000	25000	1100	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Provide two in-service training sessions for regional Extension specialists on an annual basis.

Year	Target	Actual
2008	2	1

Output #2

Output Measure

- Develop or revise four guide sheets on an annual basis for regional Extension specialists to use in producer meetings.

Year	Target	Actual
2008	4	2

Output #3

Output Measure

- Revise Missouri publication M168, Missouri Dairy Grazing Manual.

Year	Target	Actual
2008	0	0

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Nine hundred (900) producers will annually attend a management-intensive grazing (MiG) school.
2	Twenty thousand (20,000) Missouri producers will increase their awareness of stockpiling and summer pasture management for beef cattle.
3	Two hundred (200) Missouri farmers will increase their knowledge of fescue toxicosis.
4	Two thousand (2,000) Missouri producers will install fencing and watering systems as a result of the MiG schools.
5	Ten thousand (10,000) producers will stockpile forage and develop specific pastures for summer grazing.
6	Ten thousand (10,000) producers will implement new forage management practices into their operation.

Outcome #1**1. Outcome Measures**

Nine hundred (900) producers will annually attend a management-intensive grazing (MiG) school.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Forages represent a significant renewable natural resource for Missouri with more than 9.7 million acres in pastures and harvested forages. Missouri produces 7.1 million tons of hay (including alfalfa hay), or 4.7 percent of the total hay produced in the United States. Missouri's management-intensive grazing schools teach producers how to manage this natural resource in an environmentally friendly way and for increased profit.

What has been done

Thirty-two grazing schools were held throughout Missouri 2008. The schools are three days long and cover such topics as the basics of developing and managing a grazing plan, fencing, watering, selecting forages, winter stockpiling, forage economics and soil testing.

Results

More than 450 producers attended the grazing schools throughout the eight regions of the state. More than 90 percent of the producers who attended these workshops indicated that they plan to adopt fencing, watering and pasture management changes as presented in the schools. Fifty percent of those producers implemented these changes without cost-share assistance.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
307	Animal Management Systems
402	Engineering Systems and Equipment

Outcome #2**1. Outcome Measures**

Twenty thousand (20,000) Missouri producers will increase their awareness of stockpiling and summer pasture management for beef cattle.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Cow-calf producers in Missouri suffer from low farm income and small profit margins. Nearly half of their income is spent for livestock feed during January, February and March. Hay represents about 90 percent of the cost for winter feed. In addition, commodity feed prices have nearly doubled in the past six months, making supplemental feeding expensive.

What has been done

Based on a thorough assessment of available technology, the 'Winter Feeding Systems for Beef Cattle' curriculum was assembled to teach producers six different techniques to reduce the cost of feeding a beef cow during winter. These techniques are (1) timely use of stockpiled tall fescue to extend the grazing season, (2) grazing winter annual forages, (3) ammoniation to improve quality of low-quality hay, (4) use of alfalfa hay to improve feed quality, (5) low-cost silage making, and (6) minimization of losses during hay feeding.

Results

More than 3,800 producers attended educational programming on 'Winter Feeding Systems for Beef Cattle.' This effort has brought about real change in producer practices. Farmer surveys taken in 1998 and again in 2006 show that the number of producers using stockpiled tall fescue has increased by 28 percentage units (see table below). Economic analyses conducted by Driskill et al. show that producers save about \$62 per cow annually if they efficiently use stockpiled tall fescue. At the adoption rate of 54 percent statewide, the increased use of stockpiled tall fescue saves the state's beef producers \$38 million annually.

Survey results on the number of producers using stockpiled tall fescue for winter grazing.

Survey Year/Producers Surveyed/Response Rate (%)	% Using Stockpiled Tall Fescue
1998/3222/33/26	
2002/2977/24/42	
2006/3120/31/54	

Another result of the Winter Feeding Systems for Beef Cattle program is the increased use of winter annual pastures in Missouri. Based on seed sales of annual ryegrass, acreage of winter pastures in Missouri has increased by more than 300,000 acres (a 100-fold increase) since 1998.

4. Associated Knowledge Areas

KA Code	Knowledge Area
402	Engineering Systems and Equipment
205	Plant Management Systems
307	Animal Management Systems

Outcome #3**1. Outcome Measures**

Two hundred (200) Missouri farmers will increase their knowledge of fescue toxicosis.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Fescue toxicosis is the most damaging forage-based livestock disorder in Missouri. It has an estimated \$144 million economic impact annually on the Missouri livestock industry.

What has been done

The 'Tall Fescue Toxicosis and Management' curriculum was modified in 2006 and 2007. This curriculum was taught at many county workshops, and parts were used in forage meetings held in the winter, spring and summer of 2008 and at field days.

Results

MU plant scientists have developed management practices to reduce toxins present in the grass and consumed by the animal. Practices taught at the workshops include cautious fertilization of pastures, moving cattle to nontoxic pastures during the late spring, and seeding in new plant varieties. Missouri farm families are beginning to adopt these management practices, which increase calf gains by a half pound per day. If only half of the cattle producers adopt the management practices, Missouri's beef industry would realize an additional \$30 million in profits. If the state's cattlemen plant the forthcoming plant varieties on one-third of Missouri's pastures, the state will increase revenue to the beef industry by \$183 million annually; Missouri would see additional profits to other Missouri livestock industries, including dairy cattle and horses.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems
205	Plant Management Systems

Outcome #4**1. Outcome Measures**

Two thousand (2,000) Missouri producers will install fencing and watering systems as a result of the MiG schools.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	2000	1450

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Forages represent a significant renewable natural resource for Missouri with more than 9.7 million acres in pastures and harvested forages. Missouri produces 7.1 million tons of hay (including alfalfa hay) or 4.7 percent of the total hay produced in the United States. The management-intensive grazing schools teach producers how to manage this natural resource in an environmentally friendly way and for increased profit.

What has been done

Thirty-two grazing schools were held throughout Missouri. The schools are three days in length and cover topics such as: the basics of developing and managing a grazing plan, fencing, watering systems, selecting forages, winter stockpiling, economics, and soil testing.

Results

Many of these farmers are awaiting their funding, which is expected to come.

4. Associated Knowledge Areas

KA Code	Knowledge Area
402	Engineering Systems and Equipment
307	Animal Management Systems

Outcome #5

1. Outcome Measures

Ten thousand (10,000) producers will stockpile forage and develop specific pastures for summer grazing.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	10000	26250

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Cow-calf producers in Missouri suffer from low farm income and small profit margins. Nearly half of their income is spent for livestock feed during January, February, and March. Hay represents about 90 percent of the cost for winter-feed. In addition, commodity feed prices have nearly doubled in the past 18 months, making supplemental feeding expensive.

What has been done

Based on a thorough assessment of available technology, the 'Winter-feeding Systems for Beef Cattle' curriculum was assembled to teach producers six different techniques to reduce the cost of feeding a beef cow during winter. These techniques are: 1) timely use of stockpiled tall fescue to extend the grazing season, 2) grazing winter annual forages, 3) ammoniation to improve quality of low-quality hay, 4) use of alfalfa hay to improve feed quality, 5) low-cost silage making, and 6) minimization of losses during hay feeding.

Results

More than 3,800 producers attended educational programming on 'Winter Feeding Systems for Beef Cattle.' This effort has brought about real-change in producer practices. For instance, based on farmer surveys taken in 1998 and again in 2006, number of producers using stockpiled tall fescue has increased by 28 percentage units. Economic analyses conducted by Driskill et al. show that producers save approximately \$62 per cow annually if they efficiently use stockpiled tall fescue. At the adoption rate of 54 percent statewide, the increased use of stockpiled tall fescue saves the state's beef producers \$38 million annually.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems
205	Plant Management Systems

Outcome #6**1. Outcome Measures**

Ten thousand (10,000) producers will implement new forage management practices into their operation.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	10000	12200

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri's dairy producers are struggling. Since 1993, 51 percent of Missouri's family dairies have exited the dairy business due to high feed costs, expensive capital investment and low profit margins. To respond to this trend, dairy producers are adopting the pastured-based dairy model so they can lower feed costs, minimize capital investments, increase profit and protect the environment.

What has been done

A Pasture-based Dairies curriculum teaches producers three things: (1) how to develop a written business plan, (2) how to use computerized record keeping, and (3) how to adopt management-intensive grazing. This curriculum required production of new materials ranging from a Dairy Grazing Manual to digital presentations. As the program progressed, the curriculum called for additional materials, including record-keeping software, a 'grazing wedge' online calculator for managers, and a Web site.

Results

Several next-generation, larger-scale pasture-based dairies owned by three New Zealand investment groups began development and operation in Missouri. The largest of these dairies contains more than 3,000 cows and the smallest has 500 cows. The New Zealand groups have invested over \$100 million to date, and more farms are being developed. These dairies generate \$28 million in annual milk sales, add \$87 million in total annual economic impact and sustain 777 additional jobs in the state of Missouri. These dairies were attracted to Missouri by the ongoing dairy grazing research and extension efforts being conducted by the University of Missouri.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems
205	Plant Management Systems
402	Engineering Systems and Equipment

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Public Policy changes
- Government Regulations

Brief Explanation

High feed grain prices have altered the economic landscape such that forage management is more lucrative than ever. For instance, the value of a pound of grain to stocker animals is nearly double that of three years ago. And in the dairy industry, producers using management-intensive grazing techniques are much better positioned than are their confinement counterparts to manage high feed prices.

V(I). Planned Program (Evaluation Studies and Data Collection)**1. Evaluation Studies Planned**

- After Only (post program)
- Before-After (before and after program)
- During (during program)
- Case Study

Evaluation Results

Key Items of Evaluation

Program #3**V(A). Planned Program (Summary)****1. Name of the Planned Program**

Home Horticulture and Environment

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
101	Appraisal of Soil Resources	5%			
205	Plant Management Systems	50%			
211	Insects, Mites, and Other Arthropods Affecting Plants	10%			
212	Pathogens and Nematodes Affecting Plants	10%			
213	Weeds Affecting Plants	15%			
216	Integrated Pest Management Systems	10%			
	Total	100%			

V(C). Planned Program (Inputs)**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	9.0	0.0	0.0	0.0
Actual	9.6	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c 633935	1890 Extension	Hatch	Evans-Allen
	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

Some of the major activities under this program are Master Gardener training (core course), advanced Master Gardener training, Garden 'N Grow training and workshops for garden center employees. Other activities include the Plants of Merit and HortLine programs in cooperation with Missouri Botanical Gardens, homeowner workshops, Lifespan Learners Series, Responsible Home Horticulture Series, booths at home shows and fairs, Plant a Row for the Hungry, Horticulture Therapy in Nursing Homes and the Home*A*Syst Program.

2. Brief description of the target audience

The ultimate target audience of this program is individuals with an interest in gardening. However, to reach this diverse and highly dispersed audience, MU Extension will need to use several community multipliers of information. One highly important audience will be the Master Gardener volunteers. After receiving training, Master Gardeners contribute volunteer hours to assist with dissemination of horticultural information through speaking engagements, workshops, information booths, youth programs, Extension Center hot lines, demonstration plantings and other activities. Youth groups including 4-H are another important target audience. Many young people will enroll in the Garden 'N Grow program.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	5000	10000	500	0
2008	243525	500000	25	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Provide two in-service training sessions for regional Extension specialists on an annual basis.

Year	Target	Actual
2008	2	3

Output #2

Output Measure

- Develop or revise 10 guide sheets a year for regional extension specialists to use in producer meetings.

Year	Target	Actual
2008	10	18

Output #3

Output Measure

- Two print and electronic newsletters devoted to pest and horticulture crop management will be developed and distributed to regional specialists and other clientele.

Year	Target	Actual
2008	24	20

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Master Gardeners, garden center employees, retired persons and home gardeners will become more aware of the importance of plants in people's lives.
2	Master Gardeners, garden center employees, retired persons and home gardeners will increase their knowledge of basic plant growth.
3	Master Gardeners, garden center employees, retired persons and home gardeners will increase their knowledge of which species and varieties of fruits, vegetables and ornamentals are best adapted to Missouri conditions.
4	Master Gardeners, garden center employees, retired persons and home gardener will increase understanding of the basics of plant health care including soils, pruning, fertilization and management of disease problems and insect pests in and around the home.
5	Nursing home managers will become more aware of the potential for horticultural therapy to improve the quality of life for residents.
6	4-H members will improve their gardening skills and awareness of where food comes from.
7	Increase the percentage of Missourians participating in gardening activities.
8	Increase the number of new Master Gardeners completing the core training.
9	Increase sales of "Plants of Merit" plants.
10	Increase use of soil sampling and plant diagnostic services by home gardeners.
11	Increase the number of nursing homes using horticultural therapy.
12	Increase the number of young people completing the Garden 'N Grow project.
13	Increase the number of Master Gardner volunteer hours and contacts.

Outcome #1**1. Outcome Measures**

Master Gardeners, garden center employees, retired persons and home gardeners will become more aware of the importance of plants in people's lives.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Beneficial effects of plants on human quality of life are well documented. Home gardens improve nutrition, reduce energy costs, encourage physical activity and contribute to the psychological well-being of those who tend them. Increasing awareness of these benefits will encourage more Missourians to participate in gardening activities. Master Gardeners and garden center employees are key sources of information for the gardening public.

What has been done

Through specialized training, volunteer activities, newsletters, press releases and workshops, the Master Gardener program has increased the awareness of more than 200,000 individuals about the importance of plants to human welfare.

Results

Increased awareness of the beneficial effects of plants on human quality of life increases the likelihood that individuals will increase their gardening activity and thereby derive the associated benefits to health and well-being.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #2**1. Outcome Measures**

Master Gardeners, garden center employees, retired persons and home gardeners will increase their knowledge of basic plant growth.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Successful gardening requires knowledge of how plants grow and what they require to remain healthy. Increasing the knowledge of Missourians in this area will enhance the enjoyment and the health benefits that they derive from home gardening.

What has been done

Through Master Gardener training, Master Gardener volunteer activities, newsletters, press releases, Greenhouse Grower Short courses, Turf and Ornamentals Field Day and other venues, at least 50,000 individuals have received information on basic plant growth. Garden Center employees have passed on information gained from workshops and field days to their customers.

Results

If individuals who receive the plant growth information put it into practice, they will be more likely to enjoy gardening success. This would translate into increased enjoyment, improved health and more money spent on plants and gardening supplies.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #3

1. Outcome Measures

Master Gardeners, garden center employees, retired persons and home gardeners will increase their knowledge of which species and varieties of fruits, vegetables and ornamentals are best adapted to Missouri conditions.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Selecting poorly adapted plants for home garden planting can lead to frustration and may discourage people from future gardening activity. Awareness of sources of information about proper plant selection will contribute to gardening success and the health benefits derived from it.

What has been done

MU Extension personnel hosted three well-attended workshops and short courses. These events were a Native Plant Field Day, a Tomato Festival and a Rose Workshop at Bradford Research and Extension Center. More than 300 people attended the Native Plant Field Day, more than 350 attended the Tomato Festival, and 50 attended the Rose Workshop. Osher Lifelong Learning disseminated a televised horticulture short course via ITV each semester to more than 100 persons.

Results

In addition to the direct contacts noted above, several thousand Missourians learned about plant selection through the MU Guide series, Web visits, newsletter articles, and Master Gardener training and volunteer activities. More than 98 percent of the approximately 1 million visits to horticulture guides on the MU Extension Web site in this reporting period dealt with selection of vegetables or landscape plants for home gardening. Additionally, the Osher Lifelong Learning horticulture series was distributed by interactive television through the Missouri library system to eight community libraries. There is no doubt that horticultural information from MU Extension influenced Missourians' plant buying decisions and gardening success.

4. Associated Knowledge Areas

KA Code	Knowledge Area
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Outcome #4**1. Outcome Measures**

Master Gardeners, garden center employees, retired persons and home gardener will increase understanding of the basics of plant health care including soils, pruning, fertilization and management of disease problems and insect pests in and around the home.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Lack of knowledge about basic plant health care can lead to frustration, gardening failures and environmentally damaging applications of fertilizer and pesticides.

What has been done

Plant health care information was disseminated through Master Gardener training, Master Gardener volunteer activities, Turf and Ornamentals field day, Pesticide Applicator Training, Greenhouse short courses, Missouri Environment and Garden newsletter, press releases and the MU Guide series. Show Me Yards and Neighborhood workshops helped 350 homeowners learn about environmentally responsible landscape management methods.

Results

From July 1, 2006, through June 30, 2007, to the same period in 2007/2008, valid hits to all agricultural guides posted on the MU Extension Web site increased from 2.77 to 3.15 million (13%). Horticulture guides represented the largest category in both years, the number of hits increasing from 1.0 to 1.2 million (17%). In 2007/2008 there were 0.5 million hits to guides on pests around the home. Information gained by Missourians from this source and sources noted above allowed thousands of home gardeners to make better decisions about purchasing fertilizers and pesticides.

4. Associated Knowledge Areas

KA Code	Knowledge Area
216	Integrated Pest Management Systems
212	Pathogens and Nematodes Affecting Plants
205	Plant Management Systems
213	Weeds Affecting Plants
211	Insects, Mites, and Other Arthropods Affecting Plants
101	Appraisal of Soil Resources

Outcome #5**1. Outcome Measures**

Nursing home managers will become more aware of the potential for horticultural therapy to improve the quality of life for residents.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Persons in assisted living can benefit from gardening through the physical and mental stimulation of working in the garden, as well as the satisfaction and nutritional benefits of growing fresh produce. The additional source of food helps these individuals both nutritionally and by reducing food costs.

What has been done

Master Gardener volunteers devoted an average of 8 percent of their total volunteer hours to working with persons in assisted living, teaching gardening and horticultural therapy and assisting with tasks in gardens and raised beds.

Results

The quality of life among nursing home residents participating in this program improved, and experience gained through this activity will be valuable to extension specialists wishing to work with this audience in other communities across the state.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #6**1. Outcome Measures**

4-H members will improve their gardening skills and awareness of where food comes from.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
211	Insects, Mites, and Other Arthropods Affecting Plants
216	Integrated Pest Management Systems

205	Plant Management Systems
101	Appraisal of Soil Resources
213	Weeds Affecting Plants
212	Pathogens and Nematodes Affecting Plants

Outcome #7**1. Outcome Measures**

Increase the percentage of Missourians participating in gardening activities.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	2500	15000

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Beneficial effects of gardening on human quality of life are well documented. Among other benefits, home gardening improves nutrition, reduces energy costs, encourages physical activity and contributes to the gardeners' psychological well-being. Missourians who begin gardening are likely to derive these benefits for their entire lives.

What has been done

Through Master Gardener training and volunteer activities, press releases, field days and many other activities, thousands of Missourians were exposed to information that increases the likelihood that they will participate in gardening activities.

Results

From July 1, 2006, through June 30, 2007, to the same period in 2007/2008, valid hits to all agricultural guides on the MU Extension Web site increased from 2.8 to 3.2 million (13%). Horticulture guides represented the largest category in both years, the number of hits increasing from 1.0 to 1.2 million (17%). Among the most popular guides were those on growing roses, making compost, raised bed gardening, selecting landscape plants and growing tomatoes. This indicates a significant increase in the number of serious gardeners in the state and region.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #8**1. Outcome Measures**

Increase the number of new Master Gardeners completing the core training.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	250	421

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

There is tremendous demand among the general public for gardening information. Participants in the Master Gardener program receive horticultural training, which they in turn disseminate through volunteer activities in their county, thereby contributing to the knowledge base among home gardeners in their communities.

What has been done

Through core training programs across Missouri, 421 new Master Gardeners in 15 locations statewide completed the program and became eligible to fulfill their commitments to volunteer activities.

Results

New Master Gardeners taking this training are much more aware and able to use and promote the resources of the University of Missouri and MU Extension. They are better-educated gardeners, and therefore hopefully more environmentally aware gardeners. Post-training surveys indicate that they definitely will make better-informed choices when purchasing and applying home pesticide products. They actively promote the purchase of plants from local nursery and garden centers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
213	Weeds Affecting Plants
211	Insects, Mites, and Other Arthropods Affecting Plants
216	Integrated Pest Management Systems
205	Plant Management Systems
212	Pathogens and Nematodes Affecting Plants

Outcome #9**1. Outcome Measures**

Increase sales of "Plants of Merit" plants.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

'Plants of Merit' is a cooperative program of the Missouri Botanical Garden, University of Missouri Extension, Powell Gardens and Mizzou Botanic Garden designed to promote the use of plants most likely to perform well for gardeners in Missouri. The program will also generate increased sales of plants by participating nurseries.

What has been done

New plants were selected for promotion in 2008 and presented to nursery representatives during Nursery Day at the Missouri Botanical Garden. Presentations were made to Master Gardener groups regarding how they can promote the program through volunteer activities such as tours of Plants of Merit specimens planted on the MU Campus (Mizzou Botanic Garden).

Results

While no data are available on increase in sales of Plants of Merit (POM) plants, sponsorship by participating nurseries remained stable in 2008, despite the economic downturn. The program was able to match a challenge grant of \$50,000 from the Kemper Foundation with donations. In 2008, 20,000 POM brochures were distributed to sponsors and interested groups and individuals. Taken together, these indicators show that the POM program is growing rapidly and will be a useful tool for retail nurseries to increase plant sales when the economy improves.

4. Associated Knowledge Areas

KA Code	Knowledge Area
216	Integrated Pest Management Systems
205	Plant Management Systems
212	Pathogens and Nematodes Affecting Plants
211	Insects, Mites, and Other Arthropods Affecting Plants
213	Weeds Affecting Plants

Outcome #10

1. Outcome Measures

Increase use of soil sampling and plant diagnostic services by home gardeners.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

To make logical and environmentally sound decisions regarding fertilization and pest control measures to keep plants healthy, individuals must identify soil nutritional deficiencies and pest organisms. Samples sent to the MU Soil and Plant Diagnostic Services Laboratory indicates awareness of this need.

What has been done

Through newsletter articles, press releases, Master Gardener training and other means, MU Soil and Plant Diagnostic Services Laboratory staff and other faculty have consistently promoted use of the lab as a management tool.

Results

There were 575 plant diagnostic samples submitted in 2008. Almost 4,000 home, lawn and garden soil samples were submitted over the same period. Individuals receiving reports from the MU Soil and Plant Diagnostic Services Laboratory used the information to improve the effectiveness of fertilizer and pesticide applications. They were then less likely to misapply materials that might result in environmental degradation.

4. Associated Knowledge Areas

KA Code	Knowledge Area
101	Appraisal of Soil Resources
213	Weeds Affecting Plants
212	Pathogens and Nematodes Affecting Plants
216	Integrated Pest Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants

Outcome #11**1. Outcome Measures**

Increase the number of nursing homes using horticultural therapy.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

No new activity report this year.

What has been done**Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #12**1. Outcome Measures**

Increase the number of young people completing the Garden 'N Grow project.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	500	22

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

This program involves young people in gardening and provides a summer youth activity. The goals are to allow young people to experience the fun and rewards of gardening, to enjoy success and to have the satisfaction of sharing harvested food with others in need through the local food agencies. The program also promotes healthy eating among youths by increasing their appreciation of fruits and vegetables.

What has been done

Three Garden 'n Grow locations were established in 2008.

Results

Twenty-two youths participated, and 19 volunteers contributed 142 hours of volunteer service. Produce from the gardens was donated to local food pantries.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #13**1. Outcome Measures**

Increase the number of Master Gardner volunteer hours and contacts.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	2500	127663

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

The Master Gardener program provides in-depth research-based horticultural education to individuals throughout Missouri, who then return volunteer time applying what they have learned to help others in their communities. This, in turn, enhances horticultural awareness of citizens and encourages them to become involved in home gardening.

What has been done

State specialists have worked to support the Master Gardener program through curriculum development and presentations in the core training. Master Gardeners participate in a variety of volunteer activities, including answer services or hotlines and teaching workshops or short courses for the general public.

Results

The average number of volunteer hours spent on public service activities was 1,702 hours per county. The total number of volunteer hours statewide was 127,663 contributed by 1,456 individuals with an estimated dollar value of nearly \$2.6 million. Master Gardeners contributed 21 percent of their volunteer hours responding directly to the public on horticulture-related questions through hotline/phone answer services, or direct visits to the county extension office. Master Gardeners contributed 27 percent of their volunteer hours implementing horticulture-related education in their communities through workshops, short courses and answering questions at fairs and home shows.

4. Associated Knowledge Areas

KA Code	Knowledge Area
213	Weeds Affecting Plants
211	Insects, Mites, and Other Arthropods Affecting Plants
212	Pathogens and Nematodes Affecting Plants
216	Integrated Pest Management Systems
205	Plant Management Systems
101	Appraisal of Soil Resources

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Competing Public priorities
- Competing Programmatic Challenges

Brief Explanation

Responses to requests for information on helping plants recover from flood conditions and winter injury have taken a considerable amount of time on the part of state and regional specialists this year.

V(I). Planned Program (Evaluation Studies and Data Collection)**1. Evaluation Studies Planned**

- Retrospective (post program)
- Before-After (before and after program)
- During (during program)

Evaluation Results

Surveys collected at the conclusion of nearly all Master Gardener core training series ask participants to evaluate program effectiveness and impact on their likelihood of adopting improved gardening practices. On a scale of 1 to 4 with 4 best, the average rating tends to be about 3.5. Results of a follow-up survey mailed to participants in the Show Me Yards and Neighborhoods workshops in Columbia, Missouri, are indicative of the potential impact of a workshop focusing in improved horticultural practices. With a 25 percent return rate of 200 mailed surveys, 70 percent of the respondents changed the amount of fertilizer they applied to their lawns. Sixteen percent had taken a soil test of their lawns since attending a workshop. Seventy-four percent of the respondents reduced the amount of pesticides used on their lawns. Forty-four percent of the respondents had measured their lawns. This would probably lead to more accurate application rates of fertilizer and pesticides. Seventy-one percent of the respondents indicated that they are reading fertilizer and pesticide labels more closely than they did before attending the workshop. Twelve percent indicated that they had determined where storm water leaves their property since the workshop. Ninety-two percent said the workshops had caused them to make changes in the actions they used in establishing and maintaining their lawns.

Key Items of Evaluation

It is evident from the reception by the gardening public of programs such as Master Gardener and Show Me Yards and Neighborhoods that there is a tremendous demand for information about gardening. Also, home gardeners are increasingly concerned about the effects of their gardening activities on environmental quality. Furthermore, it is apparent that, given high-quality, understandable information, gardeners tend to be willing to change their practices to be more environmentally responsible based on this information. As a result of the success of the Columbia Show Me Yards program, MU Extension has established a statewide program called Healthy Yards for Clear Streams. A curriculum developed for this program will be used by Kansas State University Extension for their Healthy Yards program being started this year. We have also offered a workshop entitled Green Lawns, Blue Waters for persons in the lawncare industry.

Program #4**V(A). Planned Program (Summary)****1. Name of the Planned Program**

Individual Wastewater Systems-Implications for a New Rural Generation

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	15%			
111	Conservation and Efficient Use of Water	5%			
112	Watershed Protection and Management	15%			
133	Pollution Prevention and Mitigation	20%			
723	Hazards to Human Health and Safety	30%			
803	Sociological and Technological Change Affecting Individuals, Families and Communities	15%			
	Total	100%			

V(C). Planned Program (Inputs)**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	4.0	0.0	0.0	0.0
Actual	2.4	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
158484	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

Field days will be offered to show how to properly install and maintain on-site sewage systems. A core curriculum is developed for training in on-site sewage system basics and site selection. Workshops will be offered to increase awareness and skills for selection of on-site systems and site location. Professional education credit classes will be offered to keep real estate professions, home inspectors and installers updated and trained on the latest technologies and alternative systems available. Media (printed, radio, television coverage) are used to increase awareness of programs and classes.

2. Brief description of the target audience

The primary audience for this program is on-site sewage system installers, inspectors, home-loan inspectors, lenders, real estate appraisers and real estate professionals. This course is being offered to agency personnel to assist them in understanding site selection limitations and alternative on-site systems that can be used in environmentally sensitive areas.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	500	1500	0	0
2008	500	1500	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- A core curriculum will be produced and used for the PEC courses.

Year	Target	Actual
2008	6	6

Output #2

Output Measure

- University of Missouri Extension will offer classes totaling between 4.5 and 6 hours of professional education credit each year for real estate professionals, home building inspectors, and others.

Year	Target	Actual
2008	6	6

Output #3

Output Measure

- Evaluations will be given at each training session to determine the effectiveness of the course.

Year	Target	Actual
2008	6	8

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Five hundred (500) on-site sewage installers, real estate professionals and home inspectors will increase their awareness and have access to on-site sewage information technologies.
2	Five hundred (500) on-site sewage installers, real estate professionals and home inspectors will increase their understanding of how an on-site sewage system works and the importance of soils in determining the type of on-site system being installed.
3	Agency personnel will understand the functions of on-site sewage systems.
4	Five hundred (500) class participants will increase their awareness of on-site system alternatives and when they should be used.
5	There will be an increase in the number of alternative on-site sewage systems being installed in environmentally sensitive areas.
6	There will be reduced risk to human health from waterborne bacteria due to fecal coliform.
7	Five hundred (500) class participants will incorporate information about human health risk and environmental quality when evaluating site selection and on-site system design during inspections and land transfers.
8	In areas of class participation, 1,500 on-site systems will be installed under latest guidelines that protect environmental quality through reduced wastewater nutrients in surface and groundwater supplies.

Outcome #1**1. Outcome Measures**

Five hundred (500) on-site sewage installers, real estate professionals and home inspectors will increase their awareness and have access to on-site sewage information technologies.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri has numerous man-made lakes with housing developments built around the shoreline. The soils surrounding these lakes generally provide inadequate treatment of sewage effluent. Identifying local soil conditions can help landowners determine the appropriate on-site sewage system for the conditions. This knowledge can help reduce the potential of nutrients and bacteria from getting into our environment without proper treatment.

What has been done

University of Missouri partnered with the Osage Valley Resource Conservation and Development program and local groups to produce a handbook on 'Truman Lake Area Guide to Onsite Wastewater Treatment Systems.' The handbook identifies the basic soil classifications surrounding Truman Lake and their effectiveness for treating on-site sewage effluent. Conventional and engineer designed systems are discussed and matched with soil conditions to allow them to function properly. The handbook is available through the Health Departments and Soil and Water Conservation Districts of the four counties surrounding Truman Lake.

Results

Through the development of the handbook, local citizens and installers now have reliable and easy access to information for determining the best on-site system for their area. An educational program was conducted when the handbooks were first released to discuss the interaction between soils and on-site sewage effluent. Understanding the potential for nutrient and bacteria concerns were established and how we could protect our local watersheds by proper waste management. Access to this information has increased the ability of on-site installers to properly identify what systems are acceptable for the area and has reduced the amount of time necessary to get a permit for installing on-site sewage systems. By identifying the proper system, there should be less potential of nutrient and bacteria loading into Truman Lake from on-site sewage systems that were not properly sited.

4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management
102	Soil, Plant, Water, Nutrient Relationships

Outcome #2**1. Outcome Measures**

Five hundred (500) on-site sewage installers, real estate professionals and home inspectors will increase their understanding of how an on-site sewage system works and the importance of soils in determining the type of on-site system being installed.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

The Lake of the Ozarks draws millions of visitors each year. Excessive algae growth from high nutrient and bacteria levels can cause health concerns for those who use the lake for swimming and fishing. Many of the homes built surrounding the Lake of the Ozarks were built before on-site sewage regulations went into effect. System failure can result in bacteria and nutrient contamination that affects both human and environmental health. To reduce the potential concern, homeowners should be educated on the proper maintenance and care of an on-site septic system.

What has been done

Classes have been offered on proper care and maintenance of on-site sewage systems. The training provides participants with information about how to properly maintain on-site sewage treatment areas and septic tanks. Tests administered before and after the classes were used to determine how participants improved their knowledge of on-site sewage system maintenance. Cost-sharing was made available to those participants who had their septic tanks pumped.

Results

Classes focused on understanding the components of an on-site sewage system, care and maintenance of systems, the role of soils in effluent treatment, conditions that accelerate the need for pumping a septic tank and watershed concepts in community planning. Results of tests administered both before and after the classes showed a 33 percent improvement in responses. This demonstrates an increase in awareness of proper maintenance and understanding of on-site sewage systems.

4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management
133	Pollution Prevention and Mitigation
111	Conservation and Efficient Use of Water
102	Soil, Plant, Water, Nutrient Relationships

Outcome #3**1. Outcome Measures**

Agency personnel will understand the functions of on-site sewage systems.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Proper training for installers of on-site sewage systems is critical for protecting both human and environmental health from on-site sewage effluent. One component of this training is knowing how to determine proper soil percolation of sewage effluent. Without this understanding, improper placement of water disposal systems can result in effluent that is inadequately treated before it is released into the environment. This increases the potential for nutrient and bacterial loading surface and groundwater.

What has been done

In Missouri, 47 of the 114 counties no longer allow soil percolation test to determine the soil's ability to treat on-site sewage effluent. For those counties that still allow perc test, installers must attend a two-day training course and pass a test to be listed as certified to perform soil percolation tests for on-site sewage system installation. These classes are held two times each year to certify people wanting to perform soil percolation test.

Results

More than 20 people each year have taken the certification class for soil percolation testing. Each person must pass a 20-question test with a score of 80 percent or higher to receive certification. The two-day course requires participants to understand the interaction between soil and water movement, how different types of soil influence nutrient uptake and how proper siting and installation can prevent pollution.

4. Associated Knowledge Areas

KA Code	Knowledge Area
133	Pollution Prevention and Mitigation
102	Soil, Plant, Water, Nutrient Relationships

Outcome #4

1. Outcome Measures

Five hundred (500) class participants will increase their awareness of on-site system alternatives and when they should be used.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Private citizens and agency personnel are concerned with how human health may be affected by improperly treated wastewater. Improperly treated water can rise to the surface and create human health hazards or may enter groundwater, which can enter into private water supplies.

What has been done

Classes have been held to discuss the components and functions of an on-site sewage system and to describe the role of both the septic tank and water treatment components. Displays have been used to increase awareness of private water wells and how pollutants move through the soil.

Results

County health departments provide water test bottles to check water quality of private wells. In targeted areas surrounding lakes there has been an increase in requests for bottles for testing private well water. Wellhead protection assessments have been performed to prevent surface water from contaminating wells, and information on shock chlorination has been distributed. As a result of the classes, more people are aware of how, why and how often to test a well.

4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management

111	Conservation and Efficient Use of Water
133	Pollution Prevention and Mitigation

Outcome #5**1. Outcome Measures**

There will be an increase in the number of alternative on-site sewage systems being installed in environmentally sensitive areas.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

In environmentally sensitive areas, the need for proper maintenance and care of the on-site sewage system becomes critical for reducing the potential for nutrient and bacterial loading into surface and groundwater. Areas surrounding lakes with high Karst geology may require higher maintenance than areas with more suitable soils.

What has been done

Cost-sharing for septic tank pumping was made available for those who attended educational classes on proper maintenance and care of on-site sewage systems.

Results

By increasing awareness and knowledge concerning septic tanks and on-site sewage treatment, landowners increased their understanding on how to prevent pollution from occurring on older systems and how to mitigate effects of systems that are not working properly. More than 100,000 gallons of solids and effluent has been pumped from septic tanks owned by those that participated in the educational classes.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
133	Pollution Prevention and Mitigation
102	Soil, Plant, Water, Nutrient Relationships

Outcome #6**1. Outcome Measures**

There will be reduced risk to human health from waterborne bacteria due to fecal coliform.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management
111	Conservation and Efficient Use of Water
133	Pollution Prevention and Mitigation

Outcome #7**1. Outcome Measures**

Five hundred (500) class participants will incorporate information about human health risk and environmental quality when evaluating site selection and on-site system design during inspections and land transfers.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
133	Pollution Prevention and Mitigation

Outcome #8**1. Outcome Measures**

In areas of class participation, 1,500 on-site systems will be installed under latest guidelines that protect environmental quality through reduced wastewater nutrients in surface and groundwater supplies.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	1500	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
133	Pollution Prevention and Mitigation
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Economy
- Government Regulations
- Competing Public priorities
- Populations changes (immigration,new cultural groupings,etc.)

Brief Explanation

Due to changes in focus, landowners were included as a major part of the audience for education. This allowed local watershed groups to get stakeholders involved at all levels of decision-making. Several small grants were made available to produce training materials and provided cost-share assistance for septic tank pumping.

V(I). Planned Program (Evaluation Studies and Data Collection)**1. Evaluation Studies Planned**

- After Only (post program)

Evaluation Results

Changes in attitudes, knowledge gained and numbers who changed a behavior were indicators of the effectiveness of the on-site sewage educational programs.

An educational program and handbook for the Truman Lake area, "Truman Lake Area Guide to On-site Wastewater Treatment Systems," was developed to respond to needs of four local health departments and citizens living in the lake area. Evaluations from the educational program showed that 95 percent of those surveyed after attending the educational program felt they had increased their knowledge of on-site sewage system requirements and maintenance and could use the handbook when working with local installers or homeowners. The handbook was made available on a CD for private citizens and agency personnel, and more than 300 copies of the handbook and CD were distributed.

Citizen education course for on-site sewage systems - More than 100 people attended educational classes on proper care and maintenance of on-site sewage systems. Tests administered before and after each class showed a 33 percent improvement in responses and demonstrated an increase in awareness and knowledge of proper maintenance and understanding of on-site sewage systems. More than 80 class participants were eligible to obtain septic tank pumping at reduced cost. More than 100,000 gallons were pumped from septic tanks in the targeted area. This should reduce the potential for bacteria and nutrients to enter surface and groundwater.

More than 20 people attended the soil percolation test class. Evaluations from the perc test training shows that 98 percent of those going through the class use the information in their work. All participants passed the certification course with scores of 80 percent or better.

Health departments in counties surrounding Truman Lake and Lake of the Ozarks have seen an increase in the number of people requesting private well water test bottles. Evaluations from those having done wellhead assessments show that 80 percent will make changes in the areas surrounding their private well to reduce the potential of surface contamination. Thirty percent of those going through the assessment decided to find alternative drinking water sources.

Key Items of Evaluation

Partnerships have been established between University of Missouri, Department of Natural Resources, Department of Health and Senior Services, citizen groups, NRCS and RC&D programs. Different forms of education were used with audiences as diverse as real estate professionals, sewage system installers, agency personnel and private citizens.

Class attendees increased their understanding of how pollutants travel through soil, the proper function of a septic system, the role of soils in protecting water quality from sewage effluent, the need to check private wells and do wellhead assessments and the maintenance and care of on-site sewage systems.

Participants in the different classes indicated that the instructional materials were very helpful.

1. More than 300 copies of the handbook and CD "Truman Lake Area Guide to Onsite Wastewater Treatment Systems" have been distributed to on-site installers, agency personnel and private landowners.
2. Results of tests given before and after on-site sewage system classes showed an increase in correct responses of 33 percent, demonstrating an increase in knowledge and awareness.
3. More than 80 class participants signed up to have their septic tanks cleaned, and more than 100,000 gallons were collected in the pilot area. This maintenance should reduce the potential for bacteria and nutrients to enter into groundwater and area lakes.
4. Ninety percent of those taking the soil percolation test would use the information in their work.
5. All participants in the soil percolation class passed their certification test. There has been an increase in the number of water testing bottles from the counties surrounding Truman Lake and Lake of the Ozarks after offering programs on wellhead protection and on-site sewage locations.

Program #5**V(A). Planned Program (Summary)****1. Name of the Planned Program**

Missouri Crop Management Systems

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	20%			
104	Protect Soil from Harmful Effects of Natural Elements	10%			
205	Plant Management Systems	55%			
405	Drainage and Irrigation Systems and Facilities	10%			
512	Quality Maintenance in Storing and Marketing Non-Food Products	5%			
	Total	100%			

V(C). Planned Program (Inputs)**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	20.0	0.0	0.0	0.0
Actual	16.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
1056297	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

Campus-based and region-based faculty members will conduct several regional workshops and short courses in partnership with commodity groups and private industry. Venues include commodity district meetings, soil and crop conferences, Ag Science Week, regional short courses, field days, and demonstration projects. University of Missouri variety performance evaluations will be conducted in more than 40 locations.

2. Brief description of the target audience

The primary target audiences are crop producers and their advisers. Programs will be developed for crop producers with a diversity of farm sizes, crops produced and land resource bases. Crop advisers and service providers are important targets because of their extensive contact with crop and livestock producers, which makes them ideal intermediates in passing on University of Missouri Extension programming to a wider range of producers than could be reached by Extension personnel alone. Because the future of Missouri agriculture depends on young professionals replacing retiring farmers and personnel, youth organizations such as FFA, 4-H, Young Farmers, and their teachers will receive specially designed programs.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	8000	10000	0	0
2008	5457	31864	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Provide four in-service training sessions for regional Extension specialists on an annual basis.

Year	Target	Actual
2008	4	3

Output #2**Output Measure**

- Develop or revise 15 guide sheets annually for regional Extension specialists to use in producer meetings.

Year	Target	Actual
2008	15	10

Output #3**Output Measure**

- Develop or revise five manuals on an annual basis for regional Extension specialists to use in producer meetings.

Year	Target	Actual
2008	5	3

Output #4**Output Measure**

- Two print and electronic newsletters devoted to pest and crop management will be developed and distributed to regional specialists and other clientele.

Year	Target	Actual
2008	24	24

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Crop producers will learn sources of information about cultivars and how to interpret them.
2	Crop producers will learn crop rotations and their effects.
3	Crop producers will learn costs and benefits of available soil conservation practices.
4	Crop producers will learn economic impact of improved planting procedures.
5	Crop producers will learn proper irrigation management.
6	Crop producers will learn how management choices in one area affect appropriate choices in other areas.
7	Corn, soybean, wheat, sorghum, and cotton acreage under conservation tillage will increase. (Source: Conservation Technology Information Service)
8	The percentage of soybean acreage planted in a properly developed crop rotation will increase. (Source: USDA/ERS)
9	Seeding rates, average row width, and planting dates will be monitored. (Source: Missouri Agricultural Statistics Service and USDA/ERS)
10	Average yields and production efficiencies will increase. (Source: Missouri Agricultural Statistics Service and USDA/ERS)

Outcome #1**1. Outcome Measures**

Crop producers will learn sources of information about cultivars and how to interpret them.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
405	Drainage and Irrigation Systems and Facilities
102	Soil, Plant, Water, Nutrient Relationships
104	Protect Soil from Harmful Effects of Natural Elements
512	Quality Maintenance in Storing and Marketing Non-Food Products

Outcome #2**1. Outcome Measures**

Crop producers will learn crop rotations and their effects.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Properly constructed crop rotations increase yield and decrease the impact of crop production on the environment. Because of the shift in grain prices in 2007, farmers might be tempted to produce continuous corn instead of corn rotated with some other crop, such as soybean.

What has been done

Replicated research treatments were established for two years to demonstrate the effect of continuous corn on yield, soil quality and susceptibility to diseases. Results were analyzed and conclusions made available to regional extension specialists. A series of farmer meetings were conducted in the winter and crop advisers were presented information in a hands-on clinic in July.

Results

A day-long regional conference was held in each of three separate regions of the state to deliver research-based information and recommendations to farmers throughout Missouri. The team of state & regional Extension specialists collaborated in each of the three regions to provide interactive presentations under the overall theme of 'Crop Management Strategies in an Environment of Increasing Input Costs.' These presentations involved discussions of the integration of management practices and how this integration affects the various components of the interaction and an assessment of the risks, benefits and costs of the whole system management approach. Comments, suggestions and alternative practices were solicited from participants via audience response systems and incorporated into the scenarios developed during the presentations. In the inaugural year for conferences, approximately 105 participants attended the conferences and rated the overall program content an 8.6 on a scale of 1 to 10. The participants also rated the conference proceedings and other handouts distributed at the conferences an 8.9. Additionally, all participants indicated that they would likely attend a similar conference if held the following year.

A day-long field day and in-service education training program was conducted at the Bradford Research and Extension Center for regional extension agronomy specialist, agricultural retailers, technical service and research and development representatives from throughout the agricultural pesticide industry, crop consultants, and personnel from state and federal agencies. This event provides participants with: 1) the most recent information and recommendations pertaining to the management of the most prevalent weed, insect, and disease problems in Missouri's crops and forages, 2) information on the utility of new pesticides, pest management techniques, and/or genetically modified crops in Missouri, and 3) results from ongoing, collaborative research projects that address new and emerging pest management problems in Missouri's crops and forages. There were more than 90 attendees who influence decisions on approximately 21 million acres of cropland throughout the Midwest. Many of these attendees are chemical industry representatives and crop consultants that make decisions on a large number of acres across several states. On a scale of 1 to 5 with 1 being poor and 5 being excellent, attendees rated this year's overall program content a 4.2.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
205	Plant Management Systems
104	Protect Soil from Harmful Effects of Natural Elements

Outcome #3

1. Outcome Measures

Crop producers will learn costs and benefits of available soil conservation practices.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done**Results**

Corn producers and ag professionals were educated about the widespread impact of nitrogen loss in 2008, it is estimated this resulted in reduced corn production by 460 million bushels (worth about \$2 billion) in the Midwest. Extension programming focused on methods to manage nitrogen to prevent these losses in 2009. The MU IPM Program helped fund the publication and distribution of 'Best Management Practices for Nitrogen Fertilizer in Missouri'. This publication helps readers determine best management practices to reduce environmental impact from fertilizer use.

Two hundred (200) crop advisers attended the three-day Crop Management Conference. Presentations were made in one general session and 16 concurrent sessions. Session topics included life sciences, nitrogen management, energy savings, soybean rust, herbicide injuries, biofuels, sunflowers, soybean management, and weather information sources. These crop advisers influence decisions on more than 10 million acres and will have an impact on production efficiency, economic development and environmental quality.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
205	Plant Management Systems
104	Protect Soil from Harmful Effects of Natural Elements

Outcome #4**1. Outcome Measures**

Crop producers will learn economic impact of improved planting procedures.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

New practices and products are constantly emerging in crop agriculture. We transfer University research and other sources of expertise to help crop advisors and crop managers adapt to these changes.

What has been done

Workshops, field days and special training sessions were held for commercial crop advisers.

Results

The Crop Injury Diagnostic Clinic (CIDC) is a hands-on course held every July and the Crop Management Conference (CMC) is held every December CMC consists of 15 concurrent sessions. More than 160 persons attend CIDC and over 200 persons attended the CMC. Nearly all participants are crop advisers or work in public agencies. These participants make recommendations for over 8 million acres of Missouri crops.

4. Associated Knowledge Areas

KA Code	Knowledge Area
512	Quality Maintenance in Storing and Marketing Non-Food Products
205	Plant Management Systems
405	Drainage and Irrigation Systems and Facilities
104	Protect Soil from Harmful Effects of Natural Elements
102	Soil, Plant, Water, Nutrient Relationships

Outcome #5**1. Outcome Measures**

Crop producers will learn proper irrigation management.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
405	Drainage and Irrigation Systems and Facilities

Outcome #6**1. Outcome Measures**

Crop producers will learn how management choices in one area affect appropriate choices in other areas.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
405	Drainage and Irrigation Systems and Facilities
102	Soil, Plant, Water, Nutrient Relationships
104	Protect Soil from Harmful Effects of Natural Elements
205	Plant Management Systems

Outcome #7**1. Outcome Measures**

Corn, soybean, wheat, sorghum, and cotton acreage under conservation tillage will increase. (Source: Conservation Technology Information Service)

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
102	Soil, Plant, Water, Nutrient Relationships
104	Protect Soil from Harmful Effects of Natural Elements

Outcome #8**1. Outcome Measures**

The percentage of soybean acreage planted in a properly developed crop rotation will increase. (Source: USDA/ERS)

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
104	Protect Soil from Harmful Effects of Natural Elements
102	Soil, Plant, Water, Nutrient Relationships
405	Drainage and Irrigation Systems and Facilities
512	Quality Maintenance in Storing and Marketing Non-Food Products
205	Plant Management Systems

Outcome #9**1. Outcome Measures**

Seeding rates, average row width, and planting dates will be monitored.
(Source: Missouri Agricultural Statistics Service and USDA/ERS)

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #10**1. Outcome Measures**

Average yields and production efficiencies will increase. (Source: Missouri Agricultural Statistics Service and USDA/ERS)

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
405	Drainage and Irrigation Systems and Facilities
104	Protect Soil from Harmful Effects of Natural Elements
205	Plant Management Systems
102	Soil, Plant, Water, Nutrient Relationships
512	Quality Maintenance in Storing and Marketing Non-Food Products

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Programmatic Challenges

Brief Explanation**V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- Before-After (before and after program)
- During (during program)
- Time series (multiple points before and after program)
- Case Study

Evaluation Results**Key Items of Evaluation**

Program #6

V(A). Planned Program (Summary)

1. Name of the Planned Program

Missouri Master Wildlifer

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
131	Alternative Uses of Land	5%			
135	Aquatic and Terrestrial Wildlife	90%			
605	Natural Resource and Environmental Economics	5%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	5.0	0.0	0.0	0.0
Actual	0.8	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
52828	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Develop curriculum-based Missouri Master Wildlifer Program Reference Manual, presentations and support materials, including assessment and evaluation tools, marketing strategies and promotional materials. Provide in-service training (ISE) for regional natural resource program coordinators. Collaborate with various "conservation partners" in the delivery of the short course. These partners might include natural resource professionals with the MDC, NRCS, Soil and Water Conservation Districts and volunteers selected from various nonprofit conservation organizations (such as Conservation Federation of Missouri, Quail Unlimited, Wild Turkey Federation, Ducks Unlimited, Isaac Walton League).

2. Brief description of the target audience

The short course is designed for citizens and private landowners interested in integrating wildlife considerations into their current land use and management activities.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	200	400	0	0
2008	36	50	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Provide one training session for Extension specialists at the annual statewide Extension meeting. This will include Missouri Woodland Steward and Missouri Master Naturalist.

Year	Target	Actual
2008	1	0

Output #2

Output Measure

- Provide one annual in-service training (ISE) session for regional natural resource program coordinators. This will include Missouri Woodland Steward.

Year	Target	Actual
2008	1	0

Output #3

Output Measure

- Coordinate delivery of a growing number of short courses to private landowners at selected locations across Missouri.

Year	Target	Actual
2008	10	2

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	50 percent of participants will increase their knowledge of wildlife ecological principles.
2	50 percent of participants will increase their knowledge of habitat assessment techniques.
3	50 percent of participants will increase their knowledge of benefits of improved wildlife habitat.
4	50 percent of participants will increase their knowledge of wildlife habitat improvement practices.
5	50 percent of participants will increase their knowledge of various technical assistance, professional services and resources available to achieve their wildlife management objectives through the MDC, NRCS, and private wildlife and land management consult
6	30 percent of participants will engage in at least one wildlife habitat improvement practice after six months.
7	30 percent of participants will improve their capability to manage the wildlife resource on their property and, as a result, their potential for achieving ecological, economic and social benefits.
8	50 percent of participants will increase the economic value of their property by integrating management practices that enhance wildlife habitat with ongoing agricultural, forestry, recreational or related natural resource enterprises.
9	50 percent of MU Extension and "conservation partner" teams collaborate in the development of additional Missouri Master Wildlifer or wildlife-related programming to meet the educational needs of private landowners and other audiences within the community
10	50 percent of participants completing wildlife habitat improvement practices will see a corresponding increase in the population of target species.

Outcome #1**1. Outcome Measures**

50 percent of participants will increase their knowledge of wildlife ecological principles.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Two of the most important assets that Missouri has are its people and its wealth of natural resources. These two resources interact to contribute to the health and vitality of the state's economy, landowner income, and recreational and aesthetic enjoyment by all of the state's citizens. Since the majority (over 93%) of Missouri's land base is privately owned, the land management decisions made by private landowners directly influence the quantity and quality of wildlife habitat and resulting wildlife populations within the state.

What has been done

The Missouri Master Wildlifer Program was developed to provide private landowners and wildlife enthusiasts with information on wildlife biology and the management of wildlife habitat on their property. Participants learn basic ecological concepts and develop an improved understanding of wildlife biology and management techniques that influence the management of wildlife populations. An improved understanding of basic ecological concepts and the biology of selected wildlife species is a key to success in implementing habitat management techniques on private lands.

Results

During 2007/08, the Missouri Master Wildlifer Program was conducted using distance learning technology at 10 MU Extension locations across the state. More than 150 private landowners participated in the program, impacting the wildlife habitat on approximately 30,500 acres.

Participants' self-assessment of knowledge both before and after the course revealed that 100 percent of participants gained knowledge of basic ecological concepts and on the principles of wildlife biology. Each of the participants indicated that as a result of this program they would be able to apply that knowledge on their property to benefit the wildlife resource and their management objectives.

Success of the program was also measured by how the training improved the participants' level of knowledge of ecological concepts and wildlife management. An analysis of paired responses using mean Likert scores of pre- (1.94) and post-course (4.05) assessments indicates that there was a significant increase in the participants' level of knowledge as a result of the Master Wildlifer Program.

4. Associated Knowledge Areas

KA Code	Knowledge Area
131	Alternative Uses of Land
135	Aquatic and Terrestrial Wildlife
605	Natural Resource and Environmental Economics

Outcome #2**1. Outcome Measures**

50 percent of participants will increase their knowledge of habitat assessment techniques.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Less than 5 percent of Missouri landowners actively manage their property for wildlife. An increased number of landowners are in need of information to enhance habitats for wildlife populations and ecological communities of interest. As a result of this educational effort, an increasing number of private landowners will have an improved understanding of wildlife biology and management. In addition, participants will have an improved level of knowledge necessary to effectively communicate their wildlife management objectives to natural resource professionals who can then provide technical assistance and assist in the development of wildlife management plans for their property.

What has been done

The Master Wildlifer Program provides knowledge and information on implementing wildlife habitat management techniques for specific land management and wildlife objectives for private landowners.

Results

Since 2006, over 500 landowners and resource professionals have participated in the Master Wildlifer Program, affecting approximately 60,000 acres. Participants learned land management techniques, including use of prescribed fire, disking, timber stand improvements, wetland management, techniques to prevent invasive species and techniques that can be used to promote native habitats. As a direct result of this educational program, participants applied practices to benefit wildlife on their property.

4. Associated Knowledge Areas

KA Code	Knowledge Area
131	Alternative Uses of Land
135	Aquatic and Terrestrial Wildlife
605	Natural Resource and Environmental Economics

Outcome #3**1. Outcome Measures**

50 percent of participants will increase their knowledge of benefits of improved wildlife habitat.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Wildlife populations are dependent on the quantity and quality of available habitat for survival and to meet their biological needs.

What has been done

The Master Wildlifer Program provides information about the biology and management of selected wildlife species and ecological communities of interest.

Results

Each of the participants that provided course evaluations indicated that the Master Wildlifer Program increased their knowledge of the benefits that result from improved wildlife habitat and management on their property.

4. Associated Knowledge Areas

KA Code	Knowledge Area
131	Alternative Uses of Land
135	Aquatic and Terrestrial Wildlife
605	Natural Resource and Environmental Economics

Outcome #4

1. Outcome Measures

50 percent of participants will increase their knowledge of wildlife habitat improvement practices.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Landowners with improved knowledge and understanding of wildlife habitat management are likely to adopt active management approaches and implement habitat enhancement practices that result in a potential increase of quality habitat that supports wildlife populations and ecological communities of interest.

What has been done

The Master Wildlifer Program was developed to provide an effective way to deliver science-based information emphasizing wildlife ecology and management concepts to adult learners.

Results

The knowledge and information gained by an increasing number of landowners that have an interest in implementing practices on their property to improve wildlife habitat has resulted in improved habitat on more than 60,000 acres in Missouri.

One hundred percent of the participants increased their knowledge and ability to implement wildlife habitat management techniques on their property as a direct result of participating in the Master Wildlifer Program.

4. Associated Knowledge Areas

KA Code	Knowledge Area
131	Alternative Uses of Land
135	Aquatic and Terrestrial Wildlife

Outcome #5

1. Outcome Measures

50 percent of participants will increase their knowledge of various technical assistance, professional services and resources available to achieve their wildlife management objectives through the MDC, NRCS, and private wildlife and land management consult

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

An increasing number of landowners need additional knowledge of the technical services, incentives and assistance programs available to improve the likelihood of adopting and implementing wildlife management practices on their property.

What has been done

The Master Wildlifer Program provided participants with information on developing a wildlife management plan and accessing technical service programs that offer management assistance to landowners for implementing wildlife management practices on their land.

Results

All of the participants indicated that they had improved their knowledge of the technical services available from state and federal agencies for wildlife management assistance.

4. Associated Knowledge Areas

KA Code	Knowledge Area
605	Natural Resource and Environmental Economics
135	Aquatic and Terrestrial Wildlife

Outcome #6**1. Outcome Measures**

30 percent of participants will engage in at least one wildlife habitat improvement practice after six months.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Wildlife populations are dependent on habitat for survival. As a result of the Missouri Master Wildlifer Program, an increasing number of landowners will have an improved understanding on the need to implement wildlife management practices and will take action that will result in habitat improvements benefiting wildlife populations and recreational opportunities on their land.

The need exists to improve the management capabilities of landowners so that they have the confidence to adopt and implement practices that benefit wildlife on their property and to manage the resource for economic, social and ecological benefits.

What has been done

The Master Wildlifer Program provides information on the management of Missouri's wildlife resource. By improving the understanding of basic wildlife ecological concepts and the biology of wildlife species, private landowners can implement habitat improvements that achieve their land management and wildlife goals and objectives.

Results

The need exists to improve the management capabilities of landowners so that they have the confidence to adopt and implement practices that benefit wildlife on their property and to manage the resource for economic, social and ecological benefits.

All of the participants indicated that their knowledge of the benefits of managing their property for wildlife increased as a result of the Master Wildlifer Program.

Approximately 75 percent of the participants indicated that they would adopt and implement habitat practices on their property as a result of Master Wildlifer Program during 2008, impacting approximately 125,000 acres.

4. Associated Knowledge Areas

KA Code	Knowledge Area
135	Aquatic and Terrestrial Wildlife
131	Alternative Uses of Land
605	Natural Resource and Environmental Economics

Outcome #7

1. Outcome Measures

30 percent of participants will improve their capability to manage the wildlife resource on their property and, as a result, their potential for achieving ecological, economic and social benefits.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Approximately 95 percent of participants in the Missouri Master Wildlifer Program indicated that they owned property for agriculture, forestry, recreation or investment. Therefore a need exists to integrate wildlife objectives into ongoing land management objectives.

What has been done

The Master Wildlifer Program provides information on techniques that can be used to improve wildlife habitat and complement ongoing land management objectives.

Results

Approximately 75 percent of participants in the Master Wildlifer Program indicated that they planned to integrate wildlife management practices with ongoing land management objectives to increase the economic value of their property and increase the availability of wildlife habitat.

4. Associated Knowledge Areas

KA Code	Knowledge Area
131	Alternative Uses of Land
605	Natural Resource and Environmental Economics
135	Aquatic and Terrestrial Wildlife

Outcome #8**1. Outcome Measures**

50 percent of participants will increase the economic value of their property by integrating management practices that enhance wildlife habitat with ongoing agricultural, forestry, recreational or related natural resource enterprises.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

An increasing number of landowners lack access to wildlife management educational programming that can provide information on ecological concepts and wildlife biology to help improve their level of knowledge and adopt practices that improve habitat on their property.

What has been done

The Master Wildlife Program is an effective educational model that provides science-based information and knowledge to a diverse clientele interested in becoming more knowledgeable and having an improved understanding of the biology of Missouri's wildlife as well as in improving their abilities to implement wildlife management practices on their property.

The program was conducted and delivered at 12 MU Extension locations during 2007 in an effort to expand the delivery of the program and make it available to an increasing number of landowners and interested citizens in Missouri. Adoption of the Programs recommended management practices by program participants continued throughout 2008.

Results

As a result, additional Master Wildlifer programs and sessions were developed and planned during 2008, for delivery during 2008/09, to meet the educational needs of clientele across the state.

4. Associated Knowledge Areas

KA Code	Knowledge Area
135	Aquatic and Terrestrial Wildlife
605	Natural Resource and Environmental Economics
131	Alternative Uses of Land

Outcome #9

1. Outcome Measures

50 percent of MU Extension and "conservation partner" teams collaborate in the development of additional Missouri Master Wildlifer or wildlife-related programming to meet the educational needs of private landowners and other audiences within the community

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

One objective of land and wildlife management is to enhance the carrying capacity and quality of the habitat to support an increasing population of selected wildlife and wildlife communities on private land.

What has been done

The Master Wildlifer Program provided information about assessing and evaluating habitat conditions on private land for selected wildlife species. Management practices could then be adopted to potentially increase the population of the wildlife species or enhance the wildlife community of interest.

Results

Results from program evaluation indicate that approximately 50 percent of the participants observed an increase of various wildlife populations as a result of conducting management on their property.

4. Associated Knowledge Areas

KA Code	Knowledge Area
135	Aquatic and Terrestrial Wildlife
131	Alternative Uses of Land

Outcome #10**1. Outcome Measures**

50 percent of participants completing wildlife habitat improvement practices will see a corresponding increase in the population of target species.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	30	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
131	Alternative Uses of Land
605	Natural Resource and Environmental Economics
135	Aquatic and Terrestrial Wildlife

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes

Brief Explanation

The Missouri Master Wildlifer Program uses the distance education technology of interactive television (ITV) and the Centra videoconferencing system to deliver information. However, the technology allows for a maximum of 10 locations to participate in the live program. This limits the number of clientele that can participate in the live events. However, through the use of Centra, an increasing number of clientele have been able to participate in the Program events on a delayed basis. In addition, the Master Wildlifer Program has been modified so that program content can be delivered to clientele across the state by local natural resource professionals and MU Extension specialists.

V(I). Planned Program (Evaluation Studies and Data Collection)**1. Evaluation Studies Planned**

- Before-After (before and after program)

Evaluation Results

To evaluate the Master Wildlifer Program, participants voluntarily provided responses to a 34-question test administered before and after the course to assess changes in knowledge of ecological and wildlife management concepts. Questions were grouped into eight ecological concept areas (corresponding to the subject matter taught during each session) to facilitate the analysis of responses using paired-sample statistics. On a Likert scale (1-5), mean responses of the learners' perceived "current level of knowledge" and perceived "level of knowledge gained" indicated that a significant increase in knowledge scores resulted for each of the eight ecological concept areas, as follows:

Ecological Concept 1: Basic Ecological and Wildlife Management Concepts

Pre – 2.37 Post – 4.08

Ecological Concept 2: Biology and Management of Bobwhite Quail/Grassland Birds and Ecosystems

Pre – 2.21 Post – 4.29

Ecological Concept 3: White-tailed Deer Ecology and Management

Pre – 2.73 Post – 4.35

Ecological Concept 4: Ecology and Management of Wild Turkeys and Forest Ecosystems

Pre – 2.07 Post – 3.87

Ecological Concept 5: Waterfowl Biology and Wetland Management

Pre – 1.63 Post – 4.01

Ecological Concept 6: Aquatic Ecosystems

Pre – 1.95 Post – 4.22

Ecological Concept 7: Missouri Furbearers and Wildlife Damage Management

Pre – 1.95 Post – 4.25

Ecological Concept 8: Miscellaneous Wildlife Management Concepts

Pre – 1.94 Post – 4.15

Total:

Pre – 1.97 Post – 4.05

A six-month follow-up evaluation was also conducted to assess whether management practices were adopted. Each of the participants that provided a program evaluation responded that they gained knowledge and skills enabling them to implement ecologically sound management practices for wildlife benefits on their property. By these measures, the Missouri Master Wildlifer provides an effective educational model for delivering science-based information featuring ecological and wildlife management concepts to adult learners.

Key Items of Evaluation

Improved knowledge gained by participants as a result of the Master Wildlifer Program; an increased number of acres being actively managed for wildlife habitat improvement; an improved understanding of the biology and management of bobwhite quail and grassland birds in prairie communities; an improved understanding of the biology and management of white-tailed deer and forest wildlife populations; an improved understanding of the biology and management of wild turkey; an improved understanding of the biology and management for Missouri's furbearers and mammals as well as improved understanding of wildlife damage management; an improved understanding of Missouri's aquatic resources, including streams, lakes and ponds; an improved understanding of Missouri wetland ecosystems and waterfowl biology and management; an improved understanding on techniques that can be used to improve biological diversity on private land and on techniques that can be used to prevent and control invasive species; an improved understanding of the use and implementation of wildlife habitat management techniques, of developing a wildlife management plan and of the technical assistance provided by natural resource professionals.

Program #7

V(A). Planned Program (Summary)

1. Name of the Planned Program

Missouri Woodland Steward

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
123	Management and Sustainability of Forest Resources	45%			
131	Alternative Uses of Land	5%			
135	Aquatic and Terrestrial Wildlife	45%			
605	Natural Resource and Environmental Economics	5%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	5.0	0.0	0.0	0.0
Actual	1.6	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
105656	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Develop a curriculum-based DVD product containing indoor session presentations and support materials, including assessment and evaluation tools, marketing strategies and promotional materials. Provide in-service training (ISE) for regional natural resource program coordinators. Partner with Missouri Department of Conservation resource foresters and private land conservationists in the delivery of the short course.

2. Brief description of the target audience

The target audience is resident and absentee landowners who own 10 acres or more and are interested in improving the natural resource base of their property.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	400	800	0	0
2008	50	180	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Provide one training session for Extension specialists at the annual statewide Extension meeting. This will include Missouri Master Wildlifer and Missouri Master Naturalist.

Year	Target	Actual
2008	1	0

Output #2

Output Measure

- Provide one annual in-service training (ISE) session for regional natural resource program coordinators. This will include Missouri Master Wildlifer and Missouri Master Naturalist.

Year	Target	Actual
2008	1	1

Output #3

Output Measure

- Coordinate delivery of at least 15 short courses to private landowners at selected locations across Missouri.

Year	Target	Actual
2008	15	18

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	50 percent of participants will increase their knowledge of forest ecology.
2	50 percent of participants will increase their knowledge of forest management.
3	50 percent of participants will increase their knowledge of wildlife ecological principles.
4	50 percent of participants will increase their knowledge of wildlife habitat improvement practices.
5	50 percent of participants will contact a natural resource professional for follow-up consultation.
6	30 percent of participants will have a management plan in place after six months.
7	30 percent of participants will have engaged in at least one forest improvement practice after six months.
8	30 percent of participants will have engaged in at least one wildlife habitat improvement practice after six months.
9	50 percent of participants who complete crop tree release will see increased forest growth.
10	50 percent of participants who complete wildlife habitat improvement practices for a targeted species will see increased numbers of those species.
11	50 percent of participants who complete forest or wildlife habitat improvement practices will see a corresponding increase in the population of target species.

Outcome #1**1. Outcome Measures**

50 percent of participants will increase their knowledge of forest ecology.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Natural resource managers want their clients (landowners) to take responsibility for the management of their woodlands. For that to happen, landowners need to have a basic understanding of plant growth as it relates to both individual trees and the larger forest stand.

What has been done

The Missouri Woodland Steward Short Course was developed in 2006. In FY08, the live version was reformatted to give landowners a study-at-your-own-pace option of either purchasing a DVD-based version through MU Extension Publications or participating online through the MU Center for Distance and Independent Study. Three live short courses were conducted in FY08 with 53 landowners participating; 200 landowners borrowed DVD sets from NRCS field offices; and 20 landowners enrolled online.

Results

Impact was assessed by observing a 2.1-point increase in pre- and post-Likert self-evaluations (1-5 scale).

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources

Outcome #2**1. Outcome Measures**

50 percent of participants will increase their knowledge of forest management.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Natural resource managers want their clients (landowners) to take responsibility for the management of their woodlands. Not only do landowners need to understand basic forest ecology principles, but they must also have a basic knowledge of simple forest management principles and practices in order to communicate effectively with resource professionals.

What has been done

The Missouri Woodland Steward Short Course was developed in 2006. In FY08, the live version was reformatted to give landowners a study-at-your-own-pace option of either purchasing a DVD-based version through MU Extension Publications or participating online through the MU Center for Distance and Independent Study. Three live short courses were conducted in FY08 with 53 landowners participating; 200 landowners borrowed DVD sets from NRCS field offices; and 20 landowners enrolled online.

Results

Impact was assessed by observing a 2.2-point increase in pre- and post-Likert self-evaluations (1-5 scale).

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources

Outcome #3

1. Outcome Measures

50 percent of participants will increase their knowledge of wildlife ecological principles.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Natural resource managers want their clients (landowners) to take responsibility for the management of their woodlands. For that to happen, the client needs to have a basic understanding of wildlife ecological principles.

What has been done

The Missouri Woodland Steward Short Course was developed in 2006. In FY08, the live version was reformatted to give landowners a study-at-your-own-pace option of either purchasing a DVD-based version through MU Extension Publications or participating online through the MU Center for Distance and Independent Study. Three live short courses were conducted in FY08 with 53 landowners participating; 200 landowners borrowed DVD sets from NRCS field offices; and 20 landowners enrolled online.

Results

Impact was assessed by observing a 1.9-point increase in pre- and post-Likert self-evaluations (1-5 scale).

4. Associated Knowledge Areas

KA Code	Knowledge Area
135	Aquatic and Terrestrial Wildlife

Outcome #4

1. Outcome Measures

50 percent of participants will increase their knowledge of wildlife habitat improvement practices.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Natural resource managers want their clients (landowners) to take responsibility for the management of their woodlands. Not only do landowners need to understand basic wildlife ecological principles, but they must also have a basic knowledge of simple wildlife management principles and practices in order to communicate effectively with resource professionals.

What has been done

The Missouri Woodland Steward Short Course was developed in 2006. In FY08, the live version was reformatted to give landowners a study-at-your-own-pace option of either purchasing a DVD-based version through MU Extension Publications or participating online through the MU Center for Distance and Independent Study. Three live short courses were conducted in FY08 with 53 landowners participating; 200 landowners borrowed DVD sets from NRCS field offices; and 20 landowners enrolled online.

Results

Impact was assessed by observing a 2.2-point increase in pre- and post-Likert self-evaluations (1-5 scale).

4. Associated Knowledge Areas

KA Code	Knowledge Area
135	Aquatic and Terrestrial Wildlife

Outcome #5**1. Outcome Measures**

50 percent of participants will contact a natural resource professional for follow-up consultation.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Natural resource managers want their clients (landowners) to be motivated and comfortable with contacting them.

What has been done

The Missouri Woodland Steward Short Course was developed in 2006. In FY08, the live version was reformatted to give landowners a study-at-your-own-pace option of either purchasing a DVD-based version through MU Extension Publications or participating online through the MU Center for Distance and Independent Study. Three live short courses were conducted in FY08 with 53 landowners participating; 200 landowners borrowed DVD sets from NRCS field offices; and 20 landowners enrolled online.

Results

Impact was assessed by observing the results of the six-month, follow-up survey. Of the 273 participants, 250 indicated that they had contacted a local forester.

4. Associated Knowledge Areas

KA Code	Knowledge Area
131	Alternative Uses of Land
123	Management and Sustainability of Forest Resources
135	Aquatic and Terrestrial Wildlife
605	Natural Resource and Environmental Economics

Outcome #6

1. Outcome Measures

30 percent of participants will have a management plan in place after six months.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Natural resource managers want their clients (landowners) to implement the management plan that is developed and not let it rest on a shelf or in a filing cabinet.

What has been done

The Missouri Woodland Steward Short Course was developed in 2006. In FY08, the live version was reformatted to give landowners a study-at-your-own-pace option of either purchasing a DVD-based version through MU Extension Publications or participating online through the MU Center for Distance and Independent Study. Three live short courses were conducted in FY08 with 53 landowners participating; 200 landowners borrowed DVD sets from NRCS field offices; and 20 landowners enrolled online.

Results

Of the 250 FY08 participants who contacted their local forester or private land conservationist, only 110 were actually able to receive assistance. The most frequent reason given for not servicing a landowner request was that the professional did not have the time. However, 70 of the FY07 participants who did not receive assistance last year did receive professional help in FY08. Current landowner backlog stands at 140 unmet needs.

4. Associated Knowledge Areas

KA Code	Knowledge Area
135	Aquatic and Terrestrial Wildlife
123	Management and Sustainability of Forest Resources

Outcome #7

1. Outcome Measures

30 percent of participants will have engaged in at least one forest improvement practice after six months.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Landowners care because they are interested in seeing the results of their planning and labor.

What has been done

The Missouri Woodland Steward Short Course was developed in 2006. In FY08, the live version was reformatted to give landowners a study-at-your-own-pace option of either purchasing a DVD-based version through MU Extension Publications or participating online through the MU Center for Distance and Independent Study. Three live short courses were conducted in FY08 with 53 landowners participating; 200 landowners borrowed DVD sets from NRCS field offices; and 20 landowners enrolled online.

Results

Impact was assessed by the fact that 180 new landowners have begun managing their woodlands.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources

Outcome #8

1. Outcome Measures

30 percent of participants will have engaged in at least one wildlife habitat improvement practice after six months.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Landowners care because they are interested in seeing the results of their planning and labor.

What has been done

The Missouri Woodland Steward Short Course was developed in 2006. In FY08, the live version was reformatted to give landowners a study-at-your-own-pace option of either purchasing a DVD-based version through MU Extension Publications or participating online through the MU Center for Distance and Independent Study. Three live short courses were conducted in FY08 with 53 landowners participating; 200 landowners borrowed DVD sets from NRCS field offices; and 20 landowners enrolled online.

Results

Impact was assessed by the fact that 180 new landowners have begun managing their woodlands for wildlife.

4. Associated Knowledge Areas

KA Code	Knowledge Area
135	Aquatic and Terrestrial Wildlife

Outcome #9

1. Outcome Measures

50 percent of participants who complete crop tree release will see increased forest growth.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Landowners care because they are interested in seeing the results of their planning and labor.

What has been done

The Missouri Woodland Steward Short Course was developed in 2006. In FY08, the live version was reformatted to give landowners a study-at-your-own-pace option of either purchasing a DVD-based version through MU Extension Publications or participating online through the MU Center for Distance and Independent Study. Three live short courses were conducted in FY08 with 53 landowners participating; 200 landowners borrowed DVD sets from NRCS field offices; and 20 landowners enrolled online.

Results

It has been only one or two years, depending upon completion of the short course, since the management practice was employed, so it is too early to assess condition changes.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
605	Natural Resource and Environmental Economics
131	Alternative Uses of Land

Outcome #10

1. Outcome Measures

50 percent of participants who complete wildlife habitat improvement practices for a targeted species will see increased numbers of those species.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri's woodlands and wildlife habitats need attention now; not when we can 'fit it into our schedules.' Healthy forests tomorrow require action today.

What has been done

The Missouri Woodland Steward Short Course was developed in 2006. In FY08, the live version was reformatted to give landowners a study-at-your-own-pace option of either purchasing a DVD-based version through MU Extension Publications or participating online through the MU Center for Distance and Independent Study. Three live short courses were conducted in FY08 with 53 landowners participating; 200 landowners borrowed DVD sets from NRCS field offices; and 20 landowners enrolled online.

Results

Impact was assessed by the fact that 110 landowners have reported an increase in activity of targeted wildlife species, most noticeably quail, on their managed acres.

4. Associated Knowledge Areas

KA Code	Knowledge Area
135	Aquatic and Terrestrial Wildlife

Outcome #11**1. Outcome Measures**

50 percent of participants who complete forest or wildlife habitat improvement practices will see a corresponding increase in the population of target species.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	60	110

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Landowners care because they are interested in seeing the results of their planning and labor.

What has been done

The Missouri Woodland Steward Short Course was developed in 2006. In FY08, the live version was reformatted to give landowners a study-at-your-own-pace option of either purchasing a DVD-based version through MU Extension Publications or participating online through the MU Center for Distance and Independent Study. Three live short courses were conducted in FY08 with 53 landowners participating; 200 landowners borrowed DVD sets from NRCS field offices; and 20 landowners enrolled online.

Results

Impact was assessed by the fact that 110 landowners have reported an increase in activity of non-targeted wildlife species, most noticeably neotropical songbirds, on their managed acres.

4. Associated Knowledge Areas

KA Code	Knowledge Area
135	Aquatic and Terrestrial Wildlife

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes

Brief Explanation

The backlog of 140 requests for professional assistance is due to the lack of enough resource professionals to meet the demand. As documented in last year's report, delays are too often due not to unwillingness of the forester or land conservationist to meet with a landowner, but simply to not enough hours in the day and days in the week.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)
- Time series (multiple points before and after program)

Evaluation Results

We will continue to conduct pre- and post-Likert self-assessments to monitor knowledge gained and six-month follow-up surveys to monitor management actions enacted. Longer-term impacts such as increased forest growth or the increase in target wildlife species will be monitored by meeting with participants at future field days and landowner conferences.

Key Items of Evaluation

Since January 1, 2006, the *Missouri Woodland Steward Program* has reached 548 landowners; 275 in FY07 and 273 in FY08. In FY08, the total land area affected by the program was 79,000 acres, a 125 percent increase from FY07. Of the land area affected in FY08, 63,000 acres were forested. This 270 percent increase in the number of forested acres affected can be attributed to the increased number of EQIP contracts written in the heavily forested eastern Missouri Ozarks.

As reported in the FY08 Renewable Resource Extension Act (RREA) report, 270 new forest stewardship plans representing 50,130 forested acres were prepared as a result of landowners participating to some degree in the *Missouri Woodland Steward Program* (44,200 acres from landowners participating in Woodland Steward Program this fiscal year and 5,930 acres from landowners who participated in FY07) but had to wait for professional assistance. As reported in FY07, the main reason cited for more acreage *not* being placed under management was the long wait time for a professional forester to visit the tract and prepare the management plan.

A simple cash flow analysis in terms of net present value (NPV) based on average Ozark forest inventory data can be summarized as follows:

- Liquidate forest now: NPV = \$720/ac
- Do not manage the forest and harvest in 40 years: NPV = \$94/ac
- Manage the forest: NPV = \$912/ac

Estimated economic value (gain) of forest management on those 50,130 acres is \$41MM (\$818/ac) NPV compared to no management and even \$9.6MM (\$259/ac) over liquidating the forest asset today!

Program #8

V(A). Planned Program (Summary)

1. Name of the Planned Program

Pasture Based Dairy Systems

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
205	Plant Management Systems	20%			
301	Reproductive Performance of Animals	10%			
302	Nutrient Utilization in Animals	10%			
303	Genetic Improvement of Animals	10%			
307	Animal Management Systems	20%			
315	Animal Welfare/Well-Being and Protection	10%			
601	Economics of Agricultural Production and Farm Management	10%			
801	Individual and Family Resource Management	10%			
Total		100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	4.0	0.0	0.0	0.0
Actual	4.8	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
316967	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Extension specialists will teach "expert producers" who in turn will teach other producers. Methods will include monthly meetings, newsletters, pasture walks, helping producers learn how to use the web(A webpage has already been established from the ODF project.), provide annual Ag. Lenders workshop, establish forage demonstration plots, and hold annual dairy grazing symposium at the University of Missouri Agricultural Experiment Station in Mt. Vernon, Missouri, which has an established grass-based dairy research and demonstration program.

2. Brief description of the target audience

Young families seeking a livelihood in agriculture and to live in the rural areas of Missouri. Existing dairy producers who seek a less stressful farm management lifestyle. Foreign investors who seek to establish profitable investments as grass-based dairies in Missouri.

V(E). Planned Program (Outputs)**1. Standard output measures****Target for the number of persons (contacts) reached through direct and indirect contact methods**

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	150	300	600	75
2008	970	101	75	185

2. Number of Patent Applications Submitted (Standard Research Output)**Patent Applications Submitted**

Year	Target
Plan:	0
2008 :	0

Patents listed**3. Publications (Standard General Output Measure)****Number of Peer Reviewed Publications**

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs**Output Target****Output #1****Output Measure**

- Provide two in-service training sessions for regional Extension specialists on an annual basis.

Year	Target	Actual
2008	2	3

Output #2**Output Measure**

- Develop or revise three guide sheets a year for regional Extension specialists to use in producer meetings.

Year	Target	Actual
2008	3	2

Output #3**Output Measure**

- Revise the pasture-based dairy manual on a semiannual basis for regional Extension specialists to use in producer meetings.

Year	Target	Actual
2008	1	0

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Number of clientele gaining knowledge about forage management.
2	Number of clientele gaining knowledge of grazing systems management.
3	Number of dairy farms producing milk for less than \$10.50/cwt.
4	Increase the number of dairy grazing farms in Missouri.
5	Profitability of existing MiG dairies.
6	Quality of life as expressed by family farm operators.

Outcome #1**1. Outcome Measures**

Number of clientele gaining knowledge about forage management.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Escalating input costs require the optimization of pasture forages because this ration component can be produced for approximately one-fourth the cost of purchasing forages. Monitoring and measurement of this resource are a critical factor in maximizing use of this resource.

What has been done

University of Missouri Extension has developed a dairy grazing Web site, and included is a grazing wedge calculator available for any user. Participants can input weekly measurements of paddock dry matter to calculate daily dry matter growth and allow visual evaluation of dry matter availability in each paddock. These data are summarized over the growing season. The producer can also include other key indicators of forage and grazing management.

Results

The data generated from this program allow producers to make management decisions regarding length of rotation, level of concentrate feeding to match forage availability and need for fertilizer to be applied to particular paddocks. One hundred separate accounts have been established on this Web site, with 36 unique farms inputting pasture data. Twenty-six of these farms are specifically dairy operations. Web views of the Web page continues to increase, averaging 350 per month during the reporting period.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

Outcome #2**1. Outcome Measures**

Number of clientele gaining knowledge of grazing systems management.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Success in current economic conditions requires dairy producers to either produce milk at low cost or maximize production with little overhead cost. Economic data collected from pasture-based dairies demonstrate this type system produces milk at significantly less cost than conventional systems and can maintain profitability and sustainability. Success in this system requires not only an understanding of the science, but also the art of effectively managing a pasture-based system.

What has been done

University of Missouri Extension provides ongoing educational programs to enhance the knowledge and understanding of pasture-based systems. This includes both classroom and on-farm workshops for university, agribusiness and other producers, making use of learner-to-learner and co-learner models. Experienced producers trained through the program also serve as mentors to assist both newly established pasture-based dairy systems and current operations.

Results

The development of expert producers through participation in the University of Missouri Pasture-Based Dairy Program has significantly increased the educational efforts of the program. The university is still viewed as a source of knowledge but has assumed a much greater role as a facilitator of knowledge transfer.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
307	Animal Management Systems

Outcome #3**1. Outcome Measures**

Number of dairy farms producing milk for less than \$10.50/cwt.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

The key to Missouri's dairy future is optimizing use of the forage base to reduce feed costs. The average price received was \$20.59 per hundredweight in 2007 and approximately \$19.08 in 2008. At the same time, input costs for items such as feed, labor, machinery and supplies have continued to increase. Feed costs jumped dramatically, raising operating costs above the goals set in the plan. Within the grazing group summaries, average total operating cost rose to \$16.09 per hundredweight versus a 10-year average of \$11.18. High input costs have affected profit margins and forced many dairy producers to explore alternative management strategies to remain competitive.

What has been done

Comparison of the operating margins of Missouri dairy grazers and the MU Southwest Center dairy to those of the large conventional dairies clearly demonstrates that smaller dairies can compete on a per-cow basis. Grazers continue to maintain strong control over production costs. Obviously there is ample opportunity for Missouri grazers to lower their costs when their data are compared with data from Wisconsin.

Results

Rapidly escalating input costs have affected not only pasture-based dairy operations, but the large conventional operations as well. Even with this factor, pasture-based operations are still producing milk for almost \$3.00 less per hundredweight than the other type of operations. Grazers have worked to increase forage use and are more accurately timing fertilizer applications.

4. Associated Knowledge Areas

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management
307	Animal Management Systems

Outcome #4

1. Outcome Measures

Increase the number of dairy grazing farms in Missouri.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Declining profit margins forced hundreds of dairies out of business in Missouri and across the southeastern United States. Missouri's dairy industry remains a critical component of the state's total agricultural economy. Missouri's dairy farmers earned \$326 million in cash receipts from milk sales in 2007.

What has been done

In the early 1990s, University of Missouri Extension initiated the pasture-based dairy project and dairies began using new intensive rotational grazing technologies to improve profit margins and reduce barriers to entry and growth.

Results

As of December 2008, expansion and growth by these new grazing dairies arriving in the past five years have increased total new investment in pasture-based dairies to \$100 million, generating \$39 million in annual milk sales, adding \$121 million in total output and 1,083 additional jobs to the state of Missouri.

4. Associated Knowledge Areas

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management

Outcome #5

1. Outcome Measures

Profitability of existing MiG dairies.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

A pasture-based dairy must be not only profitable, but also sustainable. An important component of this process is to collect and analyze economic data from the dairy operation. This provides a tool to evaluate current management and identifies areas needing modification to enhance profitability.

What has been done

Economic data have been collected from participants in the pasture-based dairy project and the University of Missouri Southwest Research Center dairy on an annual basis.

Results

University of Missouri Extension dairy specialists have used financial data from grazing peer groups to develop forms, spreadsheets and publications for producers and lenders to project yearly cash flows, balance sheets and income statements. Data from these summaries have been used to develop Model Dairy Farms published on the MU Dairy Grazing Web page.

4. Associated Knowledge Areas

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management

Outcome #6**1. Outcome Measures**

Quality of life as expressed by family farm operators.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Data collected from farm families and others in rural communities indicate the mental health problems associated with farm failures lead to increased physical illness, family and animal abuse, divorce and suicide. The social and psychological problems extend to others associated with agribusinesses in the community. Many communities begin to display social symptoms similar to the psychological problems displayed by farm families.

What has been done

Aspects of pasture-based dairy production have been demonstrated to clientele and other extension specialists.

Results

Sociological and environmental aspects of pasture-based dairying provide a less stressful way of life than conventional dairy production. Operators have reported reduced amount of time spent managing their dairy and more time available to spend with their families.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Competing Public priorities
- Populations changes (immigration, new cultural groupings, etc.)
- Other (Attitude)

Brief Explanation

Environmental and economic conditions are key factors affecting the profitability and sustainability of pasture-based dairy operations. Variability in environmental conditions affects pasture growth rates, which has a direct effect on the levels of concentrate required to complement pasture intake. During the reporting year, economic conditions had a much greater effect. Operating margin increased 74 percent over the previous year, a reflection of a 50 percent increase in price received for product, but only a 17 percent increase in cash costs. The current economic climate is expected to have a much greater negative impact in the coming year.

V(I). Planned Program (Evaluation Studies and Data Collection)**1. Evaluation Studies Planned**

- Before-After (before and after program)
- During (during program)
- Comparisons between program participants (individuals, group, organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.

Evaluation Results

Interest in pasture-based dairies continues to increase. As a result of the Pasture-Based Dairy Systems Program, the university dairy team was requested to conduct training for Natural Resources Conservation Service employees to increase their ability to assist dairy operations with pasture-based systems. Economic data will continue to be collected from pasture-based operations to delineate the profitability and sustainability of these systems, and a detailed evaluation will be conducted in the coming year as well as a strategic plan for the program.

Key Items of Evaluation

Economic data collection and analysis, profitability of pasture-based systems, increased knowledge of system, number of new dairy operations and surveys.

Program #9**V(A). Planned Program (Summary)****1. Name of the Planned Program**

MO-PORK: Increasing Pork Production in Missouri

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
301	Reproductive Performance of Animals	30%			
302	Nutrient Utilization in Animals	40%			
303	Genetic Improvement of Animals	5%			
305	Animal Physiological Processes	2%			
306	Environmental Stress in Animals	3%			
307	Animal Management Systems	15%			
308	Improved Animal Products (Before Harvest)	3%			
315	Animal Welfare/Well-Being and Protection	2%			
	Total	100%			

V(C). Planned Program (Inputs)**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	8.0	0.0	0.0	0.0
Actual	4.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
264140	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

The MO-Pork program will include the following activities: Promotion of efficient production and management practices (Pork Industry Handbook, MU guide sheets and Midwest Plan Service Handbooks); Use of Manual 144/202 "The Missouri System of Swine Production"; On-farm data collection used to evaluate production and economic endpoints; Focused Management Schools for MO-Pork participants, artificial insemination course, Back to the Basics: Farrowing School, Sow Manager's Conference, Pigs to Plate: Adventures in Meat Quality Seminar, Health Summit, finishing short course, nursery management course, ventilation short course; Delivery of Pork Quality Assurance Program for MO-Pork participants; Delivery of new technologies in the swine industry to MO-Pork participants; Computer models/PDA record keeping programs; World Pork Expo and other conferences; Education about niche production markets and specialization opportunities; Media coverage of the MO-Pork program; Farm visits; On-farm research trials; Workshops; Meetings; and Consultation.

2. Brief description of the target audience

The target audience will include people who own swine operations, work on swine farms, or provide technical support to people who own or work on swine farms (e.g., veterinarians, feed dealers). In addition, MO-Pork will target beginning Missouri pork producers, expanding Missouri pork producers, and industry personnel such as Missouri grain producers (interested in adding value to their crops).

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	750	1500	400	0
2008	65	194	181	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Provide two in-service training sessions for regional Extension specialists on an annual basis.

Year	Target	Actual
2008	2	1

Output #2**Output Measure**

- Develop or revise five guide sheets on an annual basis for regional Extension specialists to use in producer meetings.

Year	Target	Actual
2008	5	3

Output #3**Output Measure**

- Develop or revise 1 manual on an annual basis for regional Extension specialists to use in producer meetings.

Year	Target	Actual
2008	1	0

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Participants will maintain or increase pork production efficiencies and profitability in Missouri.
2	Participants will have improved economic viability and profitability through enhanced marketing opportunities for their operation.
3	Participants will maintain or increase pork operations in Missouri.
4	Participants will acquire knowledge and skills to aid in the successful adoption and implementation of existing management practices or emerging technology to improve pork production efficiency and productivity.
5	Participants will be able to identify and discuss the economic implications of implementing production practices such as marketing/contracting opportunities.

Outcome #1**1. Outcome Measures**

Participants will maintain or increase pork production efficiencies and profitability in Missouri.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

This reporting period was one of economic loss for pork producers worldwide with dramatic increases in commodity corn and soybean prices as well as prices for milk by-products, organic phosphorus, vitamins and minerals. In addition, the lack of a compensating increase in prices paid for pork compounded the issue, making tighter profit margins. Therefore, pork producers focus on efficiency such as reducing inputs (of which feed is the single greatest input cost) or increasing outputs (either reproductive output or growth performance).

What has been done

Focused programmatic efforts to reduce inputs through energy efficiency, purchasing contracts, alternative feed ingredients, precision formulations, ingredient selection, feed management and feed analysis are just a short list of educational topics presented to more than 157 Missouri pork producers in group consultations or one-on-one. Those producers present represented more than 90 percent of the pigs produced in Missouri. Additionally there were 27 on-farm visits for more detailed consultation on reproductive management issues.

Results

Pork producers were provided relevant information related to organic phosphorus, mineral, and grain prices to reduce total feed costs by more than \$20 per ton in some cases. The average savings per ration was \$9 per ton. This information was provided to more than 50 Missouri pork producers who raise more than 80 percent of the pork in Missouri. In 2008, these feed savings resulted in an economic benefit to Missouri pork producers of over \$1,620,000, or about \$3.50 per pig. One farm specifically reduced its feed costs by more than \$10 per pig, which has kept the family farm in the business of raising pork and did this basically by being more flexible in ingredient selection and use of feedstuffs. Some pork operations exited the industry; the data suggest normal variation with 1 to 2 percent declines in hog numbers from the previous year, which was a record. For example, the USDA estimates the size of Missouri's breeding herd as 370,000 head compared with 375,000 in 2007. The market hog inventory is estimated at 2.73 million head compared with 2.78 million head in Missouri. Corresponding national numbers are similar (e.g., 6.08 million vs. 6.23 million breeding animals and 6.06 million vs. 6.19 million market animals for 2008 and 2007, respectively).

4. Associated Knowledge Areas

KA Code	Knowledge Area
305	Animal Physiological Processes
308	Improved Animal Products (Before Harvest)
301	Reproductive Performance of Animals
302	Nutrient Utilization in Animals
307	Animal Management Systems
315	Animal Welfare/Well-Being and Protection
303	Genetic Improvement of Animals
306	Environmental Stress in Animals

Outcome #2

1. Outcome Measures

Participants will have improved economic viability and profitability through enhanced marketing opportunities for their operation.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

To sell pigs to any of the major packers, producers are required to be certified through the National Pork Board's Pork Quality Assurance Plus (PQA Plus) program. PQA Plus includes an animal welfare component in addition to the food safety focus, and those who certify producers in PQA Plus must take a four-hour training course and pass an examination. In addition, all Missouri youths who exhibit food-producing livestock must attend the Show Me Quality Assurance Program.

What has been done

Several state and county programs were held either face-to-face or online to certify Missouri pork producers through the PQA Plus Program and the Show Me Quality Assurance (SMQA) Program for youth. These included three sessions to train and certify PQA Plus advisors who performed most certifications.

Results

As part of these two programs, more than 30 PQA Plus advisors and 92 SMQA trainers have been certified. These advisors have certified more than 200 adults for PQA Plus and more than 8,420 youths through SMQA. This has resulted in more than 800 pork producers in Missouri becoming PQA Plus certified in 2008.

4. Associated Knowledge Areas

KA Code	Knowledge Area
315	Animal Welfare/Well-Being and Protection
307	Animal Management Systems
308	Improved Animal Products (Before Harvest)

Outcome #3

1. Outcome Measures

Participants will maintain or increase pork operations in Missouri.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The main issue is the ability of pork producers to maintain a competitive infrastructure in Missouri. The number of pork producers has seen a continual decline nationally. Missouri's number one industry is agriculture, and it is important that pork producers be allowed to take advantage of the competitive advantages the state has for raising commodity pork.

What has been done

The Swine Institute (held in November) was started to bring nationally recognized speakers to Missouri to discuss market access, legislative constraints and industry issues. Increasing efficiency of feed conversion and energy use as well as increased awareness of how legislation can affect production will lead to reduced environmental impact, maximizing manure as a natural fertilizer, and improving animal welfare.

Results

More than 60 people representing over half of Missouri's sow production attended the Swine Institute, where producers increased their knowledge of possible developments in the future of swine production. Working with partners has led to increased feed efficiency, reducing energy use, maintaining sow welfare awareness, and media relations to discuss the importance of livestock production in Missouri and the United States.

4. Associated Knowledge Areas

KA Code	Knowledge Area
305	Animal Physiological Processes
306	Environmental Stress in Animals
301	Reproductive Performance of Animals
302	Nutrient Utilization in Animals
307	Animal Management Systems
303	Genetic Improvement of Animals
315	Animal Welfare/Well-Being and Protection
308	Improved Animal Products (Before Harvest)

Outcome #4

1. Outcome Measures

Participants will acquire knowledge and skills to aid in the successful adoption and implementation of existing management practices or emerging technology to improve pork production efficiency and productivity.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The swine industry has been dynamic and competitive through the beginning of this century. It is industry that has embraced change, and those producers who have not embraced change have seen the industry pass them by; most who are resistant to change have exited the industry.

What has been done

This effort has been approached largely through workshops, seminars and short courses such as the National Swine Nutrition Guide, Pork Quality Assurance Plus, Growth and Quality Barrow Classic, Pork Profit Seminars and Swine Institute. Of course on-farm visits have also been used, especially in demonstration research efforts. Countless telephone and e-mail consultations have also been part of this effort. In addition, the Missouri Swine Resource Guide and By-Product Feed Price Report located on the Web at www.agebb.missouri.edu/swine is a useful resource.

Results

Providing educational presentations at least twice a year and updating the swine feeding programs yearly for the Sho-Me Buying Cooperative, a group of more than 60 independent pork producers has resulted in a huge economic advantage. This program has enabled independent swine producers to buy feed ingredients at the same competitive and bulk rate prices as large corporate operations, which has saved 30 to 40 percent in total feed costs, depending on the ingredients purchased and past sources. For example, organic phosphorus prices have dramatically increased but through the Sho-Me Group dicalcium phosphate was purchased at \$690 per ton vs retail at \$980 per ton. In addition, many diet formulation alternatives have been made available on the Missouri Swine Resource Guide Web page that has assisted pork producers with lowering their cost of production. Training in reproduction management techniques has helped Missouri producers stay ahead of the national average for farrowing rate, number born and pigs per sow per year, according to USDA estimates.

4. Associated Knowledge Areas

KA Code	Knowledge Area
305	Animal Physiological Processes
303	Genetic Improvement of Animals
302	Nutrient Utilization in Animals
307	Animal Management Systems
301	Reproductive Performance of Animals
306	Environmental Stress in Animals
308	Improved Animal Products (Before Harvest)
315	Animal Welfare/Well-Being and Protection

Outcome #5**1. Outcome Measures**

Participants will be able to identify and discuss the economic implications of implementing production practices such as marketing/contracting opportunities.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

During these competitive times, any way pork producers can maximize profit by assuring market access and reducing input costs helps to make the operation successful and to maintain viability. In addition, pork producers contribute to the local and state economy, affecting other related businesses such as grocery stores, lumber yards and car dealerships.

What has been done

Enhancement of the Swine Resource Web page has dramatically helped the evaluation of alternative feed ingredients and the acquisition of those ingredients using the by-product feed price report that is updated weekly as well as daily market reports. In addition, working with groups of independent pork producers who want to purchase commodity grains and ingredients together allows them to be more competitive. In addition, the group gains access to a nutritional consultant at no extra charge, a service that many producers might not have accessed otherwise.

Results

All dietary premixes and base mixes were reformulated in 2008, resulting in a savings of nearly \$0.20 per pound of premix. The bigger savings occurred with a reduction in use of organic phosphorus, which saved more than \$5 per ton of grow-finish diets. With more than 50 producers purchasing premixes and base mixes, the overall economic impact for the Missouri pork producers associated with this group was more than \$1.3 million. In addition, having more than 200 pork producers attend Pork Profit Seminars and the Swine Institute has provided access to additional marketing and contracting opportunities through direct communication with professionals as well as other pork producers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
315	Animal Welfare/Well-Being and Protection
307	Animal Management Systems
308	Improved Animal Products (Before Harvest)
301	Reproductive Performance of Animals

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Programmatic Challenges

Brief Explanation

External factors played a significant role in Missouri swine production. Continued efforts to subsidize ethanol production from corn have ended the profitability of pork production. Lack of adequate support to implement larger programs has limited some potential efforts. Continued local restrictions and anti-agriculture sentiments have created much heartache and added to the expense of expanding pork production in Missouri. Legislative efforts in other states to regulate how pork producers raise pigs will continue to increase the costs of pork production nationwide.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Retrospective (post program)
- Before-After (before and after program)
- During (during program)
- Case Study
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.

Evaluation Results

In general, pork producers are paid by the pound and by other measures of quality, most with a large genetic component. Economic models have shown repeatedly that increasing reproductive performance, measured as litter size weaned, will have the most profound economic impact among production traits. Use of artificial insemination (AI) has increased from less than 25 percent to more than 85 percent in the past 10 years. This, coupled with tighter profit margins, has led producers to incorporate much higher levels of management in their operations. Another economic measurement is feed efficiency, as feed cost represents about 70 percent of the total cost of pork production. Any feed management practice that will improve growth performance and feed efficiency enhances pork producers' profit margins. Other pork production issues of importance to producers are ensuring quality food product; product safety from terrorism; prevention of disease outbreaks; antibiotic feeding concentrations; neighborhood acceptance of operations; health of employees, owners, pigs and the public; labor shortages; and lack of skilled labor. Producers need to be educated and continually challenged to adopt new technologies. Otherwise, they may be forced to leave the pork production industry due to increasing costs of environmental regulations, limited market access and smaller profit margins.

Key Items of Evaluation

At the conclusion of conferences, seminars and programs, exit surveys are administered to participants, and these are followed up with farm visits and phone conversations. In these evaluations, more than 95 percent of the pork producers in attendance indicate that they have adopted new technology or changed current production practices based on what they learned during the conference, seminar or program. All participants responding would "recommend the program to another producer."

Program #10

V(A). Planned Program (Summary)

1. Name of the Planned Program

Plant Protection for the 21st Century

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
211	Insects, Mites, and Other Arthropods Affecting Plants	15%			
212	Pathogens and Nematodes Affecting Plants	15%			
213	Weeds Affecting Plants	15%			
214	Vertebrates, Mollusks, and Other Pests Affecting Plants	5%			
215	Biological Control of Pests Affecting Plants	10%			
216	Integrated Pest Management Systems	40%			
Total		100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	20.0	0.0	0.0	0.0
Actual	4.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
264140	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Campus and regional faculty members will conduct several regional workshops and short courses in partnership with commodity groups and private industry. Venues include commodity district meetings, soil and crop conferences, Ag Science Week, regional short courses, field days and demonstration projects. A suite of full color print publications related to pest and crop management will be developed, published and revised. Several websites are available for public use. The integrated pest management site also contains interactive information for clientele interested in black cutworm status. Weekly teleconferences among state and regional faculty members will be held during spring, summer and autumn for timely commodity and pest updates. Funding will be provided to regional extension specialists for local demonstrations of integrated pest management practices.

2. Brief description of the target audience

The primary target audiences are crop producers and their advisers, and private and commercial pesticide applicators. Programs will be developed for crop producers with a diversity of farm sizes, crops produced, and land resource bases. Crop advisers and service providers are important targets because of their extensive contact with crop producers, which makes them ideal intermediates for passing on Extension programming to a wider range of producers than could be reached by Extension personnel alone. Because the future of Missouri agriculture depends on young professionals replacing retiring farmers and personnel, youth organizations including FFA, 4-H, Young Farmers, and their teachers will receive specially designed programs.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	3000	5000	1000	0
2008	3724	3018	876	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Provide three in-service training sessions for regional Extension specialists on an annual basis.

Year	Target	Actual
2008	3	3

Output #2**Output Measure**

- Develop or revise 10 guide sheets on an annual basis for regional Extension specialists to use in producer meetings.

Year	Target	Actual
2008	10	5

Output #3**Output Measure**

- Develop or revise three manuals on an annual basis for regional Extension specialists to use in producer meetings.

Year	Target	Actual
2008	3	2

Output #4**Output Measure**

- Two print and electronic newsletters devoted to pest and crop management will be developed and distributed to regional specialists and other clientele.

Year	Target	Actual
2008	24	24

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Number of IPM educational materials (10 Guides & 3 Manuals) developed or revised either on paper or electronically (source = internal).
2	Number of IPM strategies and systems validated (source = internal).
3	Diversity of IPM practices adopted, including fields scouted for weeds, insects and pathogens (source = USDA/ERS).
4	Acres treated with insecticides, herbicides and fungicides with emphasis on high risk pesticides (source = USDA/ERS)
5	Three thousand (3,000) pesticide applicators will meet the legal need of certification by improving their knowledge of pesticides and their use.
6	Two thousand (2,000) agricultural producers, turfgrass and ornamental professionals and agribusiness personnel will acquire knowledge and skills to aid in the successful adoption and implementation of existing integrated pest management practices.

Outcome #1**1. Outcome Measures**

Number of IPM educational materials (10 Guides & 3 Manuals) developed or revised either on paper or electronically (source = internal).

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	15	15

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
211	Insects, Mites, and Other Arthropods Affecting Plants
212	Pathogens and Nematodes Affecting Plants
216	Integrated Pest Management Systems
215	Biological Control of Pests Affecting Plants
214	Vertebrates, Mollusks, and Other Pests Affecting Plants
213	Weeds Affecting Plants

Outcome #2**1. Outcome Measures**

Number of IPM strategies and systems validated (source = internal).

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
215	Biological Control of Pests Affecting Plants
216	Integrated Pest Management Systems
213	Weeds Affecting Plants
212	Pathogens and Nematodes Affecting Plants
214	Vertebrates, Mollusks, and Other Pests Affecting Plants
211	Insects, Mites, and Other Arthropods Affecting Plants

Outcome #3**1. Outcome Measures**

Diversity of IPM practices adopted, including fields scouted for weeds, insects and pathogens (source = USDA/ERS).

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
214	Vertebrates, Mollusks, and Other Pests Affecting Plants
211	Insects, Mites, and Other Arthropods Affecting Plants
213	Weeds Affecting Plants
215	Biological Control of Pests Affecting Plants
212	Pathogens and Nematodes Affecting Plants
216	Integrated Pest Management Systems

Outcome #4**1. Outcome Measures**

Acres treated with insecticides, herbicides and fungicides with emphasis on high risk pesticides (source = USDA/ERS)

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)****What has been done**

Soon after rust was discovered in Missouri during 2004, the MU Extension Soybean Rust Management Team implemented plans to educate the public about this disease. An MU extension publication in color was developed, printed, and distributed, a website was developed, meetings, and workshops were held; newspapers releases and radio clips were developed and distributed. A special phone hotline was established in 2008 to provide information about development of rust in the U.S. and MO during the growing season and the information was updated each Monday, Wednesday, and Friday.

Results

A team of extension faculty from MO, IL, KY, OH, MS, NE, NC, and LA surveyed the Certified Crop Advisors (CCA's) in those states during 2008 for their views of the soybean rust monitoring project in their state of residence and their views of the national soybean rust web site. An overall report of the views of CCA's from all states is being developed by Dr. Carl Bradley at the University of IL. The survey showed of CCA's from Missouri 100% felt the national rust website was useful or very useful, 100% used the information available there some or extensively when making recommendations to farmers about fungicides for soybean rust management, 94% would be concerned if the website was not available, 100% felt University Extension was effective or very effective in conveying information about soybean rust, and 59% indicated University Extension was their preferred source of information about soybean rust.

4. Associated Knowledge Areas

KA Code	Knowledge Area
216	Integrated Pest Management Systems

Outcome #5**1. Outcome Measures**

Three thousand (3,000) pesticide applicators will meet the legal need of certification by improving their knowledge of pesticides and their use.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)****What has been done**

Results

A total of 1,814 commercial applicators attended University of Missouri Extension Pesticide Applicator Training sessions during 2008. A survey of the commercial applicators who attended certification sessions reported that as a result of the training:

*Seventy-five percent recognized that it was 'highly important' to identify pests before choosing control methods.

*Seventy-six percent recognized that it was 'highly important' to refer to label information at all phases of application.

*Sixty-four percent recognized that it was 'highly important' to use non-chemical methods of pest control when appropriate.

*Seventy-eight percent recognized that it was 'highly important' to consider environmental impacts of pesticides on wildlife habitat including endangered species.

These survey results indicate that there is still a great deal of work that still needs to be done to change behavior and values.

4. Associated Knowledge Areas

KA Code	Knowledge Area
213	Weeds Affecting Plants
215	Biological Control of Pests Affecting Plants
211	Insects, Mites, and Other Arthropods Affecting Plants
216	Integrated Pest Management Systems
214	Vertebrates, Mollusks, and Other Pests Affecting Plants
212	Pathogens and Nematodes Affecting Plants

Outcome #6**1. Outcome Measures**

Two thousand (2,000) agricultural producers, turfgrass and ornamental professionals and agribusiness personnel will acquire knowledge and skills to aid in the successful adoption and implementation of existing integrated pest management practices.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)****What has been done**

Missouri's Private Pesticide Applicator Training program delivers certification and recertification training sessions to agricultural producers and others on an annual basis. The 3-hour sessions are delivered in all 114 counties by about 37 regional extension specialists. In addition to the formal pesticide training sessions, producers have the option of attaining certification or recertification by viewing a NEW interactive CD-ROM presentation at their local extension center.

Results

A total of 2,279 private applicators attended University of Missouri Extension Pesticide Applicator Training sessions during 2008. A 2007 survey of the Missouri private applicator that took the training found following results: 77 percent of participants indicated that the training heightened their awareness of pesticide laws and regulations; 86 percent indicated that the training had improved their comprehension of the pesticide label; 75 percent indicated that the training improved their knowledge related to protecting the environment; 94 percent indicated that the training improved their knowledge of personal protective equipment selection and use; 82 percent indicated that the training improved their calibration skills; and 91 percent indicated that the training improved their skills and understanding related to proper transportation and storage of pesticides and cleanup of spills.

4. Associated Knowledge Areas

KA Code	Knowledge Area
214	Vertebrates, Mollusks, and Other Pests Affecting Plants
216	Integrated Pest Management Systems
212	Pathogens and Nematodes Affecting Plants
211	Insects, Mites, and Other Arthropods Affecting Plants
215	Biological Control of Pests Affecting Plants
213	Weeds Affecting Plants

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Programmatic Challenges

Brief Explanation

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Before-After (before and after program)
- During (during program)

Evaluation Results

Key Items of Evaluation

Program #11

V(A). Planned Program (Summary)

1. Name of the Planned Program

Profit Focused Agriculture

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
601	Economics of Agricultural Production and Farm Management	40%			
602	Business Management, Finance, and Taxation	10%			
603	Market Economics	10%			
604	Marketing and Distribution Practices	10%			
605	Natural Resource and Environmental Economics	15%			
606	International Trade and Development	2%			
607	Consumer Economics	2%			
610	Domestic Policy Analysis	10%			
611	Foreign Policy and Programs	1%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	14.0	0.0	0.0	0.0
Actual	15.2	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
1003730	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Conduct multisession workshops using curricula or other appropriate material. Participate in or give presentations at meetings, workshops, conferences, seminars. Develop or update curricula or educational materials. Provide individual assistance as follow-up to group activities. Consult with individuals upon request. Develop and distribute information on current issues related to farm/agricultural profitability through newsletters, Internet postings, personal contacts, and media releases. Keep updated and assist farmers with computer and Internet applications. Conduct surveys or develop case studies relevant to improving farm/agricultural profitability. Evaluate the effectiveness of workshops, training, and other activities. Cooperate with agencies and organizations on activities related to the program objectives.

2. Brief description of the target audience

Farmers/ranchers (beginning, primary income, secondary income and transitioning) Landowners (absentee, women, seniors) and agribusinesses/agencies, agribusinesses/agencies (commercial, farmer cooperatives), and agencies/farm organizations (governmental, commodity groups).

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	1500	15000	0	0
2008	28638	60998	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Annual training for regional specialists on curriculum-based MO programs and new programs related to Ag Business Management series teaching programs conducted by regional specialists will be monitored and participants invited to complete evaluations.

Year	Target	Actual
2008	21	19

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Fifty percent of the participants in Annie's Project will develop a strategic plan. A follow-up survey will be conducted after training is complete.
2	Fifty percent of the participants in Golden Age Framing will develop an estate plan. A follow-up survey will be conducted after training is complete.
3	Two new value-added collective agricultural business organizations will be established annually. A follow-up survey will be conducted after training is complete.
4	The improved economic viability of the agribusiness and production agricultural sectors will significantly affect the state's economy and the viability of rural Missouri. USDA statistical data on Missouri farmers will be used. Target 5=5 million.
5	Program participants will report a 50 percent increase in their awareness of existing resources that will increase the profitability of their enterprise. Evaluation forms will be used.
6	There will be a 40 percent increase in the program participants' skills related to risk management and strategic planning. Evaluation forms will be used.
7	There will be a 30 percent increase in program participants' use of risk management tools. A follow-up survey will be conducted after training is complete.

Outcome #1**1. Outcome Measures**

Fifty percent of the participants in Annie's Project will develop a strategic plan. A follow-up survey will be conducted after training is complete.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri farm women is a growing segment. In 1997, the U.S. Census of Agriculture reported 9,759 women as principal farm operators, up 10.8%. Also, farm land owned by women was 1.74 million acres, increasing 5.6%. The 2007 Census will be released in Feb. '09. Female farmers/landowners are important to agriculture and should make decisions based on sound economic principles. Females have unique learning needs and Annie's Project meets those needs, based on sound economic principles.

What has been done

Annie's Project classes (18 hrs each) were taught at 14 sites across Missouri. The curriculum has been refined by ag business specialists based upon all areas of ag risk: marketing, production, financial, legal and human resources.

Annie's Project II curriculum has been developed and taught. The 12 hr. class focuses on marketing. The four session course focuses on livestock insurance, crop insurance and tools available for marketing including futures and options.

Results

This year, 114 persons completed an Annie's Project class. All participants completed personality profiles to learn about communicating with various personalities. Also, each person completed a balance sheet, located various documents such as insurance policies, POD's, and beneficiaries.

Annie's Project II participants averaged 49 years old, with 649 ac. owned land, 368 cash leased and 400 crop share acres. Before class participants said 66% market their grain/livestock when the 'Price seems good' and 29% market when 'bank loans are due'.

At the conclusion, participants were asked statements on a scale of 1 to 5 (1 lowest and 5 highest). Information easy to understand - 3.80, range of topics covered - 4.5, Increased knowledge of marketing - 4.2.

Each person stated the most significant thing learned. Following are samples: understanding technology, having a plan, insurance differences and where to get answers, how to chart, basis and marketing plans, how to market grain.

4. Associated Knowledge Areas

KA Code	Knowledge Area
607	Consumer Economics
603	Market Economics
606	International Trade and Development
601	Economics of Agricultural Production and Farm Management
604	Marketing and Distribution Practices
602	Business Management, Finance, and Taxation
610	Domestic Policy Analysis
605	Natural Resource and Environmental Economics
611	Foreign Policy and Programs

Outcome #2

1. Outcome Measures

Fifty percent of the participants in Golden Age Framing will develop an estate plan. A follow-up survey will be conducted after training is complete.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
602	Business Management, Finance, and Taxation
604	Marketing and Distribution Practices
601	Economics of Agricultural Production and Farm Management
603	Market Economics
606	International Trade and Development
611	Foreign Policy and Programs
610	Domestic Policy Analysis
607	Consumer Economics
605	Natural Resource and Environmental Economics

Outcome #3**1. Outcome Measures**

Two new value-added collective agricultural business organizations will be established annually. A follow-up survey will be conducted after training is complete.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

There are two methods to expand the farming operation, either through horizontal expansion of becoming larger or through vertical expansion of capturing a larger portion of the agricultural value chain. For farmers seeking to integrate up the value chain, making the best strategic decisions is key.

What has been done

The Missouri Value Added Center (MOVAC) provides leadership for two important roles within Missouri. First, center staff provide technical assistance to farmer groups looking to add value. Second, center staff provide unbiased information to educate, and respond to, decision makers regarding factors that influence the rural business climate.

Results

The MOVAC staff were involved in three grants totaling over \$150,000, assisted clientele in applying for over \$300,000 in competitive value added grants for CY08-09, assisted in technical assistance (economic, financial, and marketing) for four farmer-owned business opportunities in Missouri. The projects involve exporting soybean products into Vietnam (feasible) for a group of 120 Missouri farmers, holding special bred heifer sales outside of Missouri (feasible) for a group of 165 Missouri cattle farmers, assisting a producer group in evaluating the pooling of feeder cattle to be sold collectively (feasible, so far), and working with a steering committee to evaluate the economic feasibility of a small-scale soybean crushing plant. Other projects in development include 'Missouri Nature Branded Beef,' 'Exporting Distillers Dried Grains,' 'Missouri Pet Food Marketing Opportunities,' and 'Evaluating Missouri Timber Export Opportunities.' From the policy side, MOVAC staff frequently visit with various association, state department of agriculture, and concerned constituents regarding current and proposed legislation.

4. Associated Knowledge Areas

KA Code	Knowledge Area
604	Marketing and Distribution Practices
601	Economics of Agricultural Production and Farm Management
603	Market Economics

Outcome #4

1. Outcome Measures

The improved economic viability of the agribusiness and production agricultural sectors will significantly affect the state's economy and the viability of rural Missouri. USDA statistical data on Missouri farmers will be used. Target 5=5 million.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	5	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

In 2007/08 the biofuels industry continued to have an impact on Missouri agriculture. Corn production increased as Missouri mandated ethanol's use in gasoline. Grain prices soared in response to increased demand. In spring 2008, extremely wet weather delayed planting and expectations of lower production further affected grain prices. Grain and livestock producers experienced large increases in costs of fuel, fertilizer and feed. Volatile prices and costs created serious challenges throughout the agriculture industry.

What has been done

Between July 2007 and July 2008, regional extension specialists conducted 355 group sessions with producers and agribusinesses focused on increasing and maintaining the profitability of Missouri agriculture. Campus faculty participated in many of these, providing updates on current economic conditions and forecasts, as well as providing information on marketing options and management strategies.

Results

For the calendar year 2007, Missouri's total net farm income increased \$403,579 over 2006. In 2006 Missouri ranked 15th in the nation in total cash receipts from farming at \$5.62 billion. In 2007 Missouri ranked 14th with \$6.92 billion in cash receipts. The value of Missouri's farm real estate increased 7.5% between 2006 and 2007. Farmers adjusted their plantings of crops in response to weather and economic conditions. Corn acreage harvested was reduced by 650,000 acres, soybean acreage increased by 380,000 acres, and wheat acreage increased by 280,000 acres. Hay acreage also increased. In June 2008 Missouri farmers were receiving \$1.78 more per bushel of corn than a year earlier, \$5.90 more per bushel of soybeans, and \$0.97 more per bushel of wheat. Livestock producers were not faring as well. Hog prices were about \$2 higher than a year earlier, but beef cattle prices were about \$5 lower per hundredweight. Milk prices were also about \$2 lower. But, overall, Missouri producers averaged increased net income.

4. Associated Knowledge Areas

KA Code	Knowledge Area
606	International Trade and Development
610	Domestic Policy Analysis
604	Marketing and Distribution Practices
601	Economics of Agricultural Production and Farm Management
611	Foreign Policy and Programs
607	Consumer Economics
602	Business Management, Finance, and Taxation
605	Natural Resource and Environmental Economics
603	Market Economics

Outcome #5

1. Outcome Measures

Program participants will report a 50 percent increase in their awareness of existing resources that will increase the profitability of their enterprise. Evaluation forms will be used.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

During 2007/08, keeping up to date on the rapidly changing prices and input costs for farm products was especially important for the agriculture industry. Extremely wet weather and flooding generated questions from producers on government program requirements and possibility of financial assistance. Increased income from farming generated a need for current information on taxes, rental rates and land values. Informing clients of sources for this information was a high priority.

What has been done

Use of the AgEBB Web site was demonstrated at six major MU field days and many local extension events, and hands-on training was provided for new extension agriculture specialists. Training in farm applications of software was provided at 38 sessions over the state and at a state conference of farm computer users. The eight Missouri extension regions and campus faculty informed clients of electronic, printed and personal resources available through regional newsletters and various forms of public announcements.

Results

Requests for materials on rental rates and land values increased after their availability was announced. MU Extension distributed 1500 printed copies of these materials and experienced many hits on the electronic posting. Authors were contacted by producers after finding materials on AgEBB or comments in the media. Authors were contacted by the media for additional comments or use of materials. The number of hits on Web postings of current economic, budgeting and weather information increased.

4. Associated Knowledge Areas

KA Code	Knowledge Area
610	Domestic Policy Analysis
602	Business Management, Finance, and Taxation
606	International Trade and Development
604	Marketing and Distribution Practices
611	Foreign Policy and Programs
607	Consumer Economics
605	Natural Resource and Environmental Economics
603	Market Economics
601	Economics of Agricultural Production and Farm Management

Outcome #6

1. Outcome Measures

There will be a 40 percent increase in the program participants' skills related to risk management and strategic planning. Evaluation forms will be used.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Increased grain prices motivated landlords and tenants to consider changing cropland lease agreements to reflect increased profitability. Landowners were considering buying more land, or valuing it for transfer purposes. Increased rents would affect tenants' risks. Overpriced or underpriced land could affect a landowner's equity position and have serious implications for the future of the operation.

What has been done

Regional specialists conducted 54 group sessions on legal issues and estate planning and had many individual consultations regarding leasing decisions. Group sessions targeted at women landowners were also held. A statewide survey of land values was conducted, and results made available as planning aids. A survey of farm rental rates was conducted, with results to be made available in the fall as a planning aid for the next year.

Results

The group sessions were well attended and the survey results generated much interest by the public and the media. Participating lenders and appraisers indicated they appreciate having access to the survey results and wish to continue participating, even suggesting others who would like to participate. There is continuing interest in legal issues as laws change or are interpreted.

4. Associated Knowledge Areas

KA Code	Knowledge Area
603	Market Economics
610	Domestic Policy Analysis
604	Marketing and Distribution Practices
601	Economics of Agricultural Production and Farm Management
607	Consumer Economics

606	International Trade and Development
611	Foreign Policy and Programs
605	Natural Resource and Environmental Economics
602	Business Management, Finance, and Taxation

Outcome #7**1. Outcome Measures**

There will be a 30 percent increase in program participants' use of risk management tools. A follow-up survey will be conducted after training is complete.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

The rapidly changing economic situation made it important for producers, lenders and agribusinesses to be able to analyze many situations quickly and make appropriate decisions and adjustments.

What has been done

In the fall of 2007, extension faculty held 12 seminars over the state for agricultural lenders, and 243 lenders participated. Planning budgets were developed and were a major component of the materials provided. The budgets and their use were discussed, and evaluations indicated they are widely used in lending decisions and consultations. Use of electronic budgeting programs was also discussed. Seventeen agbusiness extension specialists also used these budgeting tools in working with clients.

Results

The financial position of Missouri's agricultural lending institutions remained strong. Extension specialists modified the planning budgets to reflect local conditions when using them to consult with clients.

4. Associated Knowledge Areas

KA Code	Knowledge Area
607	Consumer Economics
602	Business Management, Finance, and Taxation
603	Market Economics
611	Foreign Policy and Programs
604	Marketing and Distribution Practices
606	International Trade and Development
601	Economics of Agricultural Production and Farm Management
605	Natural Resource and Environmental Economics
610	Domestic Policy Analysis

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Brief Explanation

Several major factors affecting Missouri's agriculture were similar over most of the country -- higher prices for grains resulting from demand for biofuel production, and increased fuel and input costs. The excessive rainfall and flooding were primarily Missouri issues, but all areas of the state were not affected equally. Missouri has a large livestock industry, which was negatively impacted by the same high grain prices that benefited crop producers. Overall, Missouri grain farmers were more interested in maximizing profits, and livestock producers were more concerned with controlling costs.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- During (during program)
- Time series (multiple points before and after program)
- Case Study
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- Other (Comparisons between states)

Evaluation Results

Regional extension specialists conducted at least 816 AgBusiness Management sessions, the majority of which involved topics related to profitability. Site evaluations could not be summarized from all these sessions. Those sessions that are annual or repetitive events, including the annual series of tax workshops, lender seminars, computer users conference, Annie's Project and agmarketing outlook teleconferences, all received positive evaluations, with requests that they be continued.

Key Items of Evaluation

Program #12**V(A). Planned Program (Summary)****1. Name of the Planned Program**

Show-Me-Select Replacement Heifer Program

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
301	Reproductive Performance of Animals	60%			
303	Genetic Improvement of Animals	20%			
307	Animal Management Systems	10%			
308	Improved Animal Products (Before Harvest)	10%			
	Total	100%			

V(C). Planned Program (Inputs)**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	13.0	0.0	0.0	0.0
Actual	12.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
792419	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

The learner-focused outcomes of this program will expand the scope of the Missouri Show-Me-Select Replacement Heifer Program. These outcomes include: 1) Regional Extension Livestock Specialists, veterinarians, farmers, and allied industry representatives will acquire knowledge and skills to aid in the successful adoption and implementation of existing management practices to improve beef heifer development; 2) Regional Extension Livestock Specialists, practicing veterinarians, producers, and future professionals will acquire new knowledge and skills to aid in the adoption of emerging biotechnologies in beef heifer development, including estrus synchronization and artificial insemination; 4) Regional Extension Livestock Specialists, practicing veterinarians and producers will be able to identify and discuss the economic implications of implementing production practices associated with the Show-Me-Select Replacement Heifer Program; and 5) Participating producers will develop a plan that establishes the Show-Me-Select Replacement Heifer Program as a producer owned and managed system.

2. Brief description of the target audience

The audiences targeted in this program are farmers across Missouri actively involved in cow-calf production and marketing. There are no limitations placed on the program in terms of farm or size of cow-herd. The program to date has involved herds as small as 8 cows and as large as 6,000 cows. Numerous sectors of the Missouri livestock industry come together as a result of this program, including University Extension, the Division of Animal Sciences, the University of Missouri College of Veterinary Medicine, the Commercial Agriculture Program, the Missouri Beef Cattle Improvement Association, the Missouri Cattlemen's Association, the Missouri Department of Agriculture, and the Missouri Livestock Marketing Association.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	750	10000	0	0
2008	1181	836	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Provide two in-service training sessions for regional Extension specialists on an annual basis.

Year	Target	Actual
2008	2	2

Output #2**Output Measure**

- Develop or revise 3 power point presentations for regional Extension specialist to use in producer meetings.

Year	Target	Actual
2008	15	6

Output #3**Output Measure**

- Regional and state specialist will conduct at least three demonstrations on an annual basis.

Year	Target	Actual
2008	3	9

Output #4**Output Measure**

- Regional specialist will assist with producer sales.

Year	Target	Actual
2008	12	12

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Economic assessment of the program based on surveys of participating farmers.
2	Number of animals (heifers) involved.
3	Number of participating veterinarians on a region-to-region basis.
4	Assessment of change in a production medicine approach to veterinary practices that participate in the program.
5	Income generated from regional sales and added value of heifers retained on farms that participate in the program.
6	Added revenue generated to related sectors of the beef industry and estimates of new job creation as a result of this program.
7	Total impact on the state's economy as a result of the Show-Me-Select heifer program and related activities. 3=3 million.
8	Adding value to Missouri raised beef cattle.
9	Number of farmers in Missouri that participate in the program.
10	Adoption rate of management practices by participating farmers.

Outcome #1**1. Outcome Measures**

Economic assessment of the program based on surveys of participating farmers.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

The audiences targeted in this program include regional extension livestock specialists, veterinarians and farmers who are actively involved in cow-calf production and marketing across Missouri. Technology transfer with respect to the management practices involved in the program is not size dependent but rather farmer dependent in terms of introducing a fundamental change in approach to management and marketing that affect their profitability profile.

What has been done

The Missouri Show-Me-Select Replacement Heifer Program was designed to improve reproductive efficiency of beef herds in Missouri and increase individual farm income. The program objectives include (1) a total quality management approach for health and management of heifers from weaning to late gestation; (2) increased marketing opportunities for, and added value to, Missouri-raised heifers; and (3) the creation of reliable sources of quality commercial and purebred replacement females.

Results

The Show-Me-Select Replacement Heifer Program is the first comprehensive, statewide on-farm beef heifer development and marketing program in the United States. Participation in the program from 1997 through 2008 involved 81,979 heifers on 669 farms across Missouri, 194 local veterinarians, 10 regional extension livestock coordinators, and 17 regional extension livestock specialists. The marketing component of the program over this same period involved 90 sales at 12 locations. During this time, 19,141 heifers sold through sanctioned Show-Me-Select sales with gross receipts of \$22,148,205. Total net impact on Missouri's economy from the first 12 years of the Show-Me-Select Replacement Heifer Program and Sales exceeded \$40,000,000. Producers from 104 of Missouri's 114 counties (91%) have enrolled heifers in the program, and 64 counties in Missouri (56% of the total) list the Show-Me-Select Replacement Heifer Program as a priority program for their county in their current extension Program of Work.

4. Associated Knowledge Areas

KA Code	Knowledge Area
301	Reproductive Performance of Animals
303	Genetic Improvement of Animals
308	Improved Animal Products (Before Harvest)
307	Animal Management Systems

Outcome #2**1. Outcome Measures**

Number of animals (heifers) involved.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Continuation of low adoption rates of best management practices in the United States will ultimately erode the competitive position of the U.S. cattle industry. Other countries are adopting new technologies for animal production more rapidly than the United States has. Unless owners of commercial and purebred cowherds aggressively implement reproductive and genetic improvement, U.S. producers will lose their competitive advantage in production of high-quality beef.

What has been done

Various management procedures have been cited as having a significant impact on beef herds and their resulting performance as measured by reproduction and productivity. Only a small fraction of beef cattle operations use these management procedures. Best management practices for replacement beef heifers, when collectively viewed as a 'program,' can assist producers in more effectively managing reproduction, production and marketing.

Results

The reproductive goals for heifers enrolled in the Show-Me-Select Replacement Heifer Program are aimed at improving breeding performance during the heifers' first breeding period, minimizing the incidence and severity of dystocia, and successful rebreeding of heifers during the subsequent breeding season. The Show-Me-Select Replacement Heifer Program is the first statewide, on-farm beef heifer development and marketing program in the nation. Producers are using on-farm heifer development technologies that are now spilling over into their cowherds. A significant increase in interest and use of estrus synchronization and AI stemming may result in part from differential in sale prices, but, more important, from successful application. In general, there has been a growing awareness, understanding and appreciation for the importance of reproductive management to the whole herd.

4. Associated Knowledge Areas

KA Code	Knowledge Area
308	Improved Animal Products (Before Harvest)
307	Animal Management Systems
303	Genetic Improvement of Animals
301	Reproductive Performance of Animals

Outcome #3**1. Outcome Measures**

Number of participating veterinarians on a region-to-region basis.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Veterinarians provide expertise in the areas of health, assessment of reproductive potential, fetal aging and pregnancy diagnosis. Veterinarians serve as key information sources for U.S. beef producers and are essential in facilitating the adoption of various reproductive procedures. Nearly two-thirds (60.8%) of cow-calf producers cited their veterinarian as a 'very important' source of information for their cow-calf operations, including health and nutrition as well as questions pertaining to production or management.

What has been done

Implementation involved University of Missouri faculty specialists working closely with producers, regional extension specialists, and veterinarians. On-farm development programs that involve local veterinarians, state and regional extension specialists and individual farm operators provide the structure through which change can occur.

Results

The success of this program over the past years was largely a function of being able to reach the target audience and the associated impact of that connection. This program brought together many sectors of the Missouri livestock industry, including University of Missouri Extension, the College of Agriculture Food and Natural Resources, the College of Veterinary Medicine, the Division of Animal Sciences, the Commercial Agriculture Program, the Missouri Beef Cattle Improvement Association, the Missouri Cattlemen's Association, the Missouri Department of Agriculture, and the Missouri Livestock Marketing Association. Regional extension livestock specialists serve as coordinators of the program locally and work closely with the 194 veterinarians involved with the program statewide. State extension specialists provide program support to regional extension field staff and participating veterinarians.

4. Associated Knowledge Areas

KA Code	Knowledge Area
301	Reproductive Performance of Animals
307	Animal Management Systems
308	Improved Animal Products (Before Harvest)
303	Genetic Improvement of Animals

Outcome #4

1. Outcome Measures

Assessment of change in a production medicine approach to veterinary practices that participate in the program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Veterinarians provide expertise in the areas of health, assessment of reproductive potential, fetal aging and pregnancy diagnosis. Veterinarians serve as key information sources for U.S. beef producers and are essential in facilitating the adoption of various reproductive procedures. Nearly two-thirds (60.8%) of cow-calf producers cited their veterinarian as a 'very important' source of information for their cow-calf operations, including health and nutrition as well as questions pertaining to production or management.

What has been done

Implementation involved University of Missouri faculty specialists working closely with producers, regional extension specialists, and veterinarians. On-farm development programs that involve local veterinarians, state and regional extension specialists and individual farm operators provide the structure through which change can occur.

Results

Veterinarians provide expertise in the areas of health, assessment of reproductive potential, fetal aging and pregnancy diagnosis. Veterinarians serve as key information sources for U.S. beef producers and are essential in facilitating the adoption of various reproductive procedures. Nearly two-thirds (60.8%) of cow-calf producers cited their veterinarian as a 'very important' source of information for their cow-calf operations, including health and nutrition as well as questions pertaining to production or management.

The success of this program over the past years was largely a function of being able to reach the target audience and the associated impact of that connection. Implementation involved University of Missouri faculty specialists working closely with producers, regional extension specialists, and veterinarians. On-farm development programs that involve local veterinarians, state and regional extension specialists and individual farm operators provide the structure through which change can occur.

4. Associated Knowledge Areas

KA Code	Knowledge Area
301	Reproductive Performance of Animals
308	Improved Animal Products (Before Harvest)
307	Animal Management Systems
303	Genetic Improvement of Animals

Outcome #5

1. Outcome Measures

Income generated from regional sales and added value of heifers retained on farms that participate in the program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The Missouri Show-Me-Select Replacement Heifer Program was designed to improve reproductive efficiency of beef herds in Missouri and increase individual farm income. The program objectives include (1) a total quality management approach for health and management of heifers from weaning to late gestation; (2) increased marketing opportunities for, and added value to, Missouri-raised heifers; and (3) the creation of reliable sources of quality commercial and purebred replacement females.

What has been done

Implementation of the Show-Me-Select Replacement Heifer Program in Missouri has resulted in expanded working relationships among producers, extension specialists and veterinarians. This has resulted in an increased adoption rate of management practices used in the development of replacement beef heifers, and ultimately improved reproductive management of cowherds across Missouri.

Results

During the past 12 years, 669 farms enrolled 81,979 heifers in the program. Regional extension livestock specialists serve as coordinators of the program locally and work closely with the 194 veterinarians involved with the program statewide. State specialists provide program support to regional extension field staff and participating veterinarians. The reproductive goals for heifers enrolled in the program are aimed at improving breeding performance during the heifers' first breeding period, minimizing the incidence and severity of dystocia, with the resulting delivery of healthy, vigorous calves, and successful rebreeding of heifers during the subsequent breeding season. The marketing component of the program facilitated the sale of 20,307 heifers in 90 sales across Missouri from 1997 through the fall sales in 2008. These sales generated interest from 6,943 prospective buyers that formally registered to buy heifers, and 2,560 individuals that purchased heifers from the various sales. Heifers from the program have now sold to farms in 16 states. Collectively, 90 sales have generated more than \$22 million in gross sales. The Missouri Show-Me-Select Replacement Heifer Program is the first statewide on-farm development and marketing program of its kind in the United States.

4. Associated Knowledge Areas

KA Code	Knowledge Area
303	Genetic Improvement of Animals
301	Reproductive Performance of Animals
308	Improved Animal Products (Before Harvest)
307	Animal Management Systems

Outcome #6

1. Outcome Measures

Added revenue generated to related sectors of the beef industry and estimates of new job creation as a result of this program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

An example of the economic impact stemming from an organized program that supports use of best management practices is the Missouri Show-Me-Select Replacement Heifer Program. Heifers that sold (n=19,141) between fall 1996 and fall 2008 at Show-Me-Select Program Sales sold for an average of \$1091 per heifer, which is more than \$100/head greater than the price received per head for bred heifers at conventional livestock sales.

Results

Impact on Missouri's economy from the first 12 years of the Show-Me-Select program now exceeds \$40,000,000. Producers from 104 (91%) of 114 counties have participated in the Show-Me-Select Replacement Heifer Program. Buyers from 112 of 114 counties (98%) registered to purchase heifers from 1997 to 2008 Show-Me-Select Replacement Heifer Sales. Buyers from 108 of the 114 counties (95%) purchased heifers from 1997 to 2008 Show-Me-Select Replacement Heifer sales. Show-Me-Select Replacement Heifers have now sold into 16 states: Arkansas, Arizona, Florida, Georgia, Iowa, Illinois, Indiana, Kentucky, Kansas, Missouri, Nebraska, Oklahoma, South Carolina, South Dakota, Tennessee and Texas.

4. Associated Knowledge Areas

KA Code	Knowledge Area
308	Improved Animal Products (Before Harvest)
307	Animal Management Systems
303	Genetic Improvement of Animals

Outcome #7**1. Outcome Measures**

Total impact on the state's economy as a result of the Show-Me-Select heifer program and related activities. 3=3 million.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Continuation of low adoption rates of best management practices in the United States will ultimately erode the competitive position of the U.S. cattle industry. Other countries have adopted new technologies for animal production more rapidly than the United States has. Unless owners of commercial cowherds aggressively implement reproductive and genetic improvement, U.S. producers will lose their competitive advantage in production of high-quality beef. International players that are more technically astute and competitively advantaged will position themselves to dominate the production and sale of high-quality beef worldwide.

What has been done

The Show-Me-Select Replacement Heifer Program is based on a fundamental principle of extension and the land grant university system: the use and application of what we know to create knowledge. Meaningful assessment of this program began by building in evaluation as part of the design. Data collection is part of the delivery process and reinforces the development of sound management practices on individual farms that participate in the program regardless of their size. Results: The impact on Missouri's economy from the first 12 years of the Show-Me-Select Replacement Heifer Program exceeds \$40 million. Producers from 104 (91%) of 114 counties have participated in the Show-Me-Select Replacement Heifer Program. Buyers from 112 of 114 counties (98%) registered to purchase heifers from 1997 to 2008 Show-Me-Select Replacement Heifer Sales. Buyers from 108 of the 114 counties (95%) purchased heifers from 1997 to 2008 Show-Me-Select Replacement Heifer sales. Show-Me-Select Replacement Heifers have now sold into 116 states: Arkansas, Arizona, Florida, Georgia, Iowa, Illinois, Indiana, Kentucky, Kansas, Missouri, Nebraska, Oklahoma, South Carolina, South Dakota, Tennessee and Texas.

Results

The marketing component of the program facilitated the sale of 20,307 heifers in 90 sales across Missouri from 1997 through the fall sales in 2008. These sales generated interest from 6,943 prospective buyers that formally registered to buy heifers, and 2,560 individuals that purchased heifers from the various sales. Heifers from the program have now sold to farms in 16 states: Arkansas, Arizona, Florida, Georgia, Iowa, Illinois, Indiana, Kentucky, Kansas, Missouri, Nebraska, Oklahoma, South Carolina, South Dakota, Tennessee and Texas. Collectively, 90 sales have generated \$22,148,205 in gross sales. The Missouri Show-Me-Select Replacement Heifer Program is the first statewide on-farm development and marketing program of its kind in the United States. The economic impact of the Show-Me-Select Replacement Heifer Program on an annual basis is estimated at \$3.5 million. The impact on Missouri's economy from the first 12 years of the Show-Me-Select program exceeds \$40 million.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems
308	Improved Animal Products (Before Harvest)
303	Genetic Improvement of Animals
301	Reproductive Performance of Animals

Outcome #8

1. Outcome Measures

Adding value to Missouri raised beef cattle.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Continuation of low adoption rates of best management practices in the U.S. will ultimately erode the competitive position of the U.S. cattle industry. Other countries are adopting new technologies for animal production more rapidly than the U.S. Unless owners of commercial cowherds aggressively implement reproductive and genetic improvement, the U.S. will lose its competitive advantage in production of high quality beef. International players that are more technically astute and competitively advantaged will position themselves to dominate the production and sale of high-quality beef worldwide.

What has been done

A number of management procedures have been cited as having a significant impact on beef herds and their resulting performance as measured by reproduction and productivity. Only a small fraction of beef cattle operations use these management procedures. Best management practices for replacement beef heifers, when collectively viewed as a 'program,' can assist producers in more effectively managing reproduction, production and marketing. These practices add value to the general performance and productivity of herds both immediately and in the long term.

Results

An example of the economic impact stemming from an organized program that supports use of best management practices is the Missouri Show-Me-Select Replacement Heifer Program. Heifers that sold (n=20,307) between fall 1996 and fall 2008 at Show-Me-Select Program Sales sold for an average of \$1091 per heifer, which is more than \$100/head greater than the price received per head for bred heifers at conventional livestock sales. The impact on Missouri's economy from the first 12 years of the Show-Me-Select program exceeds \$40 million. Producers from 104 (91%) of 114 counties have participated in the program. Buyers from 112 of 114 counties (98%) registered to purchase heifers from 1997 to 2008 Show-Me-Select Replacement Heifer Sales. Buyers from 108 of the 114 counties (95%) purchased heifers from 1997 to 2008 Show-Me-Select Replacement Heifer Sales. Show-Me-Select Replacement Heifers have now sold into 16 states: Arkansas, Arizona, Florida, Georgia, Iowa, Illinois, Indiana, Kentucky, Kansas, Missouri, Nebraska, Oklahoma, South Carolina, South Dakota, Tennessee and Texas.

4. Associated Knowledge Areas

KA Code	Knowledge Area
301	Reproductive Performance of Animals
308	Improved Animal Products (Before Harvest)
303	Genetic Improvement of Animals
307	Animal Management Systems

Outcome #9**1. Outcome Measures**

Number of farmers in Missouri that participate in the program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri ranks second in the U.S. in the number of beef cows in production with over 2 million cows on 68,000 farms. The sale of cattle and calves contribute nearly 20 percent annually to Missouri's total farm cash receipts. The definitive outcome of this program was intended in part to add value to beef heifers by expanding marketing opportunities as a result of technology adoption, production verification, collective action, and best management practices.

What has been done

The Missouri Show-Me-Select Replacement Heifer Program was designed to improve reproductive efficiency of beef herds in Missouri and increase individual farm income. The program objectives include (1) a total quality management approach for health and management of heifers from weaning to late gestation; (2) increased marketing opportunities for, and added value to, Missouri-raised heifers; and (3) the creation of reliable sources of quality commercial and purebred replacement females.

Results

During the past 12 years, 669 farms enrolled 81,979 heifers in the program. The reproductive goals for heifers enrolled in the program are aimed at improving breeding performance during the heifers' first breeding period, minimizing the incidence and severity of dystocia, and successful rebreeding of heifers during the subsequent breeding season. The marketing component of the program facilitated the sale of 20,307 heifers in 90 sales across Missouri from 1997 through the fall sales in 2008. These sales generated interest from 6,943 prospective buyers that formally registered to buy heifers, and 2,560 individuals that purchased heifers from the various sales. Heifers from the program have now sold to farms in Arkansas, Arizona, Florida, Georgia, Iowa, Illinois, Indiana, Kentucky, Kansas, Missouri, Nebraska, Oklahoma, South Carolina, South Dakota, Tennessee and Texas.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems
308	Improved Animal Products (Before Harvest)
303	Genetic Improvement of Animals
301	Reproductive Performance of Animals

Outcome #10**1. Outcome Measures**

Adoption rate of management practices by participating farmers.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Missouri ranks second in the U.S. in the number of beef cows in production with over 2 million cows on 68,000 farms. The sale of cattle and calves contribute nearly 20 percent annually to Missouri's total farm cash receipts. The definitive outcome of this program was intended in part to add value to beef heifers by expanding marketing opportunities as a result of technology adoption, production verification, collective action, and best management practices.

What has been done

A number of management procedures have been cited to have a significant impact on beef herds and their resulting performance measured by reproduction and productivity. Only a limited percent of beef cattle operations use these management procedures. Best management practices for replacement beef heifers, when collectively viewed as a 'program', can assist producers in more effectively managing reproduction, production, and marketing.

Results

The Show-Me-Select Replacement Heifer Program is the first comprehensive, statewide, on-farm beef heifer development and marketing program in the United States. Participation in the program from 1997 through 2008 involved 77,784 heifers on 669 farms across Missouri, 194 local veterinarians, 10 regional extension livestock coordinators, and 17 regional extension livestock specialists. The marketing component of the program over this same period involved 90 sales at 10 locations. During this time, 20,307 heifers sold through sanctioned Show-Me-Select sales with gross receipts of \$22,148,205. Producers from 104 (91%) of 114 counties have participated in the Show-Me-Select Replacement Heifer Program. Buyers from 112 of 114 counties (98%) registered to purchase heifers from 1997 to 2008 Show-Me-Select Replacement Heifer Sales. Buyers from 108 of the 114 counties (95%) purchased heifers from 1997 to 2008 Show-Me-Select Replacement Heifer sales. Show-Me-Select Replacement Heifers have now sold into 16 states: Arkansas, Arizona, Florida, Georgia, Iowa, Illinois, Indiana, Kentucky, Kansas, Missouri, Nebraska, Oklahoma, South Carolina, South Dakota, Tennessee and Texas.

4. Associated Knowledge Areas

KA Code	Knowledge Area
308	Improved Animal Products (Before Harvest)
301	Reproductive Performance of Animals
307	Animal Management Systems
303	Genetic Improvement of Animals

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Economy
- Other (Marketing Fluctuations)

Brief Explanation

The audiences targeted in this program include regional extension livestock specialists, veterinarians and farmers that are actively involved in cow-calf production and marketing across Missouri. There were no limitations placed on the program in terms of farm or size of cowherd. The pilot programs involved herds as small as 15 cows and as large as 800 cows. Technology transfer with respect to the management practices involved is not size dependent but rather farmer dependent in terms of introducing a fundamental change in approach to management and marketing that affect a producer's profitability profile. The success of this program over the past 12 years relied largely in reaching this target audience and the associated impact of that connection. The program brought together many sectors of the Missouri livestock industry, including University of Missouri Extension, the College of Agriculture, Food and Natural Resources, the College of Veterinary Medicine, the Division of Animal Sciences, the Commercial Agriculture Program, the Missouri Beef Cattle Improvement Association, the Missouri Cattlemen's Association, the Missouri Department of Agriculture, and the Missouri Livestock Marketing Association. Since the program was piloted in 1997, 669 farms in Missouri have enrolled 81,979 heifers in the Show-Me-Select Replacement Heifer Program. Across Missouri, the program has been led by 10 regional extension livestock specialists who serve as coordinators of the program in their respective regions, and 17 additional specialists who support efforts in these regions. In addition, 194 veterinarians in Missouri have participated in the Show-Me-Select Replacement Heifer Program since its inception. The Show-Me-Select Replacement Heifer Program is based on a founding principle of extension and the land grant university system: the use and application of what we know to create knowledge. Hence, evaluation has had an impact in the program itself. Meaningful assessment of this program began with building in evaluation as part of the design. Data collection was part of the delivery process and reinforced the development of sound management practices through on-farm, individualized result demonstrations conducted on farms that participated in the Show-Me-Select Replacement Heifer Program. Farmers used data generated on their own farms. The focus of the program was action alternatives based on the data generated. The result was that a negotiated participatory process evolved among the regional extension livestock specialist, the veterinarian, and the farmer with support from state extension specialists. Future competitiveness of farms involved with the production and sale of beef cattle requires a fundamental change in development practices being used on breeding heifers.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- During (during program)
- Time series (multiple points before and after program)
- Case Study
- Comparisons between program participants (individuals, group, organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.

Evaluation Results

The Missouri Show-Me-Select Replacement Heifer Program was designed to improve reproductive efficiency of beef herds in Missouri and increase individual farm income. The program objectives include: 1) a total quality management approach for health and management of heifers from weaning to late gestation; 2) increased marketing opportunities for, and added value to, Missouri raised heifers; and 3) the creation of reliable sources of quality commercial and purebred replacement females. The program was initiated as a pilot project in two regions of Missouri in 1997 with 33 farms and 1,873 heifers. During the past 12 years, 669 farms enrolled 81,979 heifers in the program. Regional extension livestock specialists serve as coordinators of the program locally and work closely with the 194 veterinarians involved with the program state wide. State specialists provide program support to regional extension field staff and participating veterinarians. The reproductive goals for heifers enrolled in the program are aimed at improving breeding performance during the heifers' first breeding period, minimizing the incidence and severity of dystocia, with the resulting delivery of healthy vigorous calves, and successful rebreeding of heifers during the subsequent breeding season. The marketing component of the program facilitated the sale of 20,307 heifers in 90 sales across Missouri from 1997 through the fall sales in 2008. These sales generated interest from 6,943 prospective buyers that formally registered to buy heifers, and 2,560 individuals that purchased heifers from the various sales. Heifers from the program have now sold to farms in AR, AZ, FL, GA, IA, IL, IN, KY, KS, MO, NE, OK, SC, SD, TN and TX. Collectively, 90 sales have generated \$22,148,205 in gross sales. Producers from 104 (91%) of 114 counties have participated in the Show-Me-Select Replacement Heifer Program. Buyers from 112 of 114 counties (98%) registered to purchase heifers from 1997-2008 Show-Me-Select Replacement Heifer Sales. Buyers from 108 of the 114 counties (95%) purchased heifers from 1997-2008 Show-Me-Select Replacement Heifer sales. The Missouri Show-Me-Select Replacement Heifer Program is the first statewide on-farm development and marketing program of its kind in the U.S. Economic impact of the Show-Me-Select Replacement Heifer Program on an annual basis is estimated at \$3.5 million. Impact on Missouri's economy from the first 12 years of the Show-Me-Select program exceeds \$40,000,000.

Key Items of Evaluation

The Missouri Show-Me-Select Replacement Heifer Program was designed to improve reproductive efficiency of beef herds in Missouri and increase individual farm income. The program objectives include: 1) a total quality management approach for health and management of heifers from weaning to late gestation; 2) increased marketing opportunities for, and added value to, Missouri raised heifers; and 3) the creation of reliable sources of quality commercial and purebred replacement females. The program was initiated as a pilot project in two regions of Missouri in 1997 with 33 farms and 1,873 heifers. During the past 12 years, 669 farms enrolled 81,979 heifers in the program. Regional extension livestock specialists serve as coordinators of the program locally and work closely with the 194 veterinarians involved with the program state wide. State specialists provide program support to regional extension field staff and participating veterinarians. The reproductive goals for heifers enrolled in the program are aimed at improving breeding performance during the heifers' first breeding period, minimizing the incidence and severity of dystocia, with the resulting delivery of healthy vigorous calves, and successful rebreeding of heifers during the subsequent breeding season. The marketing component of the program facilitated the sale of 20,307 heifers in 90 sales across Missouri from 1997 through the fall sales in 2008. These sales generated interest from 6,943 prospective buyers that formally registered to buy heifers, and 2,560 individuals that purchased heifers from the various sales. Heifers from the program have now sold to farms in AR, AZ, FL, GA, IA, IL, IN, KY, KS, MO, NE, OK, SC, SD, TN and TX. Collectively, 90 sales have generated \$22,148,205 in gross sales. Producers from 104 (91%) of 114 counties have participated in the Show-Me-Select Replacement Heifer Program. Buyers from 112 of 114 counties (98%) registered to purchase heifers from 1997-2007 Show-Me-Select Replacement Heifer Sales. Buyers from 108 of the 114 counties (95%) purchased heifers from 1997-2008 Show-Me-Select Replacement Heifer sales. The Missouri Show-Me-Select Replacement Heifer Program is the first statewide on-farm development and marketing program of its kind in the U.S. Economic impact of the Show-Me-Select Replacement Heifer Program on an annual basis is estimated at \$3.5 million. Impact on Missouri's economy from the first 12 years of the Show-Me-Select program exceeds \$40,000,000.

Program #13**V(A). Planned Program (Summary)****1. Name of the Planned Program**

Applying Science and Technology

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
806	Youth Development	100%			
	Total	100%			

V(C). Planned Program (Inputs)**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	9.0	0.0	0.0	0.0
Actual	7.4	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c 484158	1890 Extension	Hatch	Evans-Allen
	0	0	0
1862 Matching 0	1890 Matching 0	1862 Matching 0	1890 Matching 0
1862 All Other 0	1890 All Other 0	1862 All Other 0	1890 All Other 0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

Food Science: Show Me Quality Assurance, Pork Quality Assurance, Camp Food and Fitness, Meats Contest & Cured Ham, Growth & Quality of Live Animal Evaluation, Livestock Judging and Grading. Animal Science Food Animal: Beef Project, Judging, Demonstration, Exhibition; Sheep Project, Judging, Demonstration, Exhibition; Swine Project, Judging, Demonstration, Exhibition; Goat Project, Judging, Demonstration, Exhibition; Dairy Project, Judging, Demonstration, Exhibition; Poultry Judging, Demonstration, Exhibition. Animal Science Companion Animal: Horse Project, Bowl, Hippology, Judging, Demonstration, Exhibition; Dog Project, Judging, Demonstration, Exhibition; Cat Project, Judging, Demonstration, Exhibition. Vet Science: Project, Judging, Demonstration, Exhibition. Embryology. Plant Science: Horticulture Project, Judging, Demonstration, Exhibition; Soybean Project, Judging, Demonstration, Exhibition; Corn Project, Judging, Demonstration, Exhibition; Gardening Judging, Demonstration, Exhibition; Bee Keeping. Environmental/Natural Sciences: Project, Judging, Demonstrations, Exhibition. Community Mapping: Water Quality/Aquatic Education; Sports Fishing; Project WET; Wildlife Habitat and Management; Project WILD; Leopold Education Project; Geology; Forestry Project, Demonstration and Exhibition; Project Learning Tree; Solid Waste Management. Information Sciences: Project, Judging, Demonstration, Exhibition, Community Mapping; Computers; Software-based projects; Geo-Spatial; Internet; Digital Media. Physical Sciences Project, Judging, Demonstration, Exhibition, Community Mapping: Robotics; Design; Bicycle; Built Environments; Home Environment; Design/Manufacturing – Textiles; Aero Space; Woodworking; Welding; Electricity; Small Engines; Energy Use and Conservation.

2. Brief description of the target audience

Adults (youth staff, local leaders, parents, volunteers, teachers, organizational leaders) Youth aged 5 - 19.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	550	2500	26000	7500
2008	7558	11841	29029	17615

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Attendance of project leaders at workshops for food science, animal science, plant science, environmental science, informational sciences and physical sciences.

Year	Target	Actual
2008	550	7188

Output #2**Output Measure**

- Number of youth enrolled in food science, animal science, plant science, environmental science, informational sciences and physical sciences.

Year	Target	Actual
2008	5500	35635

Output #3**Output Measure**

- Number of youth enrolled in embryology.

Year	Target	Actual
2008	10000	29719

Output #4**Output Measure**

- Number of hits on website.

Year	Target	Actual
2008	20000	8883

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Youth will competently demonstrate knowledge and skills gained through demonstrations and project exhibition.

Outcome #1**1. Outcome Measures**

Youth will competently demonstrate knowledge and skills gained through demonstrations and project exhibition.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	12500	17417

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Command of science, engineering and technology by youth is essential for their contribution to the economic leadership of communities. America presently faces a significant challenge - young people not prepared with the workforce skills to compete in the 21st century.

What has been done

Currently, 35,635 youth are enrolled in 4-H science, engineering and technology projects.

Results

As a part of the national study, 214 Missouri youth in grades 6-10 also responded to questions on attitudes toward science and technology. The students included 126 4-Hers and 88 non-4-Hers.

Preliminary findings present a 'good news...bad news' picture about these adolescents' attitudes toward careers in scientific or technological fields. 4-H members were significantly more likely to agree that science will be useful in the future, but fewer than one in five of all students expressed an interest in a career in this field. Only about one-fourth of the students thought their parents were interested in science and technology, although 4-H members were more likely to report parental interest in science. 4-H members were almost twice as likely to report spending some of their out-of-school time on science and technology, and they named their 4-H project work as examples of this kind of learning.

Preliminary results from a sample of 347 youth completing the 4-H Study for Positive Youth Development do show that 4-H youth score higher than the national average for personal values and report less risk behavior.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

V(I). Planned Program (Evaluation Studies and Data Collection)**1. Evaluation Studies Planned**

- After Only (post program)
- During (during program)
- Other (Demonstration, Judging and Exhib)

Evaluation Results

20,320 youth demonstrated knowledge that met or exceeded established criteria through public presentations or exhibition; 7,257 youth demonstrated knowledge that minimally met established criteria through public presentations or exhibition; 1,451 youth demonstrated knowledge that could improve based on established criteria through public presentations or exhibition.

Missouri youth in grades 6 – 10 were surveyed between March and July 2007 at 16 sites throughout the state. The sample of 214 youth included 126 4-H participants and 88 non-4-H participants. A 20-item questionnaire measuring factors shown to be related to students' attitudes toward science was completed by the 214 youth (George, 2000). There were significant differences between 4-H'ers and non-4-H'ers on 3 of the 20 items. 4-H'ers strongly agreed that "Science will be useful in my future." ($p < .006$). 4-H'ers strongly agreed that science is important in their daily life ($p < .041$) and 4-H'ers spent more time learning or working with technology during their out-of-school time than non-4-H'ers ($p < .020$).

George, Rani. (2000). Measuring Change in Students' Attitudes Toward Science Over Time. Retrieved from: <http://www.springerlink.com/content/r47qu08133663887/fulltext.pdf>

Key Items of Evaluation

Missouri youth in grades 6 – 10 were surveyed between March and July 2007 at 16 sites throughout the state. The sample of 214 youth included 126 4-H participants and 88 non-4-H participants. A 20-item questionnaire measuring factors shown to be related to students' attitudes toward science was completed by the 214 youth (George, 2000). There were significant differences between 4-H'ers and non-4-H'ers on 3 of the 20 items. 4-H'ers strongly agreed that "Science will be useful in my future." ($p < .006$). 4-H'ers strongly agreed that science is important in their daily life ($p < .041$) and 4-H'ers spent more time learning or working with technology during their out-of-school time than non-4-H'ers ($p < .020$).

George, Rani. (2000). Measuring Change in Students' Attitudes Toward Science Over Time. Retrieved from: <http://www.springerlink.com/content/r47qu08133663887/fulltext.pdf>

Program #14

V(A). Planned Program (Summary)

1. Name of the Planned Program

Building Character

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
806	Youth Development	100%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	9.0	0.0	0.0	0.0
Actual	15.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
484158	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
236837	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Integrate Show Me Character resources into 4-H Clubs, 4-H Camps, 4-H Council and other meetings and 4-H educational events. Integrate Show Me Character modules into adult and teen volunteer training, workshops; Module 1-Why Character Development; Module 2-Character Development Theory; Module 3-The Six Pillars of Character; Module 4-Making Good Decisions; and Module 5-Competing with Honor.

2. Brief description of the target audience

Youth aged 5 to 19. Adults (youth staff, local leaders, parents, volunteers, teachers, organizational leaders).

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	7600	10000	15200	50000
2008	29265	72803	35886	74408

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of youth and adults reached by 4-H field and state faculty with the Show Me Character Program.

Year	Target	Actual
2008	10000	17570

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	10,000 youth will report an awareness of the six pillars of character.
2	10,000 youth will report an awareness of how character affects their daily decisions.
3	20 4-H field faculty will integrate Show Me Character into their 4-H program.
4	50 to 60 youth will report annually through the Y2200, State 4-H Recognition Form on how 4-H has influenced their lives through their 4-H Story.

Outcome #1**1. Outcome Measures**

10,000 youth will report an awareness of the six pillars of character.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	10000	6018

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri citizens expressed their concerns through the University of Missouri Extension Plan of Work process over the net social and economic loss due to the outward migration of youth from their communities. Communities want their youth to go on to higher education to gain knowledge, skills and experience but lament fewer youth are returning to their home communities to provide civic and economic leadership.

What has been done

Young people are bombarded daily with decisions that challenge their character. Often they are encouraged to do what is expedient or to satisfy the crowd rather than being encouraged to do what is right. Young people spend so many hours of the day away from home that other caring adults and organizations need to encourage and teach the basic principles of character. The six pillars of character provide a framework to guide decisions that impact life long social and economic conditions.

Results

24 faculty statewide integrated character into 4-H Youth Development Programming. Students learned Show Me Character (1) the difference between fair and equal; (2) skills in listening ; (3) speaking their thoughts, (4) consequences of poor choices; (5) characteristics of responsibility; (6) the importance of kindness, compassion and gratitude; (7) teamwork; (8) respecting others.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #2**1. Outcome Measures**

10,000 youth will report an awareness of how character affects their daily decisions.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	10000	17570

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Missouri citizens expressed their concerns through the University of Missouri Extension Plan of Work process over the net social and economic loss due to the outward migration of youth from their communities. Communities want their youth to go on to higher education to gain knowledge, skills and experience but lament fewer youth are returning to their home communities to provide civic and economic leadership.

What has been done

Young people are bombarded daily with decisions that challenge their character. Often they are encouraged to do what is expedient or to satisfy the crowd rather than being encouraged to do what is right. Young people spend so many hours of the day away from home that other caring adults and organizations need to encourage and teach the basic principles of character. The six pillars of character provide a framework to guide decisions that impact life long social and economic conditions.

Results

24 faculty statewide integrated character into 4-H Youth Development Programming. As a result of Show Me Character, teachers and parents have observed youth 1) improved their ability to guide groups; 2) improved ability to set and achieve goals; 3) improved ability to make decisions; 4) improved ability to work well with others.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #3**1. Outcome Measures**

20 4-H field faculty will integrate Show Me Character into their 4-H program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	20	24

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri citizens expressed their concerns through the University of Missouri Extension Plan of Work process over the net social and economic loss due to the outward migration of youth from their communities. Communities want their youth to go on to higher education to gain knowledge, skills and experience but lament fewer youth are returning to their home communities to provide civic and economic leadership.

What has been done

Young people are bombarded daily with decisions that challenge their character. Often they are encouraged to do what is expedient or to satisfy the crowd rather than being encouraged to do what is right. Young people spend so many hours of the day away from home that other caring adults and organizations need to encourage and teach the basic principles of character. The six pillars of character provide a framework to guide decisions that impact life long social and economic conditions.

Results

24 faculty statewide integrated character into 4-H Youth Development Programming. 4-H members are developing 1) skills about the economic well being of their community; 2) skills to be competent consumers, workers and employers in their community; 3) skills to make wise decisions to support healthy lifestyles.

4. Associated Knowledge Areas

KA Code	Knowledge Area
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Outcome #4**1. Outcome Measures**

50 to 60 youth will report annually through the Y2200, State 4-H Recognition Form on how 4-H has influenced their lives through their 4-H Story.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	50	85

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri citizens expressed their concerns through the University of Missouri Extension Plan of Work process over the net social and economic loss due to the outward migration of youth from their communities. Communities want their youth to go on to higher education to gain knowledge, skills and experience but lament fewer youth are returning to their home communities to provide civic and economic leadership.

What has been done

The Missouri 4-H Recognition program asks young people first to reflect on what they gained through leadership, citizenship, and knowledge from their project work and then if and how they applied what they gained at school, faith-based community and/or other organizations.

Results

*Without 4-H, I would have not been able to push myself to accomplish my goals because it provided me with the confidence I needed to reach those goals.

*4-H has made me a better citizen, stronger student, and a good role model for my peers and younger youth in my community.

*4-H has taught me very important life skills such as being organized, getting involved, helping others, achieving my personal best, and how to deeply appreciate how fortunate I am to have those opportunities.

*4-H has taught me many things about life, one being responsibility and how to win and lose graciously.

*The 4-H concept I have learned is 'do, reflect, apply' method. It is not enough to simply go through the program and reflect on what you have done, you have to directly apply those skills to reap the full benefit.

*I have learned many valuable skills from 4-H including communication skills, the ability to make decisions on my own, managing resources, and being able to work with others in a large group.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- During (during program)
- Case Study
- Other (Demos, Exhibs, Behav @ Ed Events)

Evaluation Results

In 2007, Missouri 4-H joined the national 4-H Study of Positive Youth Development. Funded by National 4-H Council and lead by researchers at Tufts University, this longitudinal study began with fifth graders. By the end of 2007, data has been collected from 4,793 adolescents in 34 states. Plans are to continue surveying these youth through high school and into college. Although funded by 4-H, the participants are diverse adolescents who may or may not be 4-H members.

Between March and August of 2007, 338 adolescents from Missouri participated in Wave 5 of the 4-H Study of Positive Youth Development. The students were from 21 sites in Missouri. 4-H Youth Development Specialists from the University of Missouri and Lincoln University recruited students in grades 5 to 11 to complete a written survey. Parents could also complete an optional survey. Since one of the Missouri sites was a residential facility for adjudicated adolescents (n=55), those young people are not included in the results reported here.

Findings from the first four years of the national study can be found at: <http://www.fourhcouncil.edu/>.

In addition, researchers are also studying the impact of 4-H participation. The large national sample of teens permits researchers to compare 4-H and non-4-H participants. The groups are matched on key factors such as gender, race/ethnicity, community type, number of parents in the home, family per capita income, and mother's education. The matched groups are also similar in their level of participation in out-of-school time programs. All students in the matched samples participated at least two times per month in 4-H or a similar youth development program.

Using data from multiple years, researchers created models that show trajectories or patterns of change over time. They identified desirable, undesirable, and intermediate patterns. Then, they compared matched samples of youth. For youth who had participated in 4-H at some point during 5-8th grades, they found:

4-H Youth were 3.5 times more likely to be in the highest Contribution group

4-H Youth were 1.5 times more likely to be in the highest PYD group

4-H Youth were 1.3 times more likely to be in the lowest Risk Behavior and Depression groups.

In Missouri, we tested whether the average (mean) scores were statistically different for some of the factors measured in the 4-H Study. For Missouri students in Wave 5, we found significant differences ($p < .05$) between the NON 4-H and the ACTIVE 4-H groups on:

Contribution—volunteering and service activities

Number of Positive Adult Mentors

Number of Leadership Experiences

Reported Risk Behaviors—alcohol, tobacco use, and illicit drug use

Key Items of Evaluation

In 2007, Missouri 4-H joined the national 4-H Study of Positive Youth Development. Funded by National 4-H Council and lead by researchers at Tufts University, this longitudinal study began with fifth graders. By the end of 2007, data has been collected from 4,793 adolescents in 34 states. Plans are to continue surveying these youth through high school and into college. Although funded by 4-H, the participants are diverse adolescents who may or may not be 4-H members.

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Contribution—volunteering and service activities

Number of Positive Adult Mentors

Number of Leadership Experiences

Reported Risk Behaviors—alcohol, tobacco use, and illicit drug use

Program #15**V(A). Planned Program (Summary)****1. Name of the Planned Program**

Choosing Healthy Lifestyles

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
806	Youth Development	100%			
	Total	100%			

V(C). Planned Program (Inputs)**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	9.0	0.0	0.0	0.0
Actual	3.1	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
203856	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

4-H Food and Nutrition Projects; Physical Activity 4-H Projects; Camp Food and Fitness; Steppin' Out Fitness Guide; FNEP and 4-H; Couch Potato Challenge Guide; Fight BAC Food Safety; 4-H Shooting Sports; 4-H Child Development Project; 4-H Sportsfishing; Stress Connection Project; 4-H Outdoor Adventures; Develop curricula for teen depression and suicide; Gardening; 4-H Safety Projects; Farm/Rural Safety Days.

2. Brief description of the target audience

Adults (youth staff, local leaders, parents, volunteers, teachers, organizational leaders), youth aged 5 - 19.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	1550	3000	7100	14000
2008	1509	1291	2696	11915

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Attendance of project leaders at workshops for foods/nutrition, physical activity, shooting sports, healthy relationships and/or safety.

Year	Target	Actual
2008	210	454

Output #2

Output Measure

- Number of youth enrolled in foods projects, physical activity projects, leisure projects, safety projects, camps, educational events and afterschool.

Year	Target	Actual
2008	5000	10823

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	4500 youth will competently demonstrate knowledge and skills gained through demonstrations and project exhibition.
2	75% of the participants of Camp Food and Fitness will indicate they are continuing to make healthy food choices 6 months after the camp experience.

Outcome #1**1. Outcome Measures**

4500 youth will competently demonstrate knowledge and skills gained through demonstrations and project exhibition.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	4500	2696

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri citizens expressed through the University of Missouri Extension Plan of Work process concerns over the high incidence of obesity in children and youth and the need for wholesome choices for physical and leisure activity. Communities want youth to learn more and have opportunities for healthy food and other lifestyle choices.

What has been done

Healthy lifestyles include eating a healthy diet, maintaining a healthy weight, exercising regularly, quitting (or not starting) smoking, and minimizing stress. By providing education, programs and experiences that promote healthy behaviors, 4 H can help youth, adults and families integrate healthy behaviors, which include physical, mental and emotional well being, into their everyday lives.

Results

1,889 youth demonstrated knowledge that met or exceeded established criteria through public presentations or exhibition; 674 youth demonstrated knowledge that minimally met established criteria through public presentations or exhibition; 135 youth demonstrated knowledge that could improve based on established criteria through public presentations or exhibition.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #2**1. Outcome Measures**

75% of the participants of Camp Food and Fitness will indicate they are continuing to make healthy food choices 6 months after the camp experience.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	20	38

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Missouri citizens expressed through the University of Missouri Extension Plan of Work process concerns over the high incidence of obesity in children and youth and the need for wholesome choices for physical and leisure activity. Communities want youth to learn more and have opportunities for healthy food and other lifestyle choices.

What has been done

By providing education, programs and experiences that promote healthy behaviors, 4 H can help youth, adults and families integrate healthy behaviors, which include physical, mental and emotional well being, into their everyday lives.

Results

38 youth are well positioned to make healthy food and fitness choices by attending Camp Food and Fitness. A survey completed immediately following the event. 89% of the youth indicated they learned healthy food choices, 84% indicated increased knowledge of food safety procedures, 100% of the youth completed a Healthy Lifestyle Plan. We are in the process of following-up with the individual youth to determine the success rate of the 4-H member to follow their plan.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

Competing Programmatic Challenges has interfered with following up with the individual 4-H members.

V(I). Planned Program (Evaluation Studies and Data Collection)**1. Evaluation Studies Planned**

- After Only (post program)
- During (during program)
- Other (Demos, Judging, Exhibits of Knowledge)

Evaluation Results

Between March and August of 2007, 338 adolescents from Missouri participated in Wave 5 of the 4-H Study of Positive Youth Development. The students were from 21 sites in Missouri. 4-H Youth Development Specialists from the University of Missouri and Lincoln University recruited students in grades 5 to 11 to complete a written survey. Parents could also complete an optional survey. Since one of the Missouri sites was a residential facility for adjudicated adolescents (n=55), those young people are not included in the results reported here.

In Missouri, we tested whether the average (mean) scores were statistically different for some of the factors measured in the 4-H Study. For Missouri students in Wave 5, we found significant differences ($p < .05$) between the NON 4-H and the ACTIVE 4-H groups on:

- Contribution—volunteering and service activities
- Number of Positive Adult Mentors
- Number of Leadership Experiences
- Reported Risk Behaviors—alcohol, tobacco use, and illicit drug use

Missouri 4-H members report they make better choices and have more opportunities for leadership than their non-4-H peers.

Key Items of Evaluation

Between March and August of 2007, 338 adolescents from Missouri participated in Wave 5 of the 4-H Study of Positive Youth Development. The students were from 21 sites in Missouri. 4-H Youth Development Specialists from the University of Missouri and Lincoln University recruited students in grades 5 to 11 to complete a written survey. Parents could also complete an optional survey. Since one of the Missouri sites was a residential facility for adjudicated adolescents (n=55), those young people are not included in the results reported here.

In Missouri, we tested whether the average (mean) scores were statistically different for some of the factors measured in the 4-H Study. For Missouri students in Wave 5, we found significant differences ($p < .05$) between the NON 4-H and the ACTIVE 4-H groups on:

- Contribution—volunteering and service activities
- Number of Positive Adult Mentors
- Number of Leadership Experiences
- Reported Risk Behaviors—alcohol, tobacco use, and illicit drug use

Missouri 4-H members report they make better choices and have more opportunities for leadership than their non-4-H peers.

Program #16

V(A). Planned Program (Summary)

1. Name of the Planned Program

Creating Economic Preparedness

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
806	Youth Development	100%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	5.0	0.0	0.0	0.0
Actual	2.7	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c 178374	1890 Extension	Hatch	Evans-Allen
	0	0	0
1862 Matching 0	1890 Matching 0	1862 Matching 0	1890 Matching 0
1862 All Other 0	1890 All Other 0	1862 All Other 0	1890 All Other 0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Learning about personal finances through Financial Champions 4-H Project Literature, demonstrations, exhibits, camps and educational events. Learning about consumerism through Consumer Savvy 4-H Project Literature, demonstrations, exhibits, camps and educational events. Learning about youth entrepreneurship through curricula, demonstrations, exhibits, camps and educational events.

2. Brief description of the target audience

Adults (youth staff, local leaders, parents, volunteers, teachers, organizational leaders), youth aged 8 - 19.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	150	1000	550	5000
2008	596	2765	1126	2864

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- 4-H Club, Council Treasurer Roles; 4-H Club fundraisers; 4-H Financial Champions Project Literature; 4-H Consumer Savvy Project Literature; Entrepreneurship; Workforce/Career Readiness.

Year	Target	Actual
2008	1000	1953

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Number of youth and adults in treasurer roles for 4-H Clubs, Councils and Committees.
2	Attendance of project leaders at workshops for personal finance, consumer and/or entrepreneurship.
3	Number of youth enrolled in personal finance, consumer and/or entrepreneurship.
4	Number of youth participating in camps, educational events and afterschool.
5	Number of hits on website.
6	350 youth will competently demonstrate knowledge and skills gained through treasurer roles, demonstrations and project exhibition.
7	70 volunteers will competently lead youth through project experiences, promoting demonstrations, judging and other educational events.
8	100 youth will go onto post-secondary education.
9	75 youth will demonstrate career planning by listing their goal(s) and the institution of higher education they choose to achieve their goal(s) on their 4-H state scholarship and/or award applications.

Outcome #1**1. Outcome Measures**

Number of youth and adults in treasurer roles for 4-H Clubs, Councils and Committees.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	1000	1953

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri citizens expressed their concerns through the University of Missouri Extension Plan of Work process over the net social and economic loss due to the outward migration of youth from their communities. Communities want their youth to go on to higher education to gain knowledge, skills and experience but lament fewer youth are returning to their home communities to provide civic and economic leadership.

What has been done

Providing opportunities to equip youth with skills, knowledge, and experiences that will assist them in acquiring economic success; including managing personal finances, entrepreneurship and preparing for the workforce.

Results

Summary of Evaluations

Tell us one thing that you learned as a result of the officer training:

* Which person signs checks (3)

-How to write a check.

-How to write bank fees in a check register.

Name one thing that you will do in your role as a 4-H officer as a result of this training workshop

* I will be a good treasurer

* I will fill out checks correctly

* Keep track of all the checks written

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #2**1. Outcome Measures**

Attendance of project leaders at workshops for personal finance, consumer and/or entrepreneurship.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	20	564

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri citizens expressed their concerns through the University of Missouri Extension Plan of Work process over the net social and economic loss due to the outward migration of youth from their communities. Communities want their youth to go on to higher education to gain knowledge, skills and experience but lament fewer youth are returning to their home communities to provide civic and economic leadership.

What has been done

Family and Consumer Science Specialists incorporate 4-H volunteers into their on-going financial management workshops.

Results

Creating Economic Preparedness reached 560 adults FY08.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #3**1. Outcome Measures**

Number of youth enrolled in personal finance, consumer and/or entrepreneurship.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	100	151

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri citizens expressed their concerns through the University of Missouri Extension Plan of Work process over the net social and economic loss due to the outward migration of youth from their communities. Communities want their youth to go on to higher education to gain knowledge, skills and experience but lament fewer youth are returning to their home communities to provide civic and economic leadership.

What has been done

Providing opportunities to equip youth with skills, knowledge, and experiences that will assist them in acquiring economic success; including managing personal finances, entrepreneurship and preparing for the workforce.

Results

A summary of outputs from the first quarter FY08: During quarter one, VISTA members worked with 4 sponsor organizations to start 5 programs and expand 7 Community Entrepreneurial Development (CED) programs. VISTAs generated monetary resources and recruited volunteers to help plan and deliver programs and events reaching 490 participants from 32 zip code communities.

- *Empowering aspiring entrepreneurs - 106 youth/adult participants engaged in CED programs.
- *Equipping community leaders - 25 youth/adult participants engaged in Community Leadership programs.
- *Building organization capacity - 82 community volunteers contributing 216 hours to local programs, and \$26,252 in monetary resources (cash & in-kind) leveraged for sponsoring organizations.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #4

1. Outcome Measures

Number of youth participating in camps, educational events and afterschool.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	30	2991

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Missouri citizens expressed their concerns through the University of Missouri Extension Plan of Work process over the net social and economic loss due to the outward migration of youth from their communities. Communities want their youth to go on to higher education to gain knowledge, skills and experience but lament fewer youth are returning to their home communities to provide civic and economic leadership.

What has been done

Providing opportunities to equip youth with skills, knowledge, and experiences that will assist them in acquiring economic success; including managing personal finances, entrepreneurship and preparing for the workforce.

Results

Of the 194 counselors in the study, 142 (73%) indicated that being a counselor helped them prepare for college. One hundred twenty three (63%) reported that serving as a counselor increased their desire to stay in school and, 126 (65%) felt that serving as a counselor had opened up job or career opportunities for them. The results shown in Table 1 below are a summary of responses to the 70 questions from the YES portion of the survey are grouped by domain. A Group Mean close to 4.0 indicates the counselors responded that 'yes definitely', they had positive experiences and had increased their skills and abilities in that domain. The low Group Mean in the 'Negative Experiences' category indicates that negative experiences occurred virtually 'Not At All'.

Identity Experiences	3.43
Initiative Experiences	3.30
Basic Skills	2.72
Interpersonal Relationships	3.27
Adult Networks and Social Capital	2.91
Negative Experiences	1.27

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #5

1. Outcome Measures

Number of hits on website.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	1100	11847

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri citizens expressed their concerns through the University of Missouri Extension Plan of Work process over the net social and economic loss due to the outward migration of youth from their communities. Communities want their youth to go on to higher education to gain knowledge, skills and experience but lament fewer youth are returning to their home communities to provide civic and economic leadership.

What has been done

Providing opportunities to equip youth with skills, knowledge, and experiences that will assist them in acquiring economic success; including managing personal finances, entrepreneurship and preparing for the workforce.

Results

Website	Hits	Views
Scholarships	3,915	7,701
Recognition	4,696	5,693
K.C. Global Conference	3,599	4,093
Summers@Mizzou	7,667	11,847

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #6**1. Outcome Measures**

350 youth will competently demonstrate knowledge and skills gained through treasurer roles, demonstrations and project exhibition.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	375	788

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri citizens expressed their concerns through the University of Missouri Extension Plan of Work process over the net social and economic loss due to the outward migration of youth from their communities. Communities want their youth to go on to higher education to gain knowledge, skills and experience but lament fewer youth are returning to their home communities to provide civic and economic leadership.

What has been done

Providing opportunities to equip youth with skills, knowledge, and experiences that will assist them in acquiring economic success; including managing personal finances, entrepreneurship and preparing for the workforce.

Results

788 youth demonstrated knowledge that met or exceeded established criteria through public presentations or exhibition; 281 youth demonstrated knowledge that minimally met established criteria through public presentations or exhibition; 56 youth demonstrated knowledge that could improve based on established criteria through public presentations or exhibition.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #7

1. Outcome Measures

70 volunteers will competently lead youth through project experiences, promoting demonstrations, judging and other educational events.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	75	596

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Missouri citizens expressed their concerns through the University of Missouri Extension Plan of Work process over the net social and economic loss due to the outward migration of youth from their communities. Communities want their youth to go on to higher education to gain knowledge, skills and experience but lament fewer youth are returning to their home communities to provide civic and economic leadership.

What has been done

Providing opportunities to equip youth with skills, knowledge, and experiences that will assist them in acquiring economic success; including managing personal finances, entrepreneurship and preparing for the workforce.

Results

After the November 26, 2007 Project Leader Training session was held, 100% of the leaders indicated that they would use the information at their project meeting for the 2008 4-H program year. This will eventually result in high quality 4-H project meetings. It also will result in youth who are competent in their role as consumers, workers, employers, and entrepreneurs.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #8

1. Outcome Measures

100 youth will go onto post-secondary education.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	100	18054

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri citizens expressed their concerns through the University of Missouri Extension Plan of Work process over the net social and economic loss due to the outward migration of youth from their communities. Communities want their youth to go on to higher education to gain knowledge, skills and experience but lament fewer youth are returning to their home communities to provide civic and economic leadership.

What has been done

Providing opportunities to equip youth with skills, knowledge, and experiences that will assist them in acquiring economic success; including managing personal finances, entrepreneurship and preparing for the workforce.

Results

Missouri 4-H members are twice more likely to have been on a college campus than their non-4-H peers. MU is by far the campus most frequently visited and 4-H is the second most reported reason to be on the MU Campus (Lerner, 2008). Being on a campus is a predictor of youth going on to higher education (Hoover, 2006)

*Missouri young people ages 5-18 participating in 4-H = 1 of every 10

*These students are more likely to go to college and enjoy

o increased financial success for themselves and their offspring

o be better consumers

o improve quality of life through more opportunities for leisure and hobbies

o improve health for themselves and their children (Porter, 2003)

*If 10% earn bachelor's degrees, their increased annual earnings will total \$210 million (2.1 million per individual) (Porter, 2003). Porter, K. 2003). The Value of a College Degree. Washington, D.C.: ERIC Clearinghouse on Higher Education.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #9**1. Outcome Measures**

75 youth will demonstrate career planning by listing their goal(s) and the institution of higher education they choose to achieve their goal(s) on their 4-H state scholarship and/or award applications.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	75	105

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri citizens expressed their concerns through the University of Missouri Extension Plan of Work process over the net social and economic loss due to the outward migration of youth from their communities. Communities want their youth to go on to higher education to gain knowledge, skills and experience but lament fewer youth are returning to their home communities to provide civic and economic leadership.

What has been done

Providing opportunities to equip youth with skills, knowledge, and experiences that will assist them in acquiring economic success; including managing personal finances, entrepreneurship and preparing for the workforce.

Results

*Without 4-H, I would have not been able to push myself to accomplish my goals because it provided me with the confidence I needed to reach those goals.

*4-H has made me a better citizen, stronger student, and a good role model for my peers and younger youth in my community.

*4-H has taught me very important life skills such as being organized, getting involved, helping others, achieving my personal best, and how to deeply appreciate how fortunate I am to have those opportunities.

*4-H has taught me many things about life, one being responsibility and how to win and lose graciously.

*The 4-H concept I have learned is 'do, reflect, apply' method. It is not enough to simply go through the program and reflect on what you have done, you have to directly apply those skills to reap the full benefit.

*I have learned many valuable skills from 4-H including communication skills, the ability to make decisions on my own, managing resources, and being able to work with others in a large group.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation**V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- After Only (post program)
- During (during program)
- Time series (multiple points before and after program)

Evaluation Results

Missouri 4-H members are twice more likely to have been on a college campus than their non-4-H peers. MU is by far the campus most frequently visited and 4-H is the second most reported reason to be on the MU Campus (Lerner, 2008). Being on a campus is a predictor of youth going on to higher education (Hoover, 2006)

- Missouri young people ages 5-18 participating in 4-H = 1 of every 10
- These students are more likely to go to college and enjoy
 - o increased financial success for themselves and their offspring
 - o be better consumers
 - o improve quality of life through more opportunities for leisure and hobbies
 - o improve health for themselves and their children (Porter, 2003)
- If 10% earn bachelor's degrees, their increased annual earnings will total \$210 million (2.1 million per individual) (Porter, 2003). Porter, K. (2003). *The Value of a College Degree*. Washington, D.C.: ERIC Clearinghouse on Higher Education.

Key Items of Evaluation

Missouri 4-H members are twice more likely to have been on a college campus than their non-4-H peers. MU is by far the campus most frequently visited and 4-H is the second most reported reason to be on the MU Campus (Lerner, 2008). Being on a campus is a predictor of youth going on to higher education (Hoover, 2006).

- Missouri young people ages 5-18 participating in 4-H = 1 of every 10
- These students are more likely to go to college and enjoy
 - o increased financial success for themselves and their offspring
 - o be better consumers
 - o improve quality of life through more opportunities for leisure and hobbies
 - o improve health for themselves and their children (Porter, 2003)
- If 10% earn bachelor's degrees, their increased annual earnings will total \$210 million (2.1 million per individual) (Porter, 2003). Porter, K. (2003). *The Value of a College Degree*. Washington, D.C.: ERIC Clearinghouse on Higher Education.
 - Quotes from 4-H members
 - Without 4-H, I would have not been able to push myself to accomplish my goals because it provided me with the confidence I needed to reach those goals.
 - 4-H has made me a better citizen, stronger student, and a good role model for my peers and younger youth in my community.
 - 4-H has taught me very important life skills such as being organized, getting involved, helping others, achieving my personal best, and how to deeply appreciate how fortunate I am to have those opportunities.
 - 4-H has taught me many things about life, one being responsibility and how to win and lose graciously.
 - The 4-H concept I have learned is "do, reflect, apply" method. It is not enough to simply go through the program and reflect on what you have done, you have to directly apply those skills to reap the full benefit.
 - I have learned many valuable skills from 4-H including communication skills, the ability to make decisions on my own, managing resources, and being able to work with others in a large group.

Program #17

V(A). Planned Program (Summary)

1. Name of the Planned Program

Enhancing Community Viability Through Youth Leadership

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
806	Youth Development	100%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	5.0	0.0	0.0	0.0
Actual	15.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
484158	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
236991	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

4-H Leadership Roles – club, county council/committees, state council, collegiate; Leadership project; Youth Civic Leaders Summit; Extension Council Youth Leaders; Army Service Learning Toolkit; Public Adventures; CECH-UP; Global Education.

2. Brief description of the target audience

Adults (youth staff, local leaders, parents, volunteers, teachers, organizational leaders), youth aged 8 - 19.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	1300	3000	16000	32000
2008	5458	5824	10851	6873

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	1	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of youth and adults in leadership roles for 4-H Clubs, Councils and Committees.

Year	Target	Actual
2008	2200	10851

Output #2

Output Measure

- Number of youth and adult partnership teams trained at workshops, conferences, summits.

Year	Target	Actual
2008	250	286

Output #3

Output Measure

- Number of community service grants awarded through the Missouri 4-H Foundation.

Year	Target	Actual
2008	50	20

Output #4

Output Measure

- Number of youth in civic leadership roles.

Year	Target	Actual
2008	20	25

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	12,000 youth will engage and complete 4-H leadership roles.
2	70% of the sample of 400 youth who have participated in state 4-H educational events or fulfilled leadership roles will report incorporating skills in other educational and/or leadership situations.

Outcome #1**1. Outcome Measures**

12,000 youth will engage and complete 4-H leadership roles.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	12000	10851

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri citizens expressed their concerns through the University of Missouri Extension Plan of Work process over the net social and economic loss due to the outward migration of youth from their communities. Communities want their youth to go on to higher education to gain knowledge, skills and experience but lament fewer youth are returning to their home communities to provide civic and economic leadership.

What has been done

Adult staff and volunteers will facilitate youth ages 5 to 19 to learn through projects, camps, educational events and meaningful leadership roles about the importance and benefits of serving the community and being an engaged citizen. Program staff will facilitate learning to help parents, caregivers, volunteer leaders and staff of other youth serving organizations to gain skills to promote youth and adult partnerships and to facilitate youth contribution through community service.

Results

10,851 youth completed leadership roles.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #2**1. Outcome Measures**

70% of the sample of 400 youth who have participated in state 4-H educational events or fulfilled leadership roles will report incorporating skills in other educational and/or leadership situations.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	300	364

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri citizens expressed their concerns through the University of Missouri Extension Plan of Work process over the net social and economic loss due to the outward migration of youth from their communities. Communities want their youth to go on to higher education to gain knowledge, skills and experience but lament fewer youth are returning to their home communities to provide civic and economic leadership.

What has been done

Adult staff and volunteers will facilitate youth ages 5 to 19 to learn through projects, camps, educational events and meaningful leadership roles about the importance and benefits of serving the community and being an engaged citizen.

Results

284 youth, ages 14 to 18, completed either the Missouri 4-H Recognition Form, the Missouri 4-H Scholarship Form or applied to be a Regional Representative of the State 4-H Council. These youths indicate in writing what they have learned about leadership through their 4-H experience. They go on to indicate how they apply these skills at school and in other organizations they may belong.

Another 80 middle school youth complete a similar application in their quest to obtain a scholarship to the Missouri State 4-H Teen conference. Following is an example of a statement taken from the Missouri 4-H Recognition Form:

'The 4-H concept I have learned is 'do, reflect, apply' method. It is not enough to simply go through the program and reflect on what you have done, you have to directly apply those skills to reap the full benefit.'

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- During (during program)
- Case Study

Evaluation Results

Between March and August of 2007, 338 adolescents from Missouri participated in Wave 5 of the 4-H Study of Positive Youth Development. The students were from 21 sites in Missouri. 4-H Youth Development Specialists from the University of Missouri and Lincoln University recruited students in grades 5 to 11 to complete a written survey. Parents could also complete an optional survey. Since one of the Missouri sites was a residential facility for adjudicated adolescents (n=55), those young people are not included in the results reported here.

In Missouri, we tested whether the average (mean) scores were statistically different for some of the factors measured in the 4-H Study. For Missouri students in Wave 5, we found significant differences ($p < .05$) between the NON 4-H and the ACTIVE 4-H groups on:

- Contribution—volunteering and service activities
- Number of Positive Adult Mentors
- Number of Leadership Experiences
- Reported Risk Behaviors—alcohol, tobacco use, and illicit drug use

Missouri 4-H members report they make better choices and have more opportunities for leadership than their non-4-H peers.

Key Items of Evaluation

Between March and August of 2007, 338 adolescents from Missouri participated in Wave 5 of the 4-H Study of Positive Youth Development. The students were from 21 sites in Missouri. 4-H Youth Development Specialists from the University of Missouri and Lincoln University recruited students in grades 5 to 11 to complete a written survey. Parents could also complete an optional survey. Since one of the Missouri sites was a residential facility for adjudicated adolescents (n=55), those young people are not included in the results reported here.

In Missouri, we tested whether the average (mean) scores were statistically different for some of the factors measured in the 4-H Study. For Missouri students in Wave 5, we found significant differences ($p < .05$) between the NON 4-H and the ACTIVE 4-H groups on:

- Contribution—volunteering and service activities
- Number of Positive Adult Mentors
- Number of Leadership Experiences
- Reported Risk Behaviors—alcohol, tobacco use, and illicit drug use

Missouri 4-H members report they make better choices and have more opportunities for leadership than their non-4-H peers.

Program #18

V(A). Planned Program (Summary)

1. Name of the Planned Program

Volunteer Development

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
806	Youth Development	100%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	9.0	0.0	0.0	0.0
Actual	7.4	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
484158	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

County, regional and state volunteer workshops and forums, Communications, Program management, Educational Design and Delivery, Interpersonal Skills, and Youth Development; Leadership roles of 4-H clubs, projects, county and state educational events, Letters to New Leaders, and Make the Best Better Modules; Web-based instruction; Youth Protection Policies and Procedures (Volunteer Screening).

2. Brief description of the target audience

Adults (youth staff, local leaders, parents, volunteers, teachers, organizational leaders), youth aged 5 - 19.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	125	11100	1050	11100
2008	29265	72803	35886	74408

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- County, regional and state volunteer workshops and forums, Leadership roles of 4-H clubs, projects, county and state educational events; Web-based instruction; Youth Protection Policies and Procedures (Volunteer Screening).

Year	Target	Actual
2008	500	8000

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	5,000 adults and youth volunteers will increase knowledge and awareness of practices fostering positive youth development.
2	5,000 adult and youth volunteers apply practices of positive youth development through leadership roles.
3	Number of volunteers in local, county, regional and state 4-H leadership roles.
4	Number of volunteers attending workshops and/or forums for personal.
5	Number of volunteers completing Volunteers: The Foundation of Youth Development.
6	Number of volunteers screened prior to service.

Outcome #1**1. Outcome Measures**

5,000 adults and youth volunteers will increase knowledge and awareness of practices fostering positive youth development.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	5000	11339

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Volunteers: both adult and youth are the backbone of the Missouri 4 H Youth Development Programs by teaching skills, managing the work of others, mentoring youth, working with teachers and schools, coordinating county and state events, and promoting 4 H.

What has been done

A required 4-H volunteer orientation began in FY08, to date 7,500 volunteers have completed the orientation which introduces them to the concepts of land-grant universities, how youth grow and develop, 4-H's philosophy on competition, character education and how to reduce risk when working with youth. In addition to face-to-face workshops, an on-line course is available so busy volunteers can complete this obligation at their convenience.

Results

'I really like what you and your state have done in terms of the on-line course. The course is up-to-date, clean and simple, easy to navigate and manageable. ...The additional resources that are offered are fantastic! ...I think this web-based orientation could be/should be looked at as the national strategy for volunteer management is pulled together. ...I just wanted to let you know that after spending the past few months looking at what every state has to offer in terms of web-based learning for 4H volunteers, this is very impressive. I will look forward to sharing it here with my Maine colleagues as an outstanding example.' Thanks again~ Jen Lobley, University of Maine 4-H Extension educator.

'I enjoyed being able to do this training at my own pace and on my schedule. I think I probably retained more information this way than at an in-person session.' Missouri 4-H volunteer/online orientation participant.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #2**1. Outcome Measures**

5,000 adult and youth volunteers apply practices of positive youth development through leadership roles.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	5000	11339

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Volunteers: both adult and youth are the backbone of the Missouri 4 H Youth Development Programs by teaching skills, managing the work of others, mentoring youth, working with teachers and schools, coordinating county and state events, and promoting 4 H.

What has been done

Through workshops, volunteer forums, leadership roles and web based instruction, state and county extension faculty will help adult and youth volunteer leaders gain knowledge and skills to communicate, manage programs, design and deliver education events, develop interpersonal skills and create environments that promote positive youth development.

Results

Post evaluation results of 4-H volunteer training:

*Project leaders improve skills to use 4-H curricula experientially.

*Club leaders increase their understanding of 4-H, the club model and current issues relating to clubs to help foster meaningful club activities and experiences.

*Volunteers increase their understanding of the University of Missouri, youth development and the developmental stages of young people.

*Volunteers provide higher quality experiences for young people.

*Project leaders use 4-H curricula experientially to conduct quality project meetings.

*Club leaders use their understanding of 4-H, the club model and current issues relating to clubs to help foster meaningful club activities and experiences.

*Volunteers use their understanding of the University of Missouri, youth development and the developmental stages of young people.

*Volunteers provide higher quality experiences for young people to grow and thrive.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #3**1. Outcome Measures**

Number of volunteers in local, county, regional and state 4-H leadership roles.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	10000	11339

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Volunteers: both adult and youth are the backbone of the Missouri 4 H Youth Development Programs by teaching skills, managing the work of others, mentoring youth, working with teachers and schools, coordinating county and state events, and promoting 4 H.

What has been done

Through workshops, volunteer forums, leadership roles and web based instruction, state and county extension faculty will help adult and youth volunteer leaders gain knowledge and skills to communicate, manage programs, design and deliver education events, develop interpersonal skills and create environments that promote positive youth development.

Results

11,339 adults actively volunteer for Missouri 4-H Youth Development Programs.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #4

1. Outcome Measures

Number of volunteers attending workshops and/or forums for personal.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	200	29265

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Volunteers: both adult and youth are the backbone of the Missouri 4 H Youth Development Programs by teaching skills, managing the work of others, mentoring youth, working with teachers and schools, coordinating county and state events, and promoting 4 H.

What has been done

Through workshops, volunteer forums, leadership roles and web based instruction, state and county extension faculty will help adult and youth volunteer leaders gain knowledge and skills to communicate, manage programs, design and deliver education events, develop interpersonal skills and create environments that promote positive youth development.

Results

29,265 volunteers attended 2028 sessions (duplicates not removed).

Immediate outcomes of 4-H volunteer orientation and training:

- * Understand 4-H and how it fits into the University of Missouri system.
- * Understand the proper use of the Clover and who has authority over the Clover.
- * Recognize the developmental stages of young people and how we make learning fun.
- * Understand the role of competition and cooperation in 4-H.
- * Know the Six Pillars of Character.
- * Understand the importance of safe environments.
- * Discuss factors which make leaders fail or be successful.

Intermediate outcomes of 4-H volunteer orientation and training:

- Volunteers are properly using the Name and Emblem
- Volunteers appropriately use competition to foster positive youth development
- Volunteers are creating safe environments for positive youth development

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #5**1. Outcome Measures**

Number of volunteers completing Volunteers: The Foundation of Youth Development.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	100	7500

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Volunteers: both adult and youth are the backbone of the Missouri 4 H Youth Development Programs by teaching skills, managing the work of others, mentoring youth, working with teachers and schools, coordinating county and state events, and promoting 4 H.

What has been done

A required 4-H volunteer orientation began in FY08, to date 7,500 volunteers have completed the orientation which introduces them to the concepts of land-grant universities, how youth grow and develop, 4-H's philosophy on competition, character education and how to reduce risk when working with youth. In addition to face-to-face workshops, an on-line course is available so busy volunteers can complete this obligation at their convenience.

Results

Example of feedback from a post - 4-H volunteer orientation workshop:

100% of the returned feedback forms indicated that the leaders learned the concept of the importance of the 4-H clover.

100% of the returned feedback forms also indicated that the leaders learned the concept of mastery focused competition over ends focused competition.

100% of the leaders learned that the four essential elements for positive youth development is belonging, independence, mastery, and generosity.

A majority could distinguish between a life skill and a project skill. Most could also name the six pillars of character while all of the leaders responded correctly to the question about elements of a written emergency plan.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #6**1. Outcome Measures**

Number of volunteers screened prior to service.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	8000	8800

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Adults sustain safe and supportive environments where youth can thrive. Positive youth development has improved the quality of life in communities through improved social, environmental and economic conditions in communities. It is important background screening is conducted on adults working with youth to ensure one important aspect of providing a safe learning environment for youth. 4-H is associated with a wholesome environment for positive youth development.

What has been done

Missouri 4-H volunteers submit an application on an annual basis. The applicant is screened for both criminal records and for child abuse and neglect. Volunteers do not work directly with youth until they receive a post card in the mail from the 4-H Center for Youth Development indicating they have successfully completed the screening process.

Results

8,800 volunteers successfully completed a background screening process.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation**V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- Retrospective (post program)
- Before-After (before and after program)
- During (during program)
- Other (see below)

Evaluation Results

In the past year, 2,098 volunteers have completed the on-line training. Each person must complete the survey and quiz to complete the course. Following are highlights from this data:

Leadership Role(s)

- 65% are project leaders

Length of Service in years

- 42% 1 – 5 years
- 25% less than 1 year
- 16% 6 to 10 years
- 14% 11 or more years
- 4% other

How many other 4-H trainings of any kind previously attended

- 73% this is my first training
- 23% 1 – 5
- 4% 6 or more

86% understood the 4-H Name and Emblem is a federal mark

99.8% understood that 4-H at state-level events are fun, hands-on learning taught by university faculty

85% identified correctly current technology and teaching events at the land-grant university

76% identifies the four essential elements of positive youth development

60 to 98% of the volunteers correctly distinguished between project/content skills and life skills youth gain from 4-H projects

98% validated that taking time to discuss and reflect upon the 4-H experience is important and enhances learning

84% understood the ages and stages of childhood

96% understood 4-H's philosophy of competition

98% understood 4-H promotes mastery

90% understood strategies to promote mastery

100% understood how to use open-ended questions to promote mastery

98% understood 4-H's approach to teaching character

99% understood elements to include in an emergency plan

In general, the volunteers agreed that the orientation increased their knowledge of what it takes to be an effective volunteer. The topics indicated where they learned the most were as follows:

4-H is part of the land-grant university

4-H's philosophy on competition

Essential Elements of positive youth development

Key Items of Evaluation

In the past year, 2,098 volunteers have completed the on-line training. Each person must complete the survey and quiz to complete the course. Following are highlights from this data:

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Length of Service in years

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How many other 4-H trainings of any kind previously attended

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projects

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In general, the volunteers agreed that the orientation increased their knowledge of what it

takes to be an effective volunteer. The topics indicated where they learned the most

were as follows:

4-H is part of the land-grant university

4-H's philosophy on competition

Essential Elements of positive youth development

Program #19**V(A). Planned Program (Summary)****1. Name of the Planned Program**

Improving Communications

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
806	Youth Development	100%			
	Total	100%			

V(C). Planned Program (Inputs)**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	5.0	0.0	0.0	0.0
Actual	3.5	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
229338	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

Communication Toolkit: Fun Skill-Building Activities to do with Kids; Clowning project, judging, demonstration, exhibition; Public Speaking; Theatre Arts project, judging, demonstration, exhibition; Demonstration learning methodology; Oral reasons for project judging.

2. Brief description of the target audience

Adults (youth staff, local leaders, parents, volunteers, teachers, organizational leaders), youth aged 5 - 19.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	1100	2500	7500	15000
2008	477	384	11216	12896

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of youth enrolled in communication projects and educational events.

Year	Target	Actual
2008	7000	11216

Output #2

Output Measure

- Attendance of project leaders at workshops for educational methods and communication projects.

Year	Target	Actual
2008	100	304

Output #3

Output Measure

- Number of youth participating in camps, educational events and afterschool.

Year	Target	Actual
2008	7500	14851

Output #4

Output Measure

- Number of hits on website.

Year	Target	Actual
2008	20000	13999

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	4,000 youth will competently demonstrate knowledge and skills gained through demonstrations, oral reasons and/or public speaking.
2	A sample of 400 youth who have participated in state 4-H educational events incorporating communications (oral reasons, demonstrations, public speaking, etc.) will report incorporating skills in other educational and/or leadership situations.

Outcome #1**1. Outcome Measures**

4,000 youth will competently demonstrate knowledge and skills gained through demonstrations, oral reasons and/or public speaking.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	4000	12903

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

All 4 H youth development programs provide opportunities for youth to learn and/or improve communication skills. Learning communication skills enhances learning, fosters interpersonal skills and facilitates leading groups. Command of communication skills by youth is essential for their contribution to the civic and economic leadership of communities.

What has been done

Adult staff and volunteers facilitated youth ages 5 to 19 to learn through project curricula, camps and educational events knowledge, skills and application of communications. Program staff facilitated learning through curricula, workshops and conferences to help parents, caregivers, volunteer leaders and staff of other youth serving organizations to gain skills to promote children's communication skills.

Results

Demonstrating is one of the best 4-H teaching techniques for teaching one's self and others. It involves, visual, oral and practical step-by-step presentation of information or procedures. If just 60% of the 4-H club members performed a demonstration at the club level, 15,648 youth would have given a demonstration on a topic of their choice.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #2**1. Outcome Measures**

A sample of 400 youth who have participated in state 4-H educational events incorporating communications (oral reasons, demonstrations, public speaking, etc.) will report incorporating skills in other educational and/or leadership situations.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	400	364

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

All 4-H youth development programs provide opportunities for youth to learn and/or improve communication skills. Learning communication skills enhances learning, fosters interpersonal skills and facilitates leading groups. Command of communication skills by youth is essential for their contribution to the civic and economic leadership of communities.

What has been done

Adult staff and volunteers facilitated youth ages 5 to 19 to learn through project curricula, camps and educational events knowledge, skills and application of communications. Program staff facilitated learning through curricula, workshops and conferences to help parents, caregivers, volunteer leaders and staff of other youth serving organizations to gain skills to promote children's communication skills. A review of Missouri 4-H Recognition forms informed the results.

Results

284 youth, ages 14 to 18 and 80 middle school youth completed either the Missouri 4-H Recognition Form, the Missouri 4-H Scholarship Form or applied to be a Regional Representative of the State 4-H Council. Youths indicate what they learned about leadership through 4-H and how they apply these skills at school and in other organizations they may belong.

*4-H has taught me very important life skills such as being organized, getting involved, helping others, achieving my personal best, and how to deeply appreciate how fortunate I am to have those opportunities.'

*The 4-H concept I have learned is 'do, reflect, apply' method. It is not enough to simply go through the program and reflect on what you have done, you have to directly apply those skills to reap the full benefit.'

*I have learned many valuable skills from 4-H including communication skills, the ability to make decisions on my own, managing resources, and being able to work with others in a large group.'

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation**V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- After Only (post program)
- Retrospective (post program)
- During (during program)
- Other (Educational Events)

Evaluation Results

In 2007, Missouri 4-H joined the national 4-H Study of Positive Youth Development. Funded by National 4-H Council and lead by researchers at Tufts University, this longitudinal study began with fifth graders. By the end of 2007, data has been collected from 4,793 adolescents in 34 states. Plans are to continue surveying these youth through high school and into college. Although funded by 4-H, the participants are diverse adolescents who may or may not be 4-H members.

Between March and August of 2007, 338 adolescents from Missouri participated in Wave 5 of the 4-H Study of Positive Youth Development. The students were from 21 sites in Missouri. 4-H Youth Development Specialists from the University of Missouri and Lincoln University recruited students in grades 5 to 11 to complete a written survey. Parents could also complete an optional survey. Since one of the Missouri sites was a residential facility for adjudicated adolescents (n=55), those young people are not included in the results reported here.

Findings from the first four years of the national study can be found at: <http://www.fourhcouncil.edu/>.

In addition, researchers are also studying the impact of 4-H participation. The large national sample of teens permits researchers to compare 4-H and non-4-H participants. The groups are matched on key factors such as gender, race/ethnicity, community type, number of parents in the home, family per capita income, and mother's education. The matched groups are also similar in their level of participation in out-of-school time programs. All students in the matched samples participated at least two times per month in 4-H or a similar youth development program.

Using data from multiple years, researchers created models that show trajectories or patterns of change over time. They identified desirable, undesirable, and intermediate patterns. Then, they compared matched samples of youth. For youth who had participated in 4-H at some point during 5-8th grades, they found:

- 4-H Youth were 3.5 times more likely to be in the highest Contribution group

- 4-H Youth were 1.5 times more likely to be in the highest PYD group

- 4-H Youth were 1.3 times more likely to be in the lowest Risk Behavior and Depression groups.

In Missouri, we tested whether the average (mean) scores were statistically different for some of the factors measured in the 4-H Study. For Missouri students in Wave 5, we found significant differences ($p < .05$) between the NON 4-H and the ACTIVE 4-H groups on:

- Contribution—volunteering and service activities

- Number of Positive Adult Mentors

- Number of Leadership Experiences

- Reported Risk Behaviors—alcohol, tobacco use, and illicit drug use

Key Items of Evaluation

In 2007, Missouri 4-H joined the national 4-H Study of Positive Youth Development. Funded by National 4-H Council and lead by researchers at Tufts University, this longitudinal study began with fifth graders. By the end of 2007, data has been collected from 4,793 adolescents in 34 states. Plans are to continue surveying these youth through high school and into college. Although funded by 4-H, the participants are diverse adolescents who may or may not be 4-H members.

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Contribution—volunteering and service activities

Number of Positive Adult Mentors

Number of Leadership Experiences

Reported Risk Behaviors—alcohol, tobacco use, and illicit drug use

Program #20

V(A). Planned Program (Summary)

1. Name of the Planned Program

Building Environments

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
605	Natural Resource and Environmental Economics	3%			
608	Community Resource Planning and Development	2%			
723	Hazards to Human Health and Safety	5%			
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures	90%			
Total		100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	4.0	0.0	0.0	0.0
Actual	4.4	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
319098	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Conduct hands-on workshops for builders and consumers. Assemble and maintain relevant website and guidesheet information. Create a comprehensive Missouri Guide to Green Buildings. Encourage and support involvement in state, county, and local governments and agencies supporting energy-efficient, green buildings and homes. Assemble and maintain relevant website and guidesheet information on indoor air quality, home pollutants, home safety, and disaster preparedness. Maintain curriculum for K-12 schools and at-risk families. Encourage and support involvement in state, county, and local governments and agencies supporting healthy homes and disaster preparedness. Assemble and maintain relevant website and guidesheet information on housing types, maintenance, renting, home financial management and development. Develop curriculum for advocacy groups, housing agencies and nonprofit organizations. Encourage and support involvement in housing coalitions and agencies.

2. Brief description of the target audience

Government Emergency management departments; Health Agencies; Medical groups and agencies; Day care providers; 4-H programs and Family and consumer science educators; Landlords and tenants; Builders and contractors; Real estate agents and brokers; K-12 educators, students, school districts; Consumers of home appliances; Do-it-yourself consumers; Business owners; Non-profit Energy and Ecological Organizations; Energy Cooperatives and Utilities; First Time Homebuyers; Existing and Long-term Homeowners; Non-profit Housing Agencies; Government and State Housing Directors.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	2300	25000	350	0
2008	1407	5517	32	1631

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Number of workshops.

Year	Target	Actual
2008	0	141

Output #2**Output Measure**

- Number of newsletter articles.

Year	Target	Actual
2008	0	7860

Output #3**Output Measure**

- Number of radio spots.

Year	Target	Actual
2008	0	0

Output #4**Output Measure**

- Number of one-on-one counseling sessions.

Year	Target	Actual
2008	0	0

Output #5**Output Measure**

- Number of unique website visits.

Year	Target	Actual
2008	0	69015

Output #6**Output Measure**

- Number of participant contacts.

Year	Target	Actual
2008	0	6924

Output #7**Output Measure**

- Number of students reached.

Year	Target	Actual
2008	0	1663

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Percent of participants who have a home disaster preparedness plan.
2	Percent of participants who secure funding to purchase a home.
3	Percent of participants who indicate they feel able to maintain their home.
4	Percent of participants who have implemented energy conservation technologies.

Outcome #1**1. Outcome Measures**

Percent of participants who have a home disaster preparedness plan.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	30	21

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Annually Missourians are severely affected by fire and weather disasters. The possibility also exists that Missourians might be affected by man-made (terror) and/or seismic disasters. Emergency preparedness teaches families how to prepare and cope with these possible disasters: identify hazards likely to happen to your family; mitigate against the hazards; develop a response plan, including evacuation route; plan for coping after a disaster; and implement drills and family education.

What has been done

Building Environments programs educate consumers, professionals, and government agencies about available and affordable housing options (including programs geared toward first-time homebuyers), housing quality, landlord - tenant relations, long-term home maintenance, healthy indoor air quality, healthy homes, home safety, home disaster preparedness (fire, weather, security) and promoting environmentally-sensitive and energy-efficient homes and buildings in Missouri.

Results

Twenty-one percent (21%) of participants participating in Built Environment programming prepared a home disaster plan as a result of attending the program.

4. Associated Knowledge Areas

KA Code	Knowledge Area
723	Hazards to Human Health and Safety
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures
608	Community Resource Planning and Development
605	Natural Resource and Environmental Economics

Outcome #2**1. Outcome Measures**

Percent of participants who secure funding to purchase a home.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	49

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Quality affordable, energy efficient, and healthy housing continues to be a serious expressed need in various communities in both rural and urban areas of Missouri.

What has been done

Building Environments programs educate consumers, professionals, and government agencies about available and affordable housing options (including programs geared toward first-time homebuyers), housing quality, landlord - tenant relations, long-term home maintenance, healthy indoor air quality, healthy homes, home safety, home disaster preparedness (fire, weather, security) and promoting environmentally-sensitive and energy-efficient homes and buildings in Missouri.

Results

Forty-nine percent (49%) of all participants in Home Buyer Education programs provided by MU Extension secured funding to purchase a home. Of those seeking USDA Rural Development loans, 100% secured funding. MU Extension is now the preferred Home Buyer Education provider for USDA Rural Development home loan applicants in Missouri.

4. Associated Knowledge Areas

KA Code	Knowledge Area
605	Natural Resource and Environmental Economics
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures
608	Community Resource Planning and Development
723	Hazards to Human Health and Safety

Outcome #3**1. Outcome Measures**

Percent of participants who indicate they feel able to maintain their home.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	30	80

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Home owners may not provide necessary maintenance to upkeep their home which could result in serious deterioration, they could fall behind on their mortgage payment, save inadequately for home repairs and renovation and they could over extend themselves through home equity payments due to lack of training on financial management. The program is critical to provide support in home care and maintenance to new homeowners, particularly households who have no previous experience with home ownership.

What has been done

Building Environments programs educate consumers, professionals, and government agencies about available and affordable housing options (including programs geared toward first-time homebuyers), housing quality, landlord - tenant relations, long-term home maintenance, healthy indoor air quality, healthy homes, home safety, home disaster preparedness (fire, weather, security) and promoting environmentally-sensitive and energy-efficient homes and buildings in Missouri.

Results

Eighty percent (80%) of participants felt they were more capable of maintaining their home after attending an MU Extension program.

4. Associated Knowledge Areas

KA Code	Knowledge Area
605	Natural Resource and Environmental Economics
723	Hazards to Human Health and Safety
608	Community Resource Planning and Development
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

Outcome #4**1. Outcome Measures**

Percent of participants who have implemented energy conservation technologies.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	30	31

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

The built environment has a profound impact on the natural environment, economy, health and productivity of Missouri. Green Building practices are encouraged in order to enhance the well-being of occupants, and to minimize negative impacts on the community and natural environment. However, most consumers are not too knowledgeable about the appropriate technologies and design strategies that are affordable and easy to integrate into their homes and workplaces.

What has been done

Building Environments programs educate consumers, professionals, and government agencies about available and affordable housing options (including programs geared toward first-time homebuyers), housing quality, landlord - tenant relations, long-term home maintenance, healthy indoor air quality, healthy homes, home safety, home disaster preparedness (fire, weather, security) and promoting environmentally-sensitive and energy-efficient homes and buildings in Missouri.

Results

Thirty-one percent (31%) of participants who attend programming on Green Building techniques and energy conservation implemented one or more of the energy conservation techniques in their home.

4. Associated Knowledge Areas

KA Code	Knowledge Area
605	Natural Resource and Environmental Economics
723	Hazards to Human Health and Safety
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures
608	Community Resource Planning and Development

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Populations changes (immigration,new cultural groupings,etc.)

Brief Explanation

The greatest barrier to programming in Built Environment programming is the need in relative comparison to faculty available to deliver programming. With only six regional faculty and 1.74 FTE on campus it is quite difficult to reach all of the areas in need of programs and services. With the growing housing market and now the home foreclosure issue looming, our faculty try to partner with outside agencies to meet the needs, but that still leaves us limited in our delivery capacity.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)
- During (during program)
- Case Study

Evaluation Results

Key Items of Evaluation

Forty-nine percent (49%) of all participants in Home Buyer Education programs provided by MU Extension secured funding to purchase a home. Of those seeking USDA Rural Development loans, 100% secured funding. MU Extension is now the preferred Home Buyer Education provider for USDA Rural Development home loan applicants in Missouri.

Program #21**V(A). Planned Program (Summary)****1. Name of the Planned Program**

Parenting

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
802	Human Development and Family Well-Being	100%			
	Total	100%			

V(C). Planned Program (Inputs)**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	4.0	0.0	0.0	0.0
Actual	7.5	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
547024	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

Conduct workshops and multi-sessions programs; develop curriculum and educational resources, including print and web materials; provide training; work with media; partnering with other agencies and states.

2. Brief description of the target audience

Parents or others acting in a parenting role (e.g., grandparents, other relatives, foster parents).

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	1000	5000	0	0
2008	3765	533	149	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of classes/workshops provided (face-to-face or web).

Year	Target	Actual
2008	0	386

Output #2

Output Measure

- Number of individual questions answered.

Year	Target	Actual
2008	0	0

Output #3

Output Measure

- Number of newsletters distributed.

Year	Target	Actual
2008	0	6645

Output #4

Output Measure

- Number of website visitors.

Year	Target	Actual
2008	0	83124

Output #5

Output Measure

- Number of in-service trainings provided.

Year	Target	Actual
2008	0	0

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Percent of participants who show increased knowledge of appropriate parenting practices (as defined by NEPEM).
2	Number of participants who have adopted appropriate parenting practices (as defined by NEPEM).
3	Reduction in child abuse and neglect.

Outcome #1**1. Outcome Measures**

Percent of participants who show increased knowledge of appropriate parenting practices (as defined by NEPEM).

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	30	80

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

During the Missouri Plan of Work process, 78 counties identified a need for parenting programs. The counties identified a wide range of parents and others acting in a parenting role (e.g., divorced parents, grandparents who are parenting, young parents, low-income parents, etc.) who need support and resources to develop better parenting skills. The long term goal of the program is to reduce rates of child abuse and neglect.

What has been done

Parenting education has been provided to increase parents' knowledge and use of appropriate parenting practices through providing information and/or skills practice opportunities. The Parenting program utilizes multiple curricula and delivery methods designed to increase parents' knowledge and adoption of appropriate parenting practices, as defined by the National Extension Parent Education Model (NEPEM), with a long-term goal of reduced child abuse and neglect.

Results

Over eighty percent (80%) of program participants indicated that they had learned new strategies to more effectively parent their child. The participants were more able to indicate those things that were stressors in their life and how to cope with those in a positive manner. Participants also indicated that they learned guidance strategies that could be used in place of discipline and punishment.

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being

Outcome #2**1. Outcome Measures**

Number of participants who have adopted appropriate parenting practices (as defined by NEPEM).

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

During the Missouri Plan of Work process, 78 counties identified a need for parenting programs. The counties identified a wide range of parents and others acting in a parenting role (e.g., divorced parents, grandparents who are parenting, young parents, low-income parents, etc.) who need support and resources to develop better parenting skills. The long term goal of the program is to reduce rates of child abuse and neglect.

What has been done

Parenting education has been provided to increase parents' knowledge and use of appropriate parenting practices through providing information and/or skills practice opportunities. The Parenting program utilizes multiple curricula and delivery methods designed to increase parents' knowledge and adoption of appropriate parenting practices, as defined by the National Extension Parent Education Model (NEPEM), with a long-term goal of reduced child abuse and neglect.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being

Outcome #3

1. Outcome Measures

Reduction in child abuse and neglect.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

During the Missouri Plan of Work process, 78 counties identified a need for parenting programs. The counties identified a wide range of parents and others acting in a parenting role (e.g., divorced parents, grandparents who are parenting, young parents, low-income parents, etc.) who need support and resources to develop better parenting skills. The long term goal of the program is to reduce rates of child abuse and neglect.

What has been done

Parenting education has been provided to increase parents' knowledge and use of appropriate parenting practices through providing information and/or skills practice opportunities. The Parenting program utilizes multiple curricula and delivery methods designed to increase parents' knowledge and adoption of appropriate parenting practices, as defined by the National Extension Parent Education Model (NEPEM), with a long-term goal of reduced child abuse and neglect.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Brief Explanation

Changes in parenting behaviors can often take many years to emerge.Our long term goal is to reduce child abuse and neglect and we see short term indicators of awareness and knowledge, but we have not had adequate time to follow-up with parents to determine if education has had a positive impact on this objective.

V(I). Planned Program (Evaluation Studies and Data Collection)**1. Evaluation Studies Planned**

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- During (during program)
- Comparisons between program participants (individuals,group,organizations) and non-participants

Evaluation Results

Over eighty percent (80%) of program participants indicated that they had learned new strategies to more effectively parent their child.The participants were more able to indicate those things that were stressors in their life and how to cope with those in a positive manner. Participants also indicated that they learned guidance strategies that could be used in place of discipline and punishment.

Key Items of Evaluation

Over eighty percent (80%) of program participants indicated that they had learned new strategies to more effectively parent their child.The participants were more able to indicate those things that were stressors in their life and how to cope with those in a positive manner. Participants also indicated that they learned guidance strategies that could be used in place of discipline and punishment.

Program #22

V(A). Planned Program (Summary)

1. Name of the Planned Program

Strengthening Families

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
802	Human Development and Family Well-Being	60%			
806	Youth Development	40%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	6.0	0.0	0.0	0.0
Actual	10.7	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
774949	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Conduct workshops, multi-session programs and meetings; develop products, curriculum and resources; provide training; work with media; partnering with other agencies and with other state extensions.

2. Brief description of the target audience

Adults, parents, teens, childcare providers, grandparents, foster parents, professionals, teachers, agency educators, youth ages 5-12.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	3000	10000	2000	2500
2008	10768	2338	13016	3408

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	4

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of workshops, multi-session programs, fairs, and conferences.

Year	Target	Actual
2008	0	1045

Output #2

Output Measure

- Number of newsletters and media programs.

Year	Target	Actual
2008	0	2957

Output #3

Output Measure

- Number of professional childcare providers and agency educators trained.

Year	Target	Actual
2008	0	2638

Output #4

Output Measure

- Number of website visits.

Year	Target	Actual
2008	0	356496

Output #5

Output Measure

- Number of individual questions answered (through email, phone, etc).

Year	Target	Actual
2008	0	2338

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Number of participants reporting improved family relationships.
2	Increased percent of professionals trained.
3	Number of participants who increased their knowledge of appropriate strengthening families practices.
4	Percent of participants reporting improved family communication.

Outcome #1**1. Outcome Measures**

Number of participants reporting improved family relationships.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research shows that strong families communicate with one another, spend time together, show each other caring and appreciation, cope with change, and show each other affection. The Strengthening Families Programs will help families find their strengths and learn new skills to build on those strengths. They will be treated as co-learners who have life experiences to bring to the learning process.

What has been done

The Strengthening Families Planned Program has provided families and professionals with information and skills to strengthen families in their relationships, interactions, and communications.

Results

Over sixty percent (60%) of program participants reported that they had improved their communication skills and their family relationships. These participants reported learning specific skills that will allow them to develop strong family relationships and to ease conflict in the home.

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being
806	Youth Development

Outcome #2**1. Outcome Measures**

Increased percent of professionals trained.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	30	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research shows that strong families communicate with one another, spend time together, show each other caring and appreciation, cope with change, and show each other affection. The Strengthening Families Programs will help families find their strengths and learn new skills to build on those strengths. They will be treated as co-learners who have life experiences to bring to the learning process.

What has been done

The Strengthening Families Planned Program has provided families and professionals with information and skills to strengthen families in their relationships, interactions, and communications.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
802	Human Development and Family Well-Being

Outcome #3

1. Outcome Measures

Number of participants who increased their knowledge of appropriate strengthening families practices.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Research shows that strong families communicate with one another, spend time together, show each other caring and appreciation, cope with change, and show each other affection. The Strengthening Families Programs will help families find their strengths and learn new skills to build on those strengths. They will be treated as co-learners who have life experiences to bring to the learning process.

What has been done

The Strengthening Families Planned Program has provided families and professionals with information and skills to strengthen families in their relationships, interactions, and communications.

Results

Over seventy percent (75%) of program participants reported increasing their knowledge of appropriate family strengthening skills. They reported that they intended to use these practices in their daily lives.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
802	Human Development and Family Well-Being

Outcome #4

1. Outcome Measures

Percent of participants reporting improved family communication.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	30	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research shows that strong families communicate with one another, spend time together, show each other caring and appreciation, cope with change, and show each other affection. The Strengthening Families Programs will help families find their strengths and learn new skills to build on those strengths. They will be treated as co-learners who have life experiences to bring to the learning process.

What has been done

The Strengthening Families Planned Program has provided families and professionals information and skills to strengthen families in their relationships, interactions, and communications.

Results

Over sixty percent (60%) of program participants reported that they had improved their communication skills and their family relationships. These participants reported learning specific skills that will allow them to develop strong family relationships and to ease conflict in the home.

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being
806	Youth Development

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

In our reporting we failed to track the number of agency professionals trained versus direct education to parents so we were not able to report on the number of professionals trainings or increasing the number of professionals trained. This has been changed for the upcoming year.

V(I). Planned Program (Evaluation Studies and Data Collection)**1. Evaluation Studies Planned**

- After Only (post program)
- Retrospective (post program)
- During (during program)

Evaluation Results

Program evaluations in the Family Strengthening area show that when families learn positive, productive communication skills, they are better equipped to handle stressful situations; they are more willing to work to improve family relationships; and they feel they have improved family relationships. Participants have reported that this program has helped them to the point that some have been able to regain custody or increase visitation with their children, in cases where they had been removed from the home.

Key Items of Evaluation

Over seventy percent (75%) of program participants reported increasing their knowledge of appropriate family strengthening skills. They reported that they intended to use these practices in their daily lives.

Program #23

V(A). Planned Program (Summary)

1. Name of the Planned Program

Building Better Childcare for Missouri

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
802	Human Development and Family Well-Being	100%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	2.0	0.0	0.0	0.0
Actual	5.6	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
410268	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Conduct workshops and multi-session programs; Develop products, curriculum, and resources; Provide training for other professionals; Partner with other state agencies and organizations.

2. Brief description of the target audience

Individuals who provide non-parental care to children ages birth through school entry such as center- and home-based childcare providers, Head Start and Early Head Start teachers, public-school preschool educators, and parent educators.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	200	1000	0	0
2008	2658	1801	84	820

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	1

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of classes and workshops offered.

Year	Target	Actual
2008	0	140

Output #2

Output Measure

- Number of participants attending classes and workshops.

Year	Target	Actual
2008	0	8826

Output #3

Output Measure

- Number of newsletters distributed.

Year	Target	Actual
2008	0	753

Output #4

Output Measure

- Number of visits to childcare website.

Year	Target	Actual
2008	0	40690

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Percent increase in awareness of developmentally appropriate learning environments and activities.
2	Higher quality learning environments and activities will be implemented.
3	Percent of Missouri children better prepared for school.

Outcome #1**1. Outcome Measures**

Percent increase in awareness of developmentally appropriate learning environments and activities.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	30	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

The quality of child care nationwide is suffering. Because so many families with young children rely on child care so that they can work, every effort to improve the situation benefits young children and their families. Moreover, a high quality system of child care supports the economic development of Missouri.

What has been done

Child care provider education and specialized training are the strongest predictors of child care quality and, in turn, children's experiences. Moreover, the state of Missouri requires that providers working in licensed facilities obtain 12 clock hours of training per year. Extension's 'Building Better Child Care' program meets the needs of many Missouri citizens.

Results

Over eighty percent (80%) of program participants indicated that they feel more prepared to implement developmentally appropriate activities in their childcare setting. These participants plan to implement these activities into their daily lesson plans following the program.

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being

Outcome #2**1. Outcome Measures**

Higher quality learning environments and activities will be implemented.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

The quality of child care nationwide is suffering. Because so many families with young children rely on child care so that they can work, every effort to improve the situation benefits young children and their families. Moreover, a high quality system of child care supports the economic development of Missouri.

What has been done

Child care provider education and specialized training are the strongest predictors of child care quality and, in turn, children's experiences. Moreover, the state of Missouri requires that providers working in licensed facilities obtain 12 clock hours of training per year. Extension's 'Building Better Child Care' program meets the needs of many Missouri citizens.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being

Outcome #3

1. Outcome Measures

Percent of Missouri children better prepared for school.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The quality of child care nationwide is suffering. Because so many families with young children rely on child care so that they can work, every effort to improve the situation benefits young children and their families. Moreover, a high quality system of child care supports the economic development of Missouri.

What has been done

Child care provider education and specialized training are the strongest predictors of child care quality and, in turn, children's experiences. Moreover, the state of Missouri requires that providers working in licensed facilities obtain 12 clock hours of training per year. Extension's 'Building Better Child Care' program meets the needs of many Missouri citizens.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges

Brief Explanation

Our evaluation tools did not clearly differentiate childcare provider types. In coming years, we will track more closely the home provider, the unpaid providers, and the licensed center providers. We will also track those individuals who received training as a requirement for continuing education.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)

Evaluation Results

Key Items of Evaluation

Over eighty percent (80%) of program participants indicated that they feel more prepared to implement developmentally appropriate activities in their childcare setting. These participants plan to implement these activities into their daily lesson plans following the program.

Program #24**V(A). Planned Program (Summary)****1. Name of the Planned Program**

Food Safety

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	100%			
Total		100%			

V(C). Planned Program (Inputs)**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	1.0	0.0	0.0	0.0
Actual	6.9	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
501438	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

Number of Curriculum developed; Number of individual inquiries responded to; Number of trainings for large groups; Number of smaller workshops; Number of guide sheets written; Number of newsletter articles written; Number of media interviews held.

2. Brief description of the target audience

Pre K–12th grade students, food stamp individuals and households, general adults, older adults, nursing home assistants, daycare providers.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	100	5000	5000	0
2008	669	4179	21	339

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Curriculum.

Year	Target	Actual
2008	0	0

Output #2**Output Measure**

- Individual inquiries.

Year	Target	Actual
2008	0	0

Output #3**Output Measure**

- Trainings for large groups.

Year	Target	Actual
2008	0	0

Output #4**Output Measure**

- Smaller workshops.

Year	Target	Actual
2008	0	68

Output #5**Output Measure**

- Guide sheets.

Year	Target	Actual
2008	0	2906

Output #6**Output Measure**

- Newsletter articles.

Year	Target	Actual
2008	0	0

Output #7**Output Measure**

- Media interviews.

Year	Target	Actual
2008	0	0

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Increased knowledge of proper hand washing.
2	Increased knowledge of cooking foods adequately.
3	Increased knowledge of avoiding cross-contamination.
4	Increased knowledge of keeping food at a safe temperature.
5	Increased knowledge of storing foods properly.
6	% or # of individuals who indicate an intent to adopt one or more safe food handling practices.
7	Increased practice of personal hygiene.
8	Increased careful food handling practices.
9	Percent of individuals who indicate using desirable food handling behaviors.

Outcome #1**1. Outcome Measures**

Increased knowledge of proper hand washing.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

The need is to protect food from contamination by pathogenic microorganisms, parasites, and naturally occurring toxins. A large portion of the population is improperly and unsafely handling food in the home leading to potentially lethal illnesses. Seventy-six million cases of food borne illnesses occur annually resulting in 325,000 hospitalizations and 5,000 deaths. Clients include limited resource families, school children, minority families, youth, adults, daycare providers, etc.

What has been done

Food safety education through the University of Missouri Extension involves answering consumer questions and teaching safe food handling concepts both through regional specialists as well as within the Family Nutrition Education Program. Programs include but are not limited to occasional quantity cooks, EFNEP, FSNE, and Food Power. The evaluation data of these methods indicate successful behavior change regarding food handling.

Results

Eighty-two percent (82%) of teachers reported that their students had better hand washing skills after participating in the MU Extension Family Nutrition Education Programs. Proper hand washing behavior has been shown to reduce the onset and spread of disease, especially in young children. This is often the first lesson taught in all of our youth nutrition and food safety programs given its importance.

4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Outcome #2**1. Outcome Measures**

Increased knowledge of cooking foods adequately.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The need is to protect food from contamination by pathogenic microorganisms, parasites, and naturally occurring toxins. A large portion of the population is improperly and unsafely handling food in the home leading to potentially lethal illnesses. Seventy-six million cases of food borne illnesses occur annually resulting in 325,000 hospitalizations and 5,000 deaths. Clients include limited resource families, school children, minority families, youth, adults, daycare providers, etc.

What has been done

Food safety education through the University of Missouri Extension involves answering consumer questions and teaching safe food handling concepts both through regional specialists as well as within the Family Nutrition Education Program. Programs include but are not limited to occasional quantity cooks, EFNEP, FSNE, and Food Power. The evaluation data of these methods indicate successful behavior change regarding food handling.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Outcome #3**1. Outcome Measures**

Increased knowledge of avoiding cross-contamination.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

The need is to protect food from contamination by pathogenic microorganisms, parasites, and naturally occurring toxins. A large portion of the population is improperly and unsafely handling food in the home leading to potentially lethal illnesses. Seventy-six million cases of food borne illnesses occur annually resulting in 325,000 hospitalizations and 5,000 deaths. Clients include limited resource families, school children, minority families, youth, adults, daycare providers, etc.

What has been done

Food safety education through the University of Missouri Extension involves answering consumer questions and teaching safe food handling concepts both through regional specialists as well as within the Family Nutrition Education Program. Programs include but are not limited to occasional quantity cooks, EFNEP, FSNE, and Food Power. The evaluation data of these methods indicate successful behavior change regarding food handling.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Outcome #4

1. Outcome Measures

Increased knowledge of keeping food at a safe temperature.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

The need is to protect food from contamination by pathogenic microorganisms, parasites, and naturally occurring toxins. A large portion of the population is improperly and unsafely handling food in the home leading to potentially lethal illnesses. Seventy-six million cases of food borne illnesses occur annually resulting in 325,000 hospitalizations and 5,000 deaths. Clients include limited resource families, school children, minority families, youth, adults, daycare providers, etc.

What has been done

Food safety education through the University of Missouri Extension involves answering consumer questions and teaching safe food handling concepts both through regional specialists as well as within the Family Nutrition Education Program. Programs include but are not limited to occasional quantity cooks, EFNEP, FSNE, and Food Power. The evaluation data of these methods indicate successful behavior change regarding food handling.

Results

Thirty-seven percent (37%) of adult EFNEP participants reported that they more often or always kept food stored at the proper temperature. This behavior change demonstrates that new knowledge was acquired during their food safety lessons, therefore, increasing the probability of fewer incidents of food borne illness in the home.

4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Outcome #5**1. Outcome Measures**

Increased knowledge of storing foods properly.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

The need is to protect food from contamination by pathogenic microorganisms, parasites, and naturally occurring toxins. A large portion of the population is improperly and unsafely handling food in the home leading to potentially lethal illnesses. Seventy-six million cases of food borne illnesses occur annually resulting in 325,000 hospitalizations and 5,000 deaths. Clients include limited resource families, school children, minority families, youth, adults, daycare providers, etc.

What has been done

Food safety education through the University of Missouri Extension involves answering consumer questions and teaching safe food handling concepts both through regional specialists as well as within the Family Nutrition Education Program. Programs include but are not limited to occasional quantity cooks, EFNEP, FSNE, and Food Power. The evaluation data of these methods indicate successful behavior change regarding food handling.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Outcome #6

1. Outcome Measures

% or # of individuals who indicate an intent to adopt one or more safe food handling practices.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The need is to protect food from contamination by pathogenic microorganisms, parasites, and naturally occurring toxins. A large portion of the population is improperly and unsafely handling food in the home leading to potentially lethal illnesses. Seventy-six million cases of food borne illnesses occur annually resulting in 325,000 hospitalizations and 5,000 deaths. Clients include limited resource families, school children, minority families, youth, adults, daycare providers, etc.

What has been done

Food safety education through the University of Missouri Extension involves answering consumer questions and teaching safe food handling concepts both through regional specialists as well as within the Family Nutrition Education Program. Programs include but are not limited to occasional quantity cooks, EFNEP, FSNE, and Food Power. The evaluation data of these methods indicate successful behavior change regarding food handling.

Results

Fifty-four percent (54%) of over 1,200 EFNEP adults reported that they have adopted one or more safe food handling practices. By handling their foods in a safer manner, these individuals have reduced the risk of food borne illness to themselves, their families, and anyone who they provide food for. These skills are not only useful in home food preparation but can also be used by these individuals who seek employment in the food service or hospitality industry.

4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Outcome #7**1. Outcome Measures**

Increased practice of personal hygiene.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

The need is to protect food from contamination by pathogenic microorganisms, parasites, and naturally occurring toxins. A large portion of the population is improperly and unsafely handling food in the home leading to potentially lethal illnesses. Seventy-six million cases of food borne illnesses occur annually resulting in 325,000 hospitalizations and 5,000 deaths. Clients include limited resource families, school children, minority families, youth, adults, daycare providers, etc.

What has been done

Food safety education through the University of Missouri Extension involves answering consumer questions and teaching safe food handling concepts both through regional specialists as well as within the Family Nutrition Education Program. Programs include but are not limited to occasional quantity cooks, EFNEP, FSNE, and Food Power. The evaluation data of these methods indicate successful behavior change regarding food handling.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Outcome #8**1. Outcome Measures**

Increased careful food handling practices.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

The need is to protect food from contamination by pathogenic microorganisms, parasites, and naturally occurring toxins. A large portion of the population is improperly and unsafely handling food in the home leading to potentially lethal illnesses. Seventy-six million cases of food borne illnesses occur annually resulting in 325,000 hospitalizations and 5,000 deaths. Clients include limited resource families, school children, minority families, youth, adults, daycare providers, etc.

What has been done

Food safety education through the University of Missouri Extension involves answering consumer questions and teaching safe food handling concepts both through regional specialists as well as within the Family Nutrition Education Program. Programs include but are not limited to occasional quantity cooks, EFNEP, FSNE, and Food Power. The evaluation data of these methods indicate successful behavior change regarding food handling.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Outcome #9

1. Outcome Measures

Percent of individuals who indicate using desirable food handling behaviors.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	30	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The need is to protect food from contamination by pathogenic microorganisms, parasites, and naturally occurring toxins. A large portion of the population is improperly and unsafely handling food in the home leading to potentially lethal illnesses. Seventy-six million cases of food borne illnesses occur annually resulting in 325,000 hospitalizations and 5,000 deaths. Clients include limited resource families, school children, minority families, youth, adults, daycare providers, etc.

What has been done

Food safety education through the University of Missouri Extension involves answering consumer questions and teaching safe food handling concepts both through regional specialists as well as within the Family Nutrition Education Program. Programs include but are not limited to occasional quantity cooks, EFNEP, FSNE, and Food Power. The evaluation data of these methods indicate successful behavior change regarding food handling.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Populations changes (immigration,new cultural groupings,etc.)

Brief Explanation

It has become apparent that we are now evaluating for behavior change and not focused on increasing client awareness.This has limited our ability to response to a few stated outcomes.In the future, we will continue to focus on the behavior change, however, and modify our Plan of Work.

V(l). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)

Evaluation Results

Key Items of Evaluation

Fifty-four percent (54%) of over 1,200 EFNEP adults reported that they have adopted one or more safe food handling practices.By handling their foods in a safer manner, these individuals have reduced the risk of food borne illness to themselves, their families, and anyone who they provide food for.These skills are not only useful in home food preparation but can also be used by these individuals who seek employment in the food service or hospitality industry.

Program #25

V(A). Planned Program (Summary)

1. Name of the Planned Program

Personal Financial Management

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
801	Individual and Family Resource Management	100%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	8.0	0.0	0.0	0.0
Actual	6.3	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
455853	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

University of Missouri campus and regional specialist will: Work in partnership to identify audience needs; Develop appropriate curriculum and program strategies; and Evaluate the impact of the educational experiences. Delivery strategies will include: Workshops; One-on-one coaching sessions; Training for professionals and eldercare providers; Written materials; Educational packets; Newsletters; Newspaper articles; Radio and television spots; and Web-based informational tools.

2. Brief description of the target audience

General population, general adult population, low income families, unbanked consumers, consumers going through bankruptcy, youth from pre-school through high school, college students, young couples, divorcing couples, women, older individuals and the elderly (55 and beyond), and family agencies.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	1500	5000	300	500
2008	9982	4099	306	1304

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Number of workshops.

Year	Target	Actual
2008	0	491

Output #2**Output Measure**

- Number of radio spots.

Year	Target	Actual
2008	0	0

Output #3**Output Measure**

- Number of one-on-one counseling sessions.

Year	Target	Actual
2008	0	0

Output #4**Output Measure**

- Number of newsletter articles.

Year	Target	Actual
2008	0	3732

Output #5**Output Measure**

- Number of unique website visits.

Year	Target	Actual
2008	0	209901

Output #6**Output Measure**

- Number of participant contacts.

Year	Target	Actual
2008	0	10691

Output #7**Output Measure**

- Number of students reached.

Year	Target	Actual
2008	0	1601

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Increased knowledge of debt management.
2	Increased knowledge of the benefits of saving on a regular basis.
3	Increased knowledge of basic personal financial management.
4	# of participants who have reduced their debt.
5	# of participants who began saving on a regular basis.
6	# of participants who increased the amount of money they save regularly.
7	# of participants who have established financial goals to guide financial decisions.
8	Number of participants who check their credit report.
9	Percent of participants who understand their rights under the Fair Credit Reporting Act.

Outcome #1**1. Outcome Measures**

Increased knowledge of debt management.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

MU Extension provides the general public, special target groups, youth, older citizens, and agency personnel with basic, unbiased personal finance information. With research-based curricula, we educate consumers to meet financial education requirements for bankruptcy discharge, financial literacy, home buying strategies, estate planning and retirement asset distribution strategies.

What has been done

Personal Financial Management is delivered through curricula that target low income families, family agencies, the general adult population, college students, women, unbanked consumers, consumers going through bankruptcy, young couples, divorcing couples, youth from pre-school through high school, and the elderly. This program area will also address consumer issues such as fraud and identity theft, credit reports, predatory lending and basic consumer decision-making skills.

Results

Over 75% of all program participants reporting felt they were more knowledgeable about managing their debt. They felt attending the program gave them new skills to manage their personal finances better.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #2**1. Outcome Measures**

Increased knowledge of the benefits of saving on a regular basis.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

MU Extension provides the general public, special target groups, youth, older citizens, and agency personnel with basic, unbiased personal finance information. With research-based curricula, we educate consumers to meet financial education requirements for bankruptcy discharge, financial literacy, home buying strategies, estate planning and retirement asset distribution strategies.

What has been done

Personal Financial Management is delivered through curricula that target low income families, family agencies, the general adult population, college students, women, unbanked consumers, consumers going through bankruptcy, young couples, divorcing couples, youth from pre-school through high school, and the elderly. This program area will also address consumer issues such as fraud and identity theft, credit reports, predatory lending and basic consumer decision-making skills.

Results

Over eighty percent (80%) of program participants reported understanding the benefits of saving money on a regular basis.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #3

1. Outcome Measures

Increased knowledge of basic personal financial management.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

MU Extension provides the general public, special target groups, youth, older citizens, and agency personnel with basic, unbiased personal finance information. With research-based curricula, we educate consumers to meet financial education requirements for bankruptcy discharge, financial literacy, home buying strategies, estate planning and retirement asset distribution strategies.

What has been done

Personal Financial Management is delivered through curricula that target low income families, family agencies, the general adult population, college students, women, unbanked consumers, consumers going through bankruptcy, young couples, divorcing couples, youth from pre-school through high school, and the elderly. This program area will also address consumer issues such as fraud and identity theft, credit reports, predatory lending and basic consumer decision-making skills.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #4

1. Outcome Measures

of participants who have reduced their debt.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

MU Extension provides the general public, special target groups, youth, older citizens, and agency personnel with basic, unbiased personal finance information. With research-based curricula, we educate consumers to meet financial education requirements for bankruptcy discharge, financial literacy, home buying strategies, estate planning and retirement asset distribution strategies.

What has been done

Personal Financial Management is delivered through curricula that target low income families, family agencies, the general adult population, college students, women, unbanked consumers, consumers going through bankruptcy, young couples, divorcing couples, youth from pre-school through high school, and the elderly. This program area will also address consumer issues such as fraud and identity theft, credit reports, predatory lending and basic consumer decision-making skills.

Results

Given the limited intermediate or long-term follow-up evaluations conducted, only five percent (5%) or less reported having reduced their debt. More follow-up evaluation will be conducted in the future to see if this number increases.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #5**1. Outcome Measures**

of participants who began saving on a regular basis.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

MU Extension provides the general public, special target groups, youth, older citizens, and agency personnel with basic, unbiased personal finance information. With research-based curricula, we educate consumers to meet financial education requirements for bankruptcy discharge, financial literacy, home buying strategies, estate planning and retirement asset distribution strategies.

What has been done

Personal Financial Management is delivered through curricula that target low income families, family agencies, the general adult population, college students, women, unbanked consumers, consumers going through bankruptcy, young couples, divorcing couples, youth from pre-school through high school, and the elderly. This program area will also address consumer issues such as fraud and identity theft, credit reports, predatory lending and basic consumer decision-making skills.

Results

Given the limited intermediate or long-term follow-up evaluations conducted, only five percent (5%) or less reported having begun to save on a regular basis. More follow-up evaluation will be conducted in the future to see if this number increases.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #6

1. Outcome Measures

of participants who increased the amount of money they save regularly.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

MU Extension provides the general public, special target groups, youth, older citizens, and agency personnel with basic, unbiased personal finance information. With research-based curricula, we educate consumers to meet financial education requirements for bankruptcy discharge, financial literacy, home buying strategies, estate planning and retirement asset distribution strategies.

What has been done

Personal Financial Management is delivered through curricula that target low income families, family agencies, the general adult population, college students, women, unbanked consumers, consumers going through bankruptcy, young couples, divorcing couples, youth from pre-school through high school, and the elderly. This program area will also address consumer issues such as fraud and identity theft, credit reports, predatory lending and basic consumer decision making skills.

Results

Given the limited intermediate or long-term follow-up evaluations conducted, only five percent (5%) or less reported having increased the amount of money they saved. More follow-up evaluation will be conducted in the future to see if this number increases.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #7**1. Outcome Measures**

of participants who have established financial goals to guide financial decisions.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

MU Extension provides the general public, special target groups, youth, older citizens, and agency personnel with basic, unbiased personal finance information. With research-based curricula, we educate consumers to meet financial education requirements for bankruptcy discharge, financial literacy, home buying strategies, estate planning and retirement asset distribution strategies.

What has been done

Personal Financial Management is delivered through curricula that target low income families, family agencies, the general adult population, college students, women, unbanked consumers, consumers going through bankruptcy, young couples, divorcing couples, youth from pre-school through high school, and the elderly. This program area will also address consumer issues such as fraud and identity theft, credit reports, predatory lending and basic consumer decision-making skills.

Results

Over fifty-percent of program participants reporting indicate that they have a written plan in place to manage their financial decisions and to reduce their personal debt load.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #8**1. Outcome Measures**

Number of participants who check their credit report.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

MU Extension provides the general public, special target groups, youth, older citizens, and agency personnel with basic, unbiased personal finance information. With research-based curricula, we educate consumers to meet financial education requirements for bankruptcy discharge, financial literacy, home buying strategies, estate planning and retirement asset distribution strategies.

What has been done

Personal Financial Management is delivered through curricula that target low income families, family agencies, the general adult population, college students, women, unbanked consumers, consumers going through bankruptcy, young couples, divorcing couples, youth from pre-school through high school, and the elderly. This program area will also address consumer issues such as fraud and identity theft, credit reports, predatory lending and basic consumer decision-making skills.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #9

1. Outcome Measures

Percent of participants who understand their rights under the Fair Credit Reporting Act.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	30	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

MU Extension provides the general public, special target groups, youth, older citizens, and agency personnel with basic, unbiased personal finance information. With research-based curricula, we educate consumers to meet financial education requirements for bankruptcy discharge, financial literacy, home buying strategies, estate planning and retirement asset distribution strategies.

What has been done

Personal Financial Management is delivered through curricula that target low income families, family agencies, the general adult population, college students, women, unbanked consumers, consumers going through bankruptcy, young couples, divorcing couples, youth from pre-school through high school, and the elderly. This program area will also address consumer issues such as fraud and identity theft, credit reports, predatory lending and basic consumer decision-making skills.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Brief Explanation

Limited intermediate and long-term evaluations have been conducted, therefore, not providing an accurate reflection of the number of program participants who have begun to save and reduce their personal debt.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Before-After (before and after program)
- During (during program)
- Time series (multiple points before and after program)

Evaluation Results

Key Items of Evaluation

Program #26**V(A). Planned Program (Summary)****1. Name of the Planned Program**

Nutrition, Health and Physical Activity

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
703	Nutrition Education and Behavior	25%			
724	Healthy Lifestyle	50%			
806	Youth Development	25%			
	Total	100%			

V(C). Planned Program (Inputs)**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	15.0	0.0	0.0	0.0
Actual	15.7	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
1139634	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

Use direct and indirect methods to provide education and targeted messages on nutrition, physical activity, and selfcare management. Some specific methods used will include group education, workshops, train-the-trainer strategies, newsletters, web-based education, and media efforts. In addition there will be community level interventions through partnerships that will be developed. This will include working with local coalitions to develop awareness campaigns.

2. Brief description of the target audience

Adults, youth ages 3 through 18, low-income Missourians, pregnant women, adults 55 and older, volunteers, teachers and community members, school teachers and nurses, other adults interested in improving their quality of life.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	15000	25000	200000	10000
2008	31612	28251	183864	32917

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	7

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Number of program participants (gender and ethnicity).

Year	Target	Actual
2008	0	276644

Output #2**Output Measure**

- Number of programs held.

Year	Target	Actual
2008	0	8391

Output #3**Output Measure**

- Number of newsletters distributed.

Year	Target	Actual
2008	0	897069

Output #4**Output Measure**

- Number of partnerships formed.

Year	Target	Actual
2008	0	180

Output #5**Output Measure**

- Number of community campaigns conducted.

Year	Target	Actual
2008	0	1

Output #6**Output Measure**

- Number of PSAs developed.

Year	Target	Actual
2008	0	0

Output #7**Output Measure**

- Number of PSAs used.

Year	Target	Actual
2008	0	0

Output #8**Output Measure**

- Web usage.

Year	Target	Actual
2008	0	751935

Output #9**Output Measure**

- Number of volunteers trained.

Year	Target	Actual
2008	0	548

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Improved attitudes about health eating and physical activity (percent).
2	Increased awareness/knowledge of physical activity recommendations for health (percent).
3	Increased awareness/knowledge of healthy food choices (percent).
4	Improved skill in selecting healthy foods (percent).
5	Increased self efficacy about managing chronic conditions.
6	Improve skill in preparation of healthy foods (percent).
7	Awareness among private and public sector leaders about nutrition related challenges of individuals and families.
8	Involvement of community groups to address nutrition challenges/issues of individuals and families.
9	Choose foods according to MyPyramid and the Dietary Guidelines.
10	Adopt one or more healthy food/nutrition practices.
11	Begin or increase physical activity.
12	Learner tries and accepts new foods.
13	Coalitions formed to address dietary quality and physical activity issues for individuals and families.
14	Increased adoption of healthy food practices.
15	Adoption of recommended diet-related practices for disease prevention and management.
16	Increase participation in regular physical activity.
17	Family/individual participation in community events that increase physical activity.
18	Identify barriers and enhancements to improve community diet quality and physical activity.
19	Increased community activities/facilities that encourage physical activity.
20	Improved behavior changes based on MyPyramid and the Dietary Guidelines.
21	Increased participation of individual/family in games and play that involve physical activity.
22	Reduction in time spent in sedentary activities.
23	Development of a written plan to address challenges and barriers to dietary quality and physical activity by community agencies and groups.

Outcome #1**1. Outcome Measures**

Improved attitudes about health eating and physical activity (percent).

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	30	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
703	Nutrition Education and Behavior
724	Healthy Lifestyle
806	Youth Development

Outcome #2**1. Outcome Measures**

Increased awareness/knowledge of physical activity recommendations for health (percent).

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	30	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
703	Nutrition Education and Behavior
806	Youth Development

Outcome #3

1. Outcome Measures

Increased awareness/knowledge of healthy food choices (percent).

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	30	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results

Ninety-five percent (95%) of participants reported having a greater awareness or increased knowledge about making healthier food choices. By developing an increased awareness and/or knowledge, these participants are more likely to consider adopting new, healthier behaviors which will have long-term impact on their health.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
703	Nutrition Education and Behavior
724	Healthy Lifestyle

Outcome #4**1. Outcome Measures**

Improved skill in selecting healthy foods (percent).

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	30	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results

Sixty-four percent (64%) of program participants reported that they improved their skills in making healthier food choices. This may include label reading, menu planning, selecting low fat foods, and better food resource management.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
703	Nutrition Education and Behavior
724	Healthy Lifestyle

Outcome #5**1. Outcome Measures**

Increased self efficacy about managing chronic conditions.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
724	Healthy Lifestyle
806	Youth Development
703	Nutrition Education and Behavior

Outcome #6**1. Outcome Measures**

Improve skill in preparation of healthy foods (percent).

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	30	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
724	Healthy Lifestyle
806	Youth Development
703	Nutrition Education and Behavior

Outcome #7**1. Outcome Measures**

Awareness among private and public sector leaders about nutrition related challenges of individuals and families.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development
703	Nutrition Education and Behavior
724	Healthy Lifestyle

Outcome #8**1. Outcome Measures**

Involvement of community groups to address nutrition challenges/issues of individuals and families.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
724	Healthy Lifestyle
806	Youth Development

Outcome #9

1. Outcome Measures

Choose foods according to MyPyramid and the Dietary Guidelines.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results

Eighty-one percent (81%) of those reporting in the Family Nutrition Program reported choosing their foods using the recommendations made in the Dietary Guidelines and My Pyramid.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
724	Healthy Lifestyle
703	Nutrition Education and Behavior

Outcome #10

1. Outcome Measures

Adopt one or more healthy food/nutrition practices.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results

EFNEP participants made significant improvements in dietary behaviors--87% improved one or more behaviors; 69% improved two or more behaviors; 42% improved three or more behaviors; 21% improved four or more behaviors; and 7% improved all five nutrition behaviors evaluated.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
703	Nutrition Education and Behavior
724	Healthy Lifestyle

Outcome #11**1. Outcome Measures**

Begin or increase physical activity.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results

Fifty-four percent (54%) of program participants reported beginning to exercise or increasing their daily physical activity levels as a result of this program.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
806	Youth Development
703	Nutrition Education and Behavior

Outcome #12

1. Outcome Measures

Learner tries and accepts new foods.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results

Sixty-seven percent (67%) of program participants report being more open to trying new foods and to introducing new foods into their daily diets.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
703	Nutrition Education and Behavior
724	Healthy Lifestyle

Outcome #13**1. Outcome Measures**

Coalitions formed to address dietary quality and physical activity issues for individuals and families.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
703	Nutrition Education and Behavior
806	Youth Development
724	Healthy Lifestyle

Outcome #14**1. Outcome Measures**

Increased adoption of healthy food practices.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results

Of 1,086 EFNEP participants sampled, eighty-seven percent (87%) adopted one new healthy food practice; sixty-nine percent (69%) adopted two practices; forty-two percent (42%) adopted three practices; twenty-one percent (21%) adopted four practices and seven percent (7%) adopted all five healthy food practices evaluated.

EFNEP participants made significant improvements in dietary behaviors--87% improved one or more behaviors; 69% improved two or more behaviors; 42% improved three or more behaviors; 21% improved four or more behaviors; and 7% improved all five nutrition behaviors evaluated.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
806	Youth Development
724	Healthy Lifestyle

Outcome #15

1. Outcome Measures

Adoption of recommended diet-related practices for disease prevention and management.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
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806	Youth Development
703	Nutrition Education and Behavior
724	Healthy Lifestyle

Outcome #16**1. Outcome Measures**

Increase participation in regular physical activity.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results

Eighty-three percent (83%) of program participants reported an increase in time spent participating in regular physical activity. The adoption of regular physical activity habits will have long term impact on the program participants' health and reduce their risk of overweight, obesity, and other related chronic diseases.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
806	Youth Development
724	Healthy Lifestyle

Outcome #17**1. Outcome Measures**

Family/individual participation in community events that increase physical activity.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
724	Healthy Lifestyle
806	Youth Development
703	Nutrition Education and Behavior

Outcome #18**1. Outcome Measures**

Identify barriers and enhancements to improve community diet quality and physical activity.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
724	Healthy Lifestyle
806	Youth Development
703	Nutrition Education and Behavior

Outcome #19**1. Outcome Measures**

Increased community activities/facilities that encourage physical activity.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
703	Nutrition Education and Behavior
806	Youth Development
724	Healthy Lifestyle

Outcome #20**1. Outcome Measures**

Improved behavior changes based on MyPyramid and the Dietary Guidelines.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results

Ninety-nine percent (99%) of teachers (3,329 reporting) indicated that they observed one or more behavior changes among their classroom students as a result of this program. In addition, forty-nine percent (49%) of the teachers reported that they themselves had made positive behavior changes. The primary goal of these programs is behavior change among the children to help ensure life-long benefits to nutrition and health, however, the additional changes seen among the classroom teachers also ensures proper behavior modeling and additional health benefits.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
724	Healthy Lifestyle
703	Nutrition Education and Behavior

Outcome #21**1. Outcome Measures**

Increased participation of individual/family in games and play that involve physical activity.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development
724	Healthy Lifestyle
703	Nutrition Education and Behavior

Outcome #22**1. Outcome Measures**

Reduction in time spent in sedentary activities.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
724	Healthy Lifestyle
806	Youth Development
703	Nutrition Education and Behavior

Outcome #23**1. Outcome Measures**

Development of a written plan to address challenges and barriers to dietary quality and physical activity by community agencies and groups.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research indicates increased rates of obesity, type 2 diabetes, decreased physical activity, and low consumption of fruits, vegetables and whole grains among both adults and youth. This is a state and national concern due to the economic burden of obesity and the health consequences of chronic disease such as diabetes. Extension programs must provide adults and youth with the knowledge and skills needed to promote healthful eating and develop a lifelong interest in physical activity.

What has been done

MU Extension provides nutrition, health, and physical activity education for adults and youth. These programs provide basic food, nutrition and healthy lifestyle information that promote healthy food choices, physical activity and chronic disease prevention and management.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
703	Nutrition Education and Behavior
806	Youth Development
724	Healthy Lifestyle

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Other (Participant self responsibility)

Brief Explanation

Often our evaluation in more established programs has moved beyond increasing awareness to evaluation of behavior change. This has not been corrected on our Plan of Work and will be readdressed upon resubmission.

V(I). Planned Program (Evaluation Studies and Data Collection)**1. Evaluation Studies Planned**

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- During (during program)
- Time series (multiple points before and after program)
- Case Study
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Other (Anecdotal success stories)

Evaluation Results

Key Items of Evaluation

The MU Food Stamp Nutrition Program provides programming to over seventy percent (70%) of the school districts throughout the state of Missouri. Ninety-nine percent (99%) of 3,329 teachers indicated that their students made one or more behavior changes after participating in this program. With an average class size of twenty-five (25) students, that is approximately 83,225 students who made positive behavior changes as a result of receiving an average of six lessons. The primary goal of these programs is behavior change among the children to help ensure life-long benefits to nutrition and health, however, the additional changes seen among the classroom teachers also ensures proper behavior modeling and additional health benefits.

Program #27**V(A). Planned Program (Summary)****1. Name of the Planned Program**

Facilitating Community Decision Making for Youth and Adults

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
608	Community Resource Planning and Development	25%			
609	Economic Theory and Methods	10%			
610	Domestic Policy Analysis	25%			
803	Sociological and Technological Change Affecting Individuals, Families and Communities	25%			
805	Community Institutions, Health, and Social Services	10%			
806	Youth Development	5%			
	Total	100%			

V(C). Planned Program (Inputs)**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	7.0	0.0	0.0	0.0
Actual	9.6	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
698044	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

Form planning committees/advisory panels, facilitate participatory visioning and planning workshops, moderate local issues forums, train moderators and conveners for forums and issue framing, hold community meetings and conduct presentations, gather data and use decision-support tools to analyze alternatives for the community with citizens and decision makers, work with communities to address a specific need or issue. Also work with media; provide analysis, training and consultation for local and state government; work with local officials to provide classroom training for middle school students; facilitate project planning and local government field trips with middle schoolers; and conduct project fairs and other events to highlight middle school learning and civic engagement projects.

2. Brief description of the target audience

Targeted audience would be all social groups in the community, including low-income and minority, youth (age 12-14), adults, community leaders, local government and policy making groups, and state and local agencies. No limitation on gender, ethnic or religious diversity, lifestyle choice, etc.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	5000	36000	500	1200
2008	21335	9303	1804	645

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	4	5	9

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of partners.

Year	Target	Actual
2008	33	225

Output #2

Output Measure

- Number of volunteers who assisted.

Year	Target	Actual
2008	400	388

Output #3

Output Measure

- Number of communities/organizations using deliberative processes to dialogue or frame public issues.

Year	Target	Actual
2008	10	13

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Increased participation and diversity; % of participants reporting they feel they have an increased voice and opportunity to participate in the community.
2	Awareness of need to develop or update plan.
3	Awareness of need for increased participation and diversity.
4	Increased knowledge, understanding, and skills.
5	Number of communities reporting plan/project implementation.
6	Local officials take actions that increase citizen participation.
7	Increased civic engagement in deliberating public issues. Number of communities/organizations using deliberative processes at least twice per year to inform decision making processes.
8	Increased capacity to deal with future issues.
9	Change in community practice.
10	Improved community fiscal and economic performance.
11	Citizens of varying cultures increase their participation and engagement in local government and in the community.
12	Sustained capacity for informed local decision making.
13	Group or organizational sustainability.
14	Development or update of plan.
15	Increased partnerships and resources.
16	Evidence of community goal attainment.
17	% of citizens reporting increased volunteering/engagement in local government, civic organizations, schools, and informal arrangements (including citizens seek public office).

Outcome #1**1. Outcome Measures**

Increased participation and diversity; % of participants reporting they feel they have an increased voice and opportunity to participate in the community.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Local officials want to serve citizens and local citizens want to contribute to and improve their community. Participation is the foundation of democracy. Citizens who are encouraged to participate are more likely to contribute to the community both in actions and contributions.

What has been done

Programs encourage diversity of participation to reflect the make up of the community--not just racial and ethnic or gender diversity.

Results

No data have been collected this year.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
806	Youth Development
608	Community Resource Planning and Development

Outcome #2**1. Outcome Measures**

Awareness of need to develop or update plan.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	20

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Local officials wish to implement what citizens want. Organizations want to improve services to clientele. Citizens want input into the local community or into an organization of which they are a member or are clientele. Awareness needs to exist before action is taken. Funding organizations require a proposal show relation to a plan. Planning is important for actions to happen in the needed sequence in order for there to be a successful outcome.

What has been done

A variety of planning assistance has been offered--facilitation, technical assistance, and training about planning across the state. Planning awareness ranges from an organization setting its vision and strategic plan, to communities planning specific projects, community comprehensive plans, community formal planning and zoning and a community planning for both positive and negative economic events in the community. In conjunction with UMSL and the St. Louis Metro Section of the American Planning Association, we offered a 36-hour planning and zoning course.

Results

Representative are results from officials of 5 communities, 3 counties, 2 townships, and 1 metro area. The city of Berkley participated in strategic planning sessions that provided the basis of a work plan. Extension worked with the Planning and Zoning Board in Montgomery County to update their comprehensive plan. A coalition has been formed in Johnson County among University of Missouri Extension, Johnson County Economic Development Council, Pioneer Trails Regional Planning Commission and Missouri Association of County Government to provide support to the temporary planning and zoning commission. Other communities benefitting from an increased awareness of the need for planning were St. Louis Metro, Montserrat, Jackson Township and Simpson Township. Nearly half, 25 of the 56, of the participants in the planning and zoning course earned the Chancellor's Certificate in Planning and Zoning, completing at least 6 of the 12 modules.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
608	Community Resource Planning and Development
610	Domestic Policy Analysis

Outcome #3**1. Outcome Measures**

Awareness of need for increased participation and diversity.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	5

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Local officials want to serve the citizens well and local citizens want to contribute to and improve their community. Participation is the foundation of democracy. Citizens who are encouraged to participate are more likely to contribute to the community both in actions and contributions.

What has been done

Group facilitation services have been provided. Four organizations in the Springfield area were introduced to public issue forums and how to organize them. Extension has trained planning and zoning commission members in Johnson County in methods for conducting public outreach meetings.

Results

Four organizations and one county have demonstrated increased awareness of the need for increased participation and diversity.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development

Outcome #4

1. Outcome Measures

Increased knowledge, understanding, and skills.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Without increased knowledge and understanding citizens, leaders and communities will only continue to respond in old ways even though the environment and situation have changed. The ability to respond appropriately to change is enhanced. Youth who understand civic engagement are critical for community participation.

What has been done

Seminar on watershed management, information on incorporation implications, data on website and surveys implemented to provide information to local officials. We provided seminars on planning pros and cons, city and county planning laws, and information on what public officials may and may not do; and facilitated focus groups and public meetings. 28 sessions of CECH-Up (local government) were provided to middle school students via school-based, afterschool and/or school enrichment activities.

Results

Middle school CECH-Up: In Grundy County, students scored 7 of 12 on a pre-test and 8 of 12 on a post-test. In addition, 80% of students could identify elements of a good plan. Several students indicated they might consider public office and eight indicated the importance of working on community projects. Students could identify items supplied for their education, for both academic and non-academic materials, by the public sector. Students in Nodaway County were able to construct a simple public policy zoning schematic. Evaluations of the Nodaway County sessions indicated that students were able to use data to determine what city resources were marketed to the traveling public and they were able to recognize notable events in community history. Selected comments from Nodaway County students included 'The costs vs. benefits section was what we should use when we make real life decisions.' And, 'I didn't know so many people were involved in the tax process.'

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #5

1. Outcome Measures

Number of communities reporting plan/project implementation.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	5	18

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Local officials wish to implement what citizens want. Organizations want to improve services to clientele. Citizens want input into the community or an organization of which they are a member or clientele. Plans are important as guides for future activity. They serve very little purpose if they are merely written and do not serve as a guide for future community action.

What has been done

Training on planning and technical assistance on planning and implementation. MU Extension and Drury CCS (Center for Community Studies) have collaborated on and finished visioning projects for nine communities since the spring semester 2007. These communities include Lamar, Ozark, Greenfield, Warsaw, Highlandville, Webb City, Willard, Joplin and Brookfield.

Results

Examples of updated planning and implementation: Canton completed its long-range plan as well as the MO Community Assessment Planning Process; it has 16 improvement projects in various stages and has completed the first comprehensive plan revision since 1964. Louisiana received All Missouri Certified City certification under the Missouri Community Assessment and Planning Process. Herculaneum is implementing its comprehensive plan and updating the master plan at least yearly. Jefferson County Parks Department updated its plan, which was accepted by the Parks Board and County Commission.

Lamar and Webb City received DREAM Initiative designation during the 2008 selection cycle (www.dream.mo.gov). Both used the work of the collaboration as a keystone piece for their applications, including a copy of the document produced for each city. The economic impact for these two communities is projected to be \$4.6 million total based on the data released in August 2008 for the twenty (20) preceding DREAM communities. This investment in the form of technical and financial assistance from the state is projected to leverage private investment to create a total impact of nearly \$20 million including the state's portion.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development

Outcome #6

1. Outcome Measures

Local officials take actions that increase citizen participation.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	5

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Local officials want to serve the citizens well and local citizens want to contribute to and improve their community. Participation is the foundation of democracy. Citizens who are encouraged to participate are more likely to contribute to the community both in actions and contributions.

What has been done

The Vision to Action: Take Charge Too planning process has been used. Facilitation and technical assistance for comprehensive plans, community surveys, and town meetings have been provided. Candidate forums were held, taped and copies of dialogue distributed.

Results

Three communities and two counties have taken steps to increase citizen participation. Hannibal, New London, Palmyra, Lewis County and Pike County have participated in Vision to Action: Take Charge Too planning process. Local participation has resulted in increased support for a youth center, increased grant-writing and fund-raising skills.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
806	Youth Development

Outcome #7**1. Outcome Measures**

Increased civic engagement in deliberating public issues. Number of communities/organizations using deliberative processes at least twice per year to inform decision making processes.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

As public issues become more complex and impact a greater number of citizens, people need new ways to dialogue and engage in public discourse that builds the capacity of community members to work through public issues. Through public deliberation, people are provided new knowledge and skills to identify and frame public issues and to convene and facilitate local deliberative processes. The ability of the community to discuss difficult issues allows more voices to be heard and allows communities to work through issues.

What has been done

26 public issues forums were held around the state. A workshop was held to introduce the new 'health options' focus dialogue materials; planning was initiated for the National Issues Forums on Health Care in cooperation with the Presidential libraries for fy09.

Results

Nine public deliberation forums were conducted by the Northeast Missouri (NEMO) Workforce Investment Board and GAMM, Inc. to strengthen and capture the vision, talents and passion of youth. One participant said, 'We are now able to pose a better set of questions to our community leaders.' Another participant committed to getting more involved in making a better future for youth.

As a result of a community forum on the 'Troubled American Family' conducted over eight years ago, planning commenced and a domestic violence shelter was recently established. One of the first women who sought shelter now serves as director.

Citizens in the city of Republic receive yearly notices about fireworks regulations as a result of a public forum held on banning fireworks.

A newly-formed planning and zoning committee in Johnson County participated in a public forum on land-use as part of an educational process on both planning and zoning issues and the role of deliberation in forming public policy. Due to this forum, the P&Z committee reported decreased attrition in members and a more cohesive process for developing an ordinance, which will appear on the April 2009 ballot.

4. Associated Knowledge Areas

KA Code	Knowledge Area
610	Domestic Policy Analysis
803	Sociological and Technological Change Affecting Individuals, Families and Communities
608	Community Resource Planning and Development
805	Community Institutions, Health, and Social Services

Outcome #8

1. Outcome Measures

Increased capacity to deal with future issues.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Increased capacity of local officials can result in a more effectively managed community with the ability to deal with issues as they arise. It is also likely to result in a more harmonious community. Increased capacity means that officials have the ability to learn and then to apply and update that learning in new situations.

What has been done

We provided research about CAFOs to 5 Northwest Missouri counties, comprehensive planning and planning for housing, and developed poll worker training materials, and partnered in training delivery.

OSEDA updated the school accreditation program in Missouri.

We collaborated with Drury College to conduct visioning projects for nine communities.

Results

For the second year, OSEDA gathered and reported information on over 5,000 first year Missouri teachers' perception of their preparation. OSEDA increased capacity of communities to deal with future issues through the 2008 Missouri Senior Report, which identified trends, and is a resource to inform policy makers, service providers, and families in planning for the impact of an increasingly older population.

Lamar and Webb City received DREAM Initiative designation during the 2008 selection cycle (www.dream.mo.gov). Both used the work of the collaboration as a keystone piece for their applications, including a copy of the document produced for each city. The economic impact for these two communities is projected to be \$4.6 million total based on the data released in August 2008 for the twenty (20) preceding DREAM communities. This investment in the form of technical and financial assistance from the state is projected to leverage private investment to create a total impact of nearly \$20 million including the state's portion.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
805	Community Institutions, Health, and Social Services

Outcome #9

1. Outcome Measures

Change in community practice.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	7

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Local officials and citizens are concerned. As the world changes, how communities interact and implement must change to be effective in addressing the new context.

What has been done

Technical assistance for planning was provided, and training materials were developed.

Vision to Action: Take Charge Too was used to assist communities in planning and also training provided to others in conducting planning. We worked with communities in the Community Betterment assessment process. Grant writing assistance was provided. Training materials were developed for poll workers.

Results

Five communities showed changes in practices as a result of Missouri Community Betterment. MCB is facilitated across the state by Extension Specialists. Communities impacted include Higbee, Moberly, Salisbury, Louisiana, and Palmyra. The president of the Louisiana Historical Museum Board said, 'As the downtown improves you begin to see residents working on their homes. Everybody seems to spiff up a little because of the improvements made to downtown. Right now, over \$3 million in three years has been put into downtown restoration.'

Herculaneum and Hillsboro continue to attract resources and implement their comprehensive plans. Herculaneum has leveraged over \$8,125,000 since completing its plan in 2006.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development

Outcome #10

1. Outcome Measures

Improved community fiscal and economic performance.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Local officials and citizens care. Economic performance includes jobs and income for citizens. Fiscal performance includes the relationships between tax bases, tax revenues, demand for public services and costs of public services. The fiscal capacity is that ideally the community can meet the demands of the majority of its citizens with a 'reasonable' level of taxes.

What has been done

Mediation between county and a non-profit organization. Presentations on taxes and factors affecting sales and property tax revenues; options for economic development financing and basics of state and local tax structure and burden. Analysis of impacts of conservation projects and agriculture, economic and water quality impacts of agricultural, recreational activities and bio power. Models to determine economically efficient biofuels.

Results

In FY2008 OSEDA leveraged over \$1.4 million of external funding in the areas of demographics, transportation, education, health and economic development. As a result of University Extension's commitment of support for collaborative regional economic development, a partnership between OSEDA and the Missouri Department of Economic Development was established. This partnership has lead to the development of a new prototype for the integration and analysis of detailed economic data that communities have requested:

<http://apps.oseda.missouri.edu/meric/Industry.py> An additional result of the partnership has been the award of \$500,000 Economic Development Administration planning grant to Missouri to overcome economic hardships in the Mississippi River floodplains of Northeastern Missouri expected to yield over \$10 million dollars in public works projects and \$20 million in local economic development impacts.

Citizens in Sunrise Beach attribute the work of Extension in planning and zoning with saving the town \$100,000. Clay County requested updates on tax revenue projections for use in their annual budget process.

4. Associated Knowledge Areas

KA Code	Knowledge Area
610	Domestic Policy Analysis
608	Community Resource Planning and Development
803	Sociological and Technological Change Affecting Individuals, Families and Communities
805	Community Institutions, Health, and Social Services

Outcome #11

1. Outcome Measures

Citizens of varying cultures increase their participation and engagement in local government and in the community.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Local officials want to serve citizens and local citizens want to contribute to and improve their community. Participation is the foundation of democracy. Citizens who are encouraged to participate are more likely to contribute to the community both in actions and contributions.

What has been done

Technical assistance has been provided to local boards about participation techniques. Group facilitation services have been provided. Programs encourage diversity of participation to reflect the make up of the community--not just racial and ethnic or gender diversity.

Columbia Social Service Program Training and Evaluation project with the Truman School of Public Affairs increased collaboration among local government programs. In FY08, evaluation projects for over 20 community-based agencies were completed.

Results

As a result of Missouri Senior Report the Missouri AARP has become more active and more engaged in advocacy for seniors quality of life measures. For example, based on 2008 Senior Report presentations, the Missouri AARP State Director organized a series of meetings with members. The members arranged for large state maps reproducing population trends and then hand delivered copies of the maps and Senior Report to over 80 members of the Missouri General Assembly. The report received awards from the U.S. Office on Aging and the Center for Disease Control and has now been adopted by the state as an on-going annual program. Results of Missouri Senior Report web site: <http://missouriseniorreport.org>.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
610	Domestic Policy Analysis
608	Community Resource Planning and Development
805	Community Institutions, Health, and Social Services

Outcome #12

1. Outcome Measures

Sustained capacity for informed local decision making.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

As public issues become more complex and impact a greater number of citizens, people need new ways to dialogue and engage in public discourse that builds the capacity of community members to work through public issues. Through public deliberation, people are provided new knowledge and skills to identify and frame public issues and to convene and facilitate local deliberative processes. The ability of the community to discuss difficult issues allows more voices to be heard and allows communities to work through issues.

What has been done

Public issues forums were held around the state. Surveys were conducted at 9 forums to get feedback and ideas from participants. Also provided were a deliberative process workshop, technical assistance to planning and zoning commissions, and group facilitation services. Columbia Social Service Program Training and Evaluation project with the Truman School evaluated projects for over 20 community-based agencies. Extension joined the national Community Issues Management collaborative and launched a pilot to improve engagement in decision making in its East Central region.

Results

Results from 16 deliberative forums on workforce development compiled in a document from the Southern Growth Policy Board. Results from 9 forums held in Northeast Missouri are being used to capture the talents of youth in the area.

In Johnson County local citizens with little knowledge of land use planning found themselves appointed to a planning and zoning committee. Local extension faculty held a forum which focused on land use issues both to inform the committee about land use and to illustrate how dialogue and deliberation can be used to make difficult choices when there is no one 'right' answer. In response to a question about what he had learned about the deliberative dialogue process from that forum, one farmer said: 'That you're going to have to work together and you're going to have to somehow come up with some common ground...what's going to make everybody happy, (and their) goal is to get it to pass. I'm not sure that we can get there, but I think that if we follow what [was] said in that meeting that we can probably come up with something to vote on.'

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
610	Domestic Policy Analysis

Outcome #13

1. Outcome Measures

Group or organizational sustainability.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Increased capacity of local officials can result in a more effectively managed community with the ability to deal with issues as they arise. It is also likely to result in a more harmonious community. Increased capacity means that officials have the ability to learn and then to apply and update that learning in new situations.

What has been done

We updated poll worker training materials, and partnered in training delivery. OSEDA provided social and economic information, conducted program evaluation of the enhancing Missouri's Instructional Networked Teaching Strategies program, and provided policy support and evaluation services to school districts (<http://www.oseda.missouri.edu/projects>).

Results

OSEDA websites supported the download of over 6.5 million pages of web information from more than 400,000 unique users. OSEDA built one of the nation's first comparative analysis applications using the Census Bureau's new American Community Survey. The evaluation results of eMINTS, showing improved test scores and improved attitude of teachers and learners supported the continued statewide expansion of the program as well as garnering local school board support.

Through training on planning and zoning for the Mid-Missouri area, capacity of local planners and agencies were strengthened.

Nationally, Project Vote highlighted Missouri's poll worker training as a model program. Missouri elections ran smoothly as a result of poll worker training.

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services
803	Sociological and Technological Change Affecting Individuals, Families and Communities
608	Community Resource Planning and Development
610	Domestic Policy Analysis

Outcome #14**1. Outcome Measures**

Development or update of plan.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	14

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Local officials wish to implement what citizens want. Organizations want to improve services to clientele. Citizens want input into the community or an organization of which they are a member or clientele. Funding organizations require a proposal to show relation to a plan. For implementation a plan shows the needed sequence in order for there to be a successful outcome. Plans are important as guides for future activity.

What has been done

We provided technical assistance for planning, including facilitation, and survey design. Participatory community and organizational planning have been provided in a number of communities. We partnered with Drury College to provide visioning and planning with 9 communities.

Results

Extension worked with Sunrise Beach throughout the year to educate the public about planning and zoning, facilitate meetings and focus groups, assist in a community survey, and train board members. In Sunrise Beach, the plan was written and approved in September 2008. Additionally, the community is in the process of applying for a grant from USDA-RD to assist in defraying the cost of a new tornado siren. Herculaneum and Hillsboro continued implementation of their comprehensive plans. Herculaneum reports having leveraged over \$8,125,000 since 2006 for community projects.

Lamar and Webb City received DREAM Initiative designation during the 2008 selection cycle (www.dream.mo.gov). Both used the work of the collaboration as a keystone piece for their applications, including a copy of the document produced for each city. The economic impact for these two communities is projected to be \$4.6 million total based on the data released in August 2008 for the twenty (20) preceding DREAM communities. This investment in the form of technical and financial assistance from the state is projected to leverage private investment to create a total impact of nearly \$20 million including the state's portion.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development

Outcome #15

1. Outcome Measures

Increased partnerships and resources.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	15

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Communities wish to be able to improve what they offer their citizens. Organizations want to increase their outreach to clientele. Partnerships offer additional knowledge and personnel to achieve ends and expand networks. Resources are needed to implement plans and these can come from within the community or from outside.

What has been done

We assisted and in some cases conducted the Missouri Community Betterment Assessment. Vision to Action: Take Charge Too was used to facilitate planning (and training provided on how to use this), and programs on downtown revitalization and how to write grants were conducted. Assistance and training was provided in local data gathering.

Results

Canton received about \$1.5 million total in grants; Louisiana secured \$250,000-\$300,000 in grants to redo part of its streets, infrastructure and street lights. Participants in the Workforce Development issue forums in Northeast Missouri reported that the forum led to new networks. In Pilot Grove, Extension has been involved in NAP grants, local, regional and national grants totaling \$500,000. Additionally, the Governor's Dream initiative grant totaled over \$1 million.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development

Outcome #16

1. Outcome Measures

Evidence of community goal attainment.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Citizens and local officials want their communities to be able to achieve their goals.

What has been done

Information, training, community facilitation, planning assistance (including Vision to Action: Take Charge Too) and grant writing assistance was provided.

Results

Pilot Grove's Community vision is a progressive one which includes growth driven by community leaders and entrepreneurs. A survey was conducted by University of Missouri Extension. Many improvements to the community occurred following the survey, including a low rental senior housing complex, a community building, a nursing home and major improvements to the public school. The community vision included improving the town's overall appearance and providing more accommodations and services to those using a bicycling trail. Southwest Missouri established a domestic violence shelter.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development

Outcome #17**1. Outcome Measures**

% of citizens reporting increased volunteering/engagement in local government, civic organizations, schools, and informal arrangements (including citizens seek public office).

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Volunteers are an important part of any community and of many organizations. Without volunteers public services would be more expensive or would not be available at the same level.

What has been done

Technical assistance on comprehensive plan, community surveys, and facilitating meetings. For example, Extension worked with commission members and volunteers in Johnson County to develop, print and distribute information pieces regarding the proposed planning and zoning ordinances and the outreach meetings being held to gather input. Significant engagement was fostered in the yearlong work with Sunrise Beach to develop its plan.

Results

Examples include Herculaneum where citizens can speak views without rancor. In the words of one Herculaneum citizen, 'We have an opportunity to do great things now in Herculaneum, because we have a plan and a vision for the future, instead of just anguish, pain and despair.'

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

Community decision making outcomes were limited by several external factors. Appropriations changes reduced field faculty and thus the number of communities worked with and the time available to build local partnerships and reach diverse stakeholder groups; ability to assist communities with identifying public issues and framing them for public deliberation. This also meant reduction in capacity to educate communities about the public deliberation process and train community members to moderate the forums resulting in communities not having experience with the process or choosing to budget for other programs. Competing programmatic challenges have increased as there are fewer people and those who remain take on additional work. Population changes impacted public forums because new immigrants may not have language skills or may feel intimidated by established local populations and therefore unwilling to speak publicly about their concerns. Competing public priorities force citizens to prioritize which public issues they will engage. Citizens discouraged by usual methods of public engagement on difficult issues, which result in polarizing on issues and some public discussion breaking down into shouting matches, are reluctant to engage in another process.

V(I). Planned Program (Evaluation Studies and Data Collection)**1. Evaluation Studies Planned**

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- During (during program)
- Case Study

Evaluation Results

The following results were used to update poll worker training in 2008: After the general election in fall of 2006, evaluations distributed to a sample of poll workers in all counties regarding the effectiveness of the new modules for poll worker training developed for use by county elections officials in the election received the following ratings (scale of 1 to 4—highest). Providing information about the Help America Vote Act (HAVA) received a mean rating of 3.22; explaining accessible voting machines, 3.51; and dealing with difficult voters, 3.48.

The Kettering Foundation funded a recent evaluation survey conducted by Sandy Hodge and Susan Tharp to determine the impact of convener/moderator training since the program's inception in 1998. One of the impacts reported was the development of networks as a result of convening community forums around specific issues. Many respondents wrote about non-formal networks being developed. These non-formal networks connected co-workers, connected organizations, and connected communities. Those that wrote about being more connected with their co-workers appreciated knowing who had similar training. Others wrote about non-formal networks being formed with other organizations, indicating that when organizations work with the same clientele, the training laid the framework so that future programming could be developed as a joint effort. One example given was related to assisting new immigrants. People in communities gained new connections. After a forum around the issue of death and dying, doctors and nursing homes developed a new connection. Other issues have prompted the formation of study circles.

- Quotes from participants who received training in moderating forums:

quot;Immediately following both days of the workshops, we found ourselves discussing forums we would like to put on ourselves, and eventually, teaching our corps on how to facilitate and moderate productive forums."

quot;"I'll retool how I conduct discussions and/or deliberations. The possibilities are endless."

quot;"One thing I plan to do as a result of this session is to share what I learned with others, and set up a forum for local issues. Maybe even talk the Greene County Commission into having you do a series of forums on up coming issues. It was a good training session."

In Willard, the city administrator sees a possible use for deliberation this spring. "I'm going to suggest that the city council's work sessions be restructured to more closely resemble a forum than the traditional work session."

From a participant in the healthcare field: "One thing I plan to do as a result of this session is look for a way to incorporate the public deliberation forums into our racial and ethnic health disparities work."

Six MU faculty are using deliberative dialogue methods in their college classrooms as a result of training conducted as part of Ford Foundation funding. The results of the 11 forums held in Missouri are included in the Southern Growth Policies Board's *Report on the Future of the South--Workforce Development*.

Key Items of Evaluation

The evaluation of the eMINTS (enhancing Missouri's instructional networked teaching strategies) program was both formative and summative. Formative evaluation validated that the goals of the program were being achieved and identified areas of strengths and weaknesses and where modifications were warranted. The summative evaluation addresses key performance indicators among students, teachers, parents, and the school. Analysis of student achievement outcomes included a comparable set of non-project participants. The evaluation used a mixed methods approach using surveys, MAP (state standardized test) scores, classroom observations, and focus groups.

The First Year Teacher Survey used descriptive statistics including statewide frequency reports, institution specific frequency reports and selected statewide cross-tabulations.

This year, *Round Robin Interaction* is being used for short-term evaluation of public deliberation. Participants will detail what skills they intend to practice and how they applied the principles in their own situation. Evaluation of longer-term impact of public deliberation is under development.

Evaluation protocols and measure continue to be developed for other decision support programming and for community planning programs.

Program #28

V(A). Planned Program (Summary)

1. Name of the Planned Program

Ensuring Safe Communities

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
805	Community Institutions, Health, and Social Services	95%			
806	Youth Development	5%			
Total		100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	2.0	0.0	0.0	0.0
Actual	3.2	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
232682	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Establish COAD (Community Organizations Active in Disasters). Provide disaster educational materials & presentations to communities and organizations. Build partnerships with local, state, federal agencies and organizations. Consult with local emergency planning committees and/or citizen councils. Represent Extension at meetings of federal, state and local emergency management organizations after disasters. Assist local entities in identification of funding sources for community emergency management and homeland security, eg., USDA-RD, fire grants, etc. Provide disaster preparedness and mitigation leadership for Extension itself. Coordinate and participate in Extension disaster activities.

2. Brief description of the target audience

Targeted audience is all social groups in the community, including low-income and minority, Spanish-speaking, community organizations, local government, home builders, agencies that assist in disaster, businesses and farmers. No limitation on gender, ethnic or religious diversity, lifestyle choice, etc.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	3000	22000	550	1500
2008	1786	1967	1151	199

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of communities assisted with training and facilitation for disaster preparedness.

Year	Target	Actual
2008	45	50

Output #2

Output Measure

- Number of partners.

Year	Target	Actual
2008	100	146

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Citizens learn about hazards & risks in Missouri.
2	Communities, local businesses and citizens learn preparedness and mitigation strategies to reduce impacts of disasters.
3	Builders learn about incorporating safe rooms into home construction.
4	Communities & schools learn about school disaster mitigation, preparedness and exercises.
5	Communities adopt disaster mitigation plans and principles.
6	Community Organizations Active in Disaster (COADs) created and function to meet citizen needs.
7	Community and businesses improve hazard mitigation programs and disaster plans.
8	Practices adopted such as disaster plans and kits developed and safe rooms incorporated into building practices.
9	Communities, businesses, schools and homes are supportive of local emergency management.
10	Communities, businesses, schools and homes become more disaster resilient.
11	Communities, businesses, schools and citizens are more prepared for disasters.
12	Communities, businesses, schools and citizens recover quickly and with less cost.
13	Adoption of practices and plans, creation of COADs, effectiveness of COADs in disaster.

Outcome #1**1. Outcome Measures**

Citizens learn about hazards & risks in Missouri.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missourians must be prepared for the possibility of a multitude of severe weather events in addition to terrorist or seismic disasters.

What has been done

50 classes in preparedness were conducted by regional faculty. County offices distributed information. Information was provided at county fairs and other local events. Media materials for TV, web, and radio were developed and distributed. Hazard awareness and disaster preparedness information provided to a vast and diverse audience. Weather awareness campaigns developed and delivered. Donations for disaster kits collected and provided to participants of rural 4-H disaster preparedness workshops.

Results

Requests for programming continue to grow every year and the use of the mobile safe room exhibit remains strong. The Community Emergency Management Program provided direct support to communities and the state as they planned for, addressed and recovered from ice, hail, floods, and tornadoes. Residents, businesses, and communities have accessed resources, made decisions, and started the process of recovery as a result of information packets and assistance with 24 community coalitions for long term recovery (COADs). Regional faculty assisted in the conducted 134 prevention and education programs apart from disaster assistance. Unique web page hits for the Community Emergency Management information at MU Extension included the following:

3,668 Home page <http://extension.missouri.edu/cemp/>

18,405 Cough page, no longer posted

5,767 Floods <http://extension.missouri.edu/cemp/flood.html>

2,628 Storms <http://extension.missouri.edu/cemp/storms.html>

1,580 Preparedness <http://extension.missouri.edu/cemp/preparedness.html>

914 Disaster recovery <http://extension.missouri.edu/cemp/recovery.html>

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

Outcome #2**1. Outcome Measures**

Communities, local businesses and citizens learn preparedness and mitigation strategies to reduce impacts of disasters.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missourians must be prepared for the possibility of a multitude of severe weather events in addition to terrorist or seismic disasters.

What has been done

Classes in preparedness were conducted by regional faculty. County offices distributed disaster information. Information was provided at county fairs and other local events. Media materials for TV, web, and radio were developed and distributed. Hazard awareness and disaster preparedness information to a vast and diverse audience. Campus disaster awareness has been promoted. We have participated in local and state preparedness exercises across the state. Many presentations focused on day cares, youth groups, and agribusiness.

Results

Requests for programming and the use of the mobile safe room exhibit are increasing. Participants in the 4-H Winter Weather Preparedness workshops reported Increased winter weather knowledge and understanding of weather warning systems, being prepared for any type of storm with disaster kit, and learning risk mitigation strategies for home and property.

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

Outcome #3**1. Outcome Measures**

Builders learn about incorporating safe rooms into home construction.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research has shown that safe rooms and/or the knowledge of 'safe places' to shelter can have dramatic results in protecting citizens during severe weather events that strike their communities or homes.

What has been done

MU Extension maintains and uses the mobile FEMA safe room display with information about construction, pamphlets and brochures about severe weather and a CD with safe room plans and other materials about severe weather and disaster preparedness. The display traveled to fairs and other events. Specialists developed and aired safe room stories through numerous Missouri TV and radio stations reaching thousands of homes.

Results

The CEMP received over a dozen requests for safe room plans from prefabricated safe room vendors. Over 20 call-in requests for our Storm Shelter Packet were made within 24 hours of the TV broadcast.

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

Outcome #4**1. Outcome Measures**

Communities & schools learn about school disaster mitigation, preparedness and exercises.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri communities and schools must be prepared for the possibility of a multitude of weather events in addition to terrorist or seismic disasters.

What has been done

50 classes in preparedness were conducted by regional faculty. Some targeted preschool operators. County offices distributed information. Information was provided at county fairs and other local events. Media materials for TV, web, and radio were developed and distributed. Hazard awareness and disaster preparedness information to a vast and diverse audience. A mass care exercise was developed by MU Extension and delivered to a 15 county region. Specialists work on school safety plans and deliver preparedness presentations to 4-H students.

Results

Preschool operators that have been through training have developed plans which were shared with parents. Kits were made and placed in the daycare building. Plans kits and disaster preparedness information sent to homes via students.

MU Extension developed and conducted a 15 county regional exercise testing mass care plans within counties and the region.

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services
806	Youth Development

Outcome #5**1. Outcome Measures**

Communities adopt disaster mitigation plans and principles.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri communities, local extension offices and other local entities need to be prepared for disasters. We are the 8th most disaster-prone state.

What has been done

Training and guidance was provided to county extension offices for updating their plans. Training sessions were provided to daycares. Work was done with northern Missouri communities to plan for warning systems.

Results

We have been invited by more communities to make presentations and assist in recovery. As a result of programming, Extension Specialists are being called upon by community organizations for information, leadership and presentations about emergency management activities.

As a result of the Leadership Northwest Missouri graduates' work and community emergency management programs over the past five years, 24 North Missouri communities have committed \$110,647, obtained an additional \$173,583 in grants, and installed emergency warning sirens since 2003. These sirens are estimated to have saved \$856,785 as well as untold lives.

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

Outcome #6**1. Outcome Measures**

Community Organizations Active in Disaster (COADs) created and function to meet citizen needs.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	5	24

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Disasters are unpredictable and external assistance does not meet all needs that arise. COADs include any agency that has a role to play in any phase of emergency management. COADs provide the platform for launching Long Term Recovery Committees (LTRC) groups in their communities in the event of a disaster event. In addition, established COADs function to assist in mitigation, preparedness, response and recovery--contributing to community resiliency to disaster.

What has been done

COADS and LTRCs were formed utilizing the state and local networks provided by MU Extension. These COADs may be formed after a disaster event but Extension is working on establishing and nurturing the COAD framework in many counties before a disaster event. We facilitated the meetings and provided organizational development assistance and disaster recovery and planning training and information.

Results

The Community Emergency Management Program provided direct support to communities and the state as they planned for, addressed and recovered from ice, hail, floods, and tornadoes. Residents, businesses, and communities have accessed resources, made decisions, and started the process of recovery as a result of information packets and assistance with 24 community coalitions for long term recovery (COADs). Regional faculty assisted in the conducted 134 prevention and education programs apart from disaster assistance.

The Monroe County Unmet Needs committee passed and approved a motion to assist the Middle Grove community in the purchase of an early storm warning siren system. The effort was a partnership effort between USDA Rural Development, the Madison-West Monroe Rural Fire Protection District, Alliant Bank, the Unmet Needs committee, and the citizens of the Middle Grove community. The siren cost for purchase and installation to be activated by the 911 dispatcher in Monroe County is \$6,900.

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

Outcome #7

1. Outcome Measures

Community and businesses improve hazard mitigation programs and disaster plans.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Missouri communities, businesses, government agencies, and organizations must be prepared for the possibility of a multitude of severe weather events in addition to terrorist or seismic disasters. Research has shown that preparedness and planning can have dramatic results in protecting businesses, jobs and citizens during severe weather events that strike their communities or homes.

What has been done

COADs have been formed to assist in preparedness. Extension Specialists have been advocates and participants in Community Emergency Response Team training and have conducted 50 workshops. TV and radio along with exhibits and displays have been used extensively.

Results

The Community Emergency Management Program provided direct support to communities and the state as they planned for, addressed and recovered from ice, hail, floods, and tornadoes. Residents, businesses, and communities have accessed resources, made decisions, and started the process of recovery as a result of information packets and assistance with 24 community coalitions for long term recovery (COADs). Regional faculty assisted in the conducted 134 prevention and education programs apart from disaster assistance.

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

Outcome #8**1. Outcome Measures**

Practices adopted such as disaster plans and kits developed and safe rooms incorporated into building practices.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri communities, families, government agencies, organizations, and businesses must be prepared for the possibility of a multitude of weather events in addition to terrorist or seismic disasters. Research has shown that safe rooms and/or the knowledge of 'safe places' to shelter can have dramatic results in protecting citizens during severe weather events that strike their communities or homes.

What has been done

We maintain and use the mobile FEMA safe room display with information about construction, pamphlets and brochures about severe weather and a CD with safe room plans and other materials about severe weather and disaster preparedness. The display traveled to fairs and other events. Worked through private organizations as well as non-profit groups such as 4-H to provide winter preparedness information to youth. Secured donations to provide a basic individual disaster kit for children. This was an excellent way to reach parents. Many follow-ups with individual families and 4-H groups on family preparation in rural areas, what should be included in a family disaster kit, etc. A rural school successfully engaged in winter disaster preparation as well as spring severe weather preparation.

Results

Over 20 call-in requests for our Storm Shelter Packet were made within 24 hours of the TV broadcast. County extension offices have developed plans and have been equipped with disaster kits, NOAA Weather Radios and office disaster plans and checklists. Survey data shows that Missouri Extension faculty involved in the CEMP have developed family and office plans and kits. The Community Emergency Management Program provided direct support to communities and the state as they planned for, addressed and recovered from ice, hail, floods, and tornadoes. Residents, businesses, and communities have accessed resources, made decisions, and started the process of recovery as a result of information packets and assistance with 24 community coalitions for long term recovery (COADs). Regional faculty assisted in the conducted 134 prevention and education programs apart from disaster assistance.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
805	Community Institutions, Health, and Social Services

Outcome #9**1. Outcome Measures**

Communities, businesses, schools and homes are supportive of local emergency management.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Missouri communities and businesses must be prepared for the possibility of a multitude of weather events in addition to terrorist or seismic disasters. The key to addressing current and potential disasters is to integrate multidisciplinary research and education into a coordinated response that includes collaboration with local, state and federal partners.

What has been done

We distributed information to communities and citizens as well as provided hazard awareness and disaster preparedness information to a vast and diverse audience. We secured donations to provide a basic individual disaster kit for children and to reach their parents. We partnered with SEMA to assist in meeting preparedness needs of citizens through local partnerships, facilitation of meetings. Workshops and training for preparedness and citizen emergency response have been conducted. We have strengthened the university's preparedness for disaster.

Results

Many follow-ups with individual families and 4-H groups on family preparation in rural areas. A rural school completed winter disaster and spring severe weather preparation. Our efforts are now being highlighted by National Geographic for Kids (food safety) and Rural Life Magazine (winter weather in rural areas, winter safety on the farm, food defense for fruit/vegetable growers) with quarterly news items to help safeguard rural residents, their property and any agricultural products they raise.

The agricultural component is actively being written into Dade County emergency plan, not just a template, but a plan custom fit to this particular county.

The Monroe County Unmet Needs committee passed and approved a motion to assist the Middle Grove community in the purchase of an early storm warning siren system. The effort was a partnership effort between USDA Rural Development, the Madison-West Monroe Rural Fire Protection District, Alliant Bank, the Unmet Needs committee, and the citizens of the Middle Grove community. The siren cost for purchase and installation to be activated by the 911 dispatcher in Monroe County is \$6,900.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
805	Community Institutions, Health, and Social Services

Outcome #10

1. Outcome Measures

Communities, businesses, schools and homes become more disaster resilient.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Missouri communities and businesses must be prepared for the possibility of a multitude of severe weather events in addition to terrorist or seismic disasters. The key to addressing current and potential disasters is to integrate multidisciplinary research and education into a coordinated response that includes collaboration with local, state and federal partners.

What has been done

We distributed information to communities and citizens as well as provided hazard awareness and disaster preparedness information to a vast and diverse audience. The agriculture preparedness program not only provided information for livestock and crop production, but also for the people who lived on those farms and surrounding rural areas. We created a well-rounded preparedness program that helped better prepare rural citizens, agriculture producers, property, and crops and livestock on that property.

Results

As a result of partnering with state agencies and a host of organizations for the past 20+ years, observations of community response and recovery to the 2008 spring flooding of the Mississippi River in Northeast Missouri by comparison to 1993 and 1995 indicated that persons and businesses heeded warnings seriously and evacuated. This saved lives and time and funds of emergency responders. Community shelters were quickly set up and offered assistance to those displaced. Emergency veterinary kits were distributed to all counties within SW Region D during this first year of the agriculture preparedness program. In addition, two portable corrals were purchased to use during animal health emergencies.

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

Outcome #11

1. Outcome Measures

Communities, businesses, schools and citizens are more prepared for disasters.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Missouri communities and businesses must be prepared for the possibility of a multitude of severe weather events in addition to terrorist or seismic disasters. The key to addressing current and potential disasters is to integrate multidisciplinary research and education into a coordinated mitigation, preparedness response and recovery that includes collaboration with local, state and federal partners.

What has been done

We distributed information to communities and citizens as well as provided hazard awareness and disaster preparedness information to a vast and diverse audience. We have begun partnering with SEMA to reach out to Faith-based organizations to enlist their support and make them better prepared with 11 regional trainings called Missouri Regional Mass Care Citizen Preparedness and Emergency Human Services Symposia.

Results

A rural school completed winter disaster and spring severe weather preparation. As a result of partnering with state agencies and a host of organizations for the past 20+ years, observations of community response and recovery to the 2008 spring flooding of the Mississippi River in Northeast Missouri by comparison to 1993 and 1995 indicated that persons and businesses heeded warnings seriously and evacuated. This saved lives and time and funds of emergency responders. Community shelters were quickly set up and offered assistance to those displaced.

Results from faith-based trainings to be available in 2009.

Preschools and day cares are developing plans and kits for themselves.

County extension offices have been equipped with disaster kits, NOAA Weather Radios and office disaster plans and checklists.

New groups with fruit and vegetable growers, small livestock producers, etc. want to know how to keep their crops and livestock safe. More and more producers - large and small -are recognizing that they are the first defense in protecting our food supply because they are raising it.

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

Outcome #12**1. Outcome Measures**

Communities, businesses, schools and citizens recover quickly and with less cost.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri has been and will likely continue to experience a number of disasters. Each is costly in dollars and can cost lives. Disaster preparedness can help mitigate cost and hasten recovery.

What has been done

We distributed information to communities and citizens as well as provided hazard awareness and disaster preparedness information and workshops to a vast and diverse audience. We partnered with SEMA to assist in meeting preparedness needs of citizens through local partnerships, facilitation of meetings. Workshops and training for preparedness and citizen emergency response have been conducted. We have strengthened the university's preparedness for disaster.

Results

As multiple weather disasters have struck Missouri, communities in general are responding more routinely with establishment of shelters and services. The State Emergency Management Agency regularly taps MU Extension to assist in training and organization and coordination of local organizations. The Community Emergency Management Program provided direct support to communities and the state as they planned for, addressed and recovered from ice, hail, floods, and tornadoes. Residents, businesses, and communities have accessed resources, made decisions, and started the process of recovery as a result of information packets and assistance with 24 community coalitions for long term recovery (COADs). Regional faculty assisted in the conducted 134 prevention and education programs apart from disaster assistance.

As a result of partnering with state agencies and a host of organizations for the past 20+ years, observations of community response and recovery to the 2008 spring flooding of the Mississippi River in Northeast Missouri by comparison to 1993 and 1995 indicated that persons and businesses heeded warnings seriously and evacuated. This saved lives and time and funds of emergency responders. Community shelters were quickly set up and offered assistance to those displaced.

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

Outcome #13

1. Outcome Measures

Adoption of practices and plans, creation of COADs, effectiveness of COADs in disaster.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Disasters are unpredictable and external assistance does not meet all needs that arise. COADs and LTRCs include any agency that has a role to play in any phase of emergency management. COADs provide the platform for launching unmet needs groups in their communities in the event of a disaster event. In addition, established COADs function to assist in mitigation, preparedness, response and recovery--contributing to community resiliency to disaster.

What has been done

COADs were formed utilizing the state and local networks provided by MU Extension. These COADs may be formed after a disaster event but Extension is working on establishing and nurturing the CAOD framework in many counties before a disaster event. We facilitated the meetings and provided organizational development assistance and disaster recovery and planning training and information.

Results

County extension offices' emergency preparedness plans have been adopted and used in all regions of the state.

COADs and LTRCs are meeting regularly and responding to the needs of disaster survivors. These groups have taken on the role of helping citizens and officials become more prepared for future disasters through planning and individual and community preparedness.

The Community Emergency Management Program provided direct support to communities and the state as they planned for, addressed and recovered from ice, hail, floods, and tornadoes. Residents, businesses, and communities have accessed resources, made decisions, and started the process of recovery as a result of information packets and assistance with 24 community coalitions for long term recovery (COADs). Regional faculty assisted in the conducted 134 prevention and education programs apart from disaster assistance.

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

State and local funding decreased. Natural disasters and other emergency situations are unpredictable. Severe hail, windstorms, tornadoes, ice, snow storms, flooding and drought resulted in eight (8) Presidential disaster declarations for the state of Missouri, on which MU Extension assisted during FY08:

- September 2007 Severe Storms and flooding – 7 counties
- December 2007 Severe Winter Storm - for all 114 Missouri Counties and the Independent City of St. Louis
- December 2007 Severe Winter Storm – 42 counties
- February 2008 Severe Storms, Tornadoes and flooding – 9 counties
- March 2008 Severe Winter Storms and Flooding – 18 counties
- March 2008 Severe Storms and Flooding – 75 counties
- May 2008 Severe Storms and Tornadoes – 3 counties
- June 2008 Severe Storms and Flooding- 66 counties

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- During (during program)
- Time series (multiple points before and after program)
- Case Study
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.

Evaluation Results

In the fall of 2007 a second internal evaluative inquiry was developed to determine the extent to which the CEMP has prepared faculty, employees and county offices for emergencies and disasters. The study was intended also to determine if any discernable individual and institutional behavior changes related to emergency management/preparedness could be attributed to the CEMP. There were four evaluative questions guiding the evaluation: (1) Has the CEMP made the University of Missouri Extension (faculty/employees/offices) more prepared for disaster? (2) Has the institution/organization aided in the process? (3) How has this effort affected/influenced programming at the individual level? (4) Has this effort affected MU Extension employees on a personal level (family, home, etc.)?

Several themes emerged and though there were varying degrees of opinions, most respondents agreed on major questions. The themes included communication, training, involvement, preparation, and support. In all areas those surveyed indicated that there were significant increases in every area across MU Extension as a whole. Most important was the regional offices were better prepared for potential disasters, they and their families were significantly more prepared and the programming created numerous opportunities to become more involved with multiple organizations at the local level. In summary, the CEMP is making a significant preparedness impact on employees and local offices within MU Extension and is meeting its goal of developing and delivering preparedness materials throughout the state.

Key Items of Evaluation

The purpose of the evaluation was to determine the efficacy of the program for a key audience, Extension itself. If the program cannot affect knowledge and behavior change internally and make itself more prepared for disaster then the program has little value outside of Extension amongst organizations, groups and citizens. This evaluation indicated clearly that CEMP has had a direct and measurable impact on extension faculty, staff and local offices.

Another evaluation is planned to determine the efficacy of the Faith-Based initiative conducted during the summer months of 2008. It is planned to determine the scope and impact of the programming. This evaluation will ask community organizations and citizens if and how programming has impacted their level of disaster preparedness or resiliency.

Program #29

V(A). Planned Program (Summary)

1. Name of the Planned Program

Community Leadership Development for Youth and Adults

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
803	Sociological and Technological Change Affecting Individuals, Families and Communities	50%			
806	Youth Development	50%			
Total		100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	3.0	0.0	0.0	0.0
Actual	4.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
290852	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Form planning committee; assist with organizational development, fund development, and tailoring content to local community need. Provide facilitation, training, workshops, retreat, field trips and exchanges with other communities, conduct planning with education class for use of learning.

2. Brief description of the target audience

Targeted audience is all social groups in the community, including low-income and minority, youth (age 14-18), adults. No limitation on gender, ethnic or religious diversity, lifestyle choice, etc. Also targeted among adults will be those who are currently serving in a leadership role in an agency, organization, neighborhood, club, community, business or aspire to serve.

V(E). Planned Program (Outputs)**1. Standard output measures****Target for the number of persons (contacts) reached through direct and indirect contact methods**

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	200	3000	150	1000
2008	2682	402	941	0

2. Number of Patent Applications Submitted (Standard Research Output)**Patent Applications Submitted**

Year	Target
Plan:	0
2008 :	0

Patents listed**3. Publications (Standard General Output Measure)****Number of Peer Reviewed Publications**

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs**Output Target****Output #1****Output Measure**

- Number of program participants (gender and ethnicity).

Year	Target	Actual
2008	200	396

Output #2**Output Measure**

- Number of programs held.

Year	Target	Actual
2008	25	37

Output #3**Output Measure**

- Number of volunteers who assisted.

Year	Target	Actual
2008	250	125

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Increased knowledge, understanding, and skills.
2	Increased density of leadership networks.
3	Increased engagement in leadership activities.
4	Increase in collective community action undertaken.
5	Sustained capacity for community leadership development: the number of programs which continue after at least 5 years.
6	% of participants reporting changes in changes in personal growth and self-efficacy; community commitment; shared future and purpose, community knowledge and civic engagement.

Outcome #1**1. Outcome Measures**

Increased knowledge, understanding, and skills.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Community leaders are the central force in effectively mobilizing people to address local issues. Frequently, community leaders wonder how to achieve the kind of success they dream about and recognize that they cannot be successful alone or without greater personal capabilities. Effective citizen leaders translate knowledge and commitment into hands-on action to engage in building community networks, make well-informed community decisions and find real solutions to real problems.

What has been done

Programs engaged local leaders and citizens in developing a program adapted to the community in urban and rural areas. Past participants helped plan and deliver the cohort programs. Several have formed nonprofit organizations to support their programs. Four Leadership RAP programs were offered in a Juvenile Justice Center. We partnered with community action agencies to deliver community leadership training for low-income persons.

Results

Results from surveys of Leadership Northwest Missouri participants for the past 5 years indicated: 72.2% have changed their approach to volunteer work or community service; 48.1% increased the number of volunteer hours given per month; 47.3% had increased participation in boards; 98.2% had promoted regional thinking. As a result of Leadership RAP, participants reported they were better able to resolve conflicts. 90.5% reported that learning was important to getting what they want in life. Less than 15% reported that they had been involved in a violent fight in the last 2 years. Following Leadership RAP, nearly 75% demonstrated an understanding of win-win, win-lose and lose-lose approaches to conflict resolution.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
806	Youth Development

Outcome #2**1. Outcome Measures**

Increased density of leadership networks.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Community leaders are the central force in effectively mobilizing people to address local issues. Frequently, community leaders wonder how to achieve the kind of success they dream about and recognize that they cannot be successful alone or without greater personal capabilities. Effective citizen leaders translate knowledge and commitment into hands-on action to engage in building community networks, make well-informed community decisions and find real solutions to real problems.

What has been done

Programs engaged local leaders and citizens in developing a program adapted to the community in urban and rural areas. Past participants helped plan and deliver the cohort programs. Several have formed nonprofit organizations to support their programs. Four Leadership RAP programs were offered in a Juvenile Justice Center. We partnered with community action agencies to deliver community leadership training for low-income persons.

Results

As a result of the Leadership Northwest Missouri graduates' work and community emergency management programs over the past five years, 24 North Missouri communities have committed \$110,647, obtained an additional \$173,583 in grants, and installed emergency warning sirens since 2003. These sirens are estimated to have saved \$856,785 as well as untold lives. Results from surveys of participants for the past 5 years indicated: 87.1% are more effective in their work environment; 98.9% have a greater sense of civic responsibility; 51.9% are more involved in their community; 48.2% remained as involved as before; 72.2% have changed their approach to volunteer work or community service; 48.1% increased the number of volunteer hours given per month; 47.3% had increased participation in boards; 98.2% had promoted regional thinking.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities

Outcome #3**1. Outcome Measures**

Increased engagement in leadership activities.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Community leaders are the central force in effectively mobilizing people to address local issues. Frequently, community leaders wonder how to achieve the kind of success they dream about and recognize that they cannot be successful alone or without greater personal capabilities. Effective citizen leaders translate knowledge and commitment into hands-on action to engage in building community networks, make well-informed community decisions and find real solutions to real problems.

What has been done

Programs engaged local leaders and citizens in developing a program adapted to the community in urban and rural areas. Past participants helped plan and deliver the cohort programs. Several have formed nonprofit organizations to support their programs. Four Leadership RAP programs were offered in a Juvenile Justice Center. We partnered with community action agencies to deliver community leadership training for low-income persons.

Results

In a one-year follow up survey, 54% of responding adult EXCEL participants scored greater than the mean on the civic engagement index. As a result of the Leadership Northwest Missouri graduates' work and community emergency management programs over the past five years, 24 North Missouri communities have committed \$110,647, obtained an additional \$173,583 in grants, and installed emergency warning sirens since 2003. These sirens are estimated to have saved \$856,785 as well as untold lives. Results from surveys of participants for the past 5 years indicated: 87.1% are more effective in their work environment; 98.9% have a greater sense of civic responsibility; 51.9% are more involved in their community; 48.2% remained as involved as before; 72.2% have changed their approach to volunteer work or community service; 48.1% increased the number of volunteer hours given per month; 47.3% had increased participation in boards; 98.2% had promoted regional thinking.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities

Outcome #4

1. Outcome Measures

Increase in collective community action undertaken.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Community leaders are the central force in effectively mobilizing people to address local issues. Frequently, community leaders wonder how to achieve the kind of success they dream about and recognize that they cannot be successful alone or without greater personal capabilities. Effective citizen leaders translate knowledge and commitment into hands-on action to engage in building community networks, make well-informed community decisions and find real solutions to real problems.

What has been done

Programs engaged local leaders and citizens in developing a program adapted to the community. Past Programs engaged local leaders and citizens in developing a program adapted to the community in urban and rural areas. Past participants helped plan and deliver the cohort programs. Several have formed nonprofit organizations to support their programs. Four Leadership RAP programs were offered in a Juvenile Justice Center. We partnered with community action agencies to deliver community leadership training for low-income persons.

Results

In a one-year follow up survey, 54% of responding adult EXCEL participants scored greater than the mean on the civic engagement index. As a result of the Leadership Northwest Missouri graduates' work and community emergency management programs over the past five years, 24 North Missouri communities have committed \$110,647, obtained an additional \$173,583 in grants, and installed emergency warning sirens since 2003. These sirens are estimated to have saved \$856,785 as well as untold lives. Results from surveys of participants for the past 5 years indicated: 87.1% are more effective in their work environment; 98.9% have a greater sense of civic responsibility; 51.9% are more involved in their community; 48.2% remained as involved as before; 72.2% have changed their approach to volunteer work or community service; 48.1% increased the number of volunteer hours given per month; 47.3% had increased participation in boards; 98.2% had promoted regional thinking.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities

Outcome #5

1. Outcome Measures

Sustained capacity for community leadership development: the number of programs which continue after at least 5 years.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	16	19

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Community leaders are the central force in effectively mobilizing people to address local issues. Frequently, community leaders wonder how to achieve the kind of success they dream about and recognize that they cannot be successful alone or without greater personal capabilities. Effective citizen leaders translate knowledge and commitment into hands-on action to engage in building community networks, make well-informed community decisions and find real solutions to real problems.

What has been done

Programs engaged local leaders and citizens in developing a program adapted to the community in urban and rural areas. Past participants helped plan and deliver the cohort programs. Several have formed nonprofit organizations to support their programs. Four Leadership RAP programs were offered in a Juvenile Justice Center. We partnered with community action agencies to deliver community leadership training for low-income persons.

Results

19 programs have been active for 5 years or more. One-third of Missouri's counties and communities - over 7,565 people - have participated in locally driven community leadership programs over the past 23 years. Programs included in this count were Step Up to Leadership, Leadership RAP, and Neighborhood Leadership Academy and Adult & Youth EXCEL programs.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
803	Sociological and Technological Change Affecting Individuals, Families and Communities

Outcome #6

1. Outcome Measures

% of participants reporting changes in changes in personal growth and self-efficacy; community commitment; shared future and purpose, community knowledge and civic engagement.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	72	64

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Community leaders are the central force in effectively mobilizing people to address local issues. Frequently, community leaders wonder how to achieve the kind of success they dream about and recognize that they cannot be successful alone or without greater personal capabilities. Effective citizen leaders translate knowledge and commitment into hands-on action to engage in building community networks, make well-informed community decisions and find real solutions to real problems.

What has been done

Programs engaged local leaders and citizens in developing a program adapted to the community in urban and rural areas. Past participants helped plan and deliver the cohort programs. Several have formed nonprofit organizations to support their programs. Three Leadership RAP programs were offered in a Juvenile Justice Center. We partnered with community action agencies to deliver community leadership training for low-income persons.

Results

In a one-year follow up survey, 54% of responding adult EXCEL participants scored greater than the mean on the civic engagement index. Results from surveys of Leadership Northwest Missouri participants for the past 5 years indicated: 87.1% are more effective in their work environment; 98.9% have a greater sense of civic responsibility; 51.9% are more involved in their community; 48.2% remained as involved as before; 72.2% have changed their approach to volunteer work or community service; 48.1% increased the number of volunteer hours given per month; 47.3% had increased participation in boards; 98.2% had promoted regional thinking. Four years following their release from the juvenile justice center, 48% fewer Leadership RAP participants had been referred to law enforcement agencies compared to nonparticipants.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
806	Youth Development

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

A number of concerns facing communities demand leadership related to community development. The contemporary arena in which community actions are pursued can seem overwhelmingly complex. For example, community organizations and political subdivisions such as cities, school districts, library boards and counties continually struggle to find qualified residents to serve as council, board and commission members.

The forces external to the community locality and structure that affect its status and its future are important to take into account in the process of formulating leadership programs. These forces include: the devolution of authority for action and service delivery to the community; the double bind created by trying to maintain quality with fewer resources; expectations for sharing power and responsibility; interdependence, diversity, collaboration, and communication; and displacement of the developmental paradigm with the globalization paradigm.

Less than the target of 72% was reached in follow-up EXCEL evaluation of 5 key areas because the data is from the benchmark study. Plans are to use these scores as the starting point for comparison of scores over time. CLD programs have participated in evaluation efforts on a voluntary basis producing a small number of cases in the benchmark data. In 2009, programs will be required to participate in an evaluation survey designed by Dr. Ken Pigg that is being used in a multi-state NRI funded project. An evaluation process is being centralized in the State CD Extension office for use with Regional staff. Administration will take place approximately 6 mos. to 1 yr. following the end of the educational program.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Retrospective (post program)
- During (during program)

Evaluation Results

Outcomes from EXCEL program: personal growth and self-efficacy community commitment, a shared future and purpose for the community, community knowledge, and civic engagement among participants. Increased knowledge of local, county and state resources, local history and decision-making process, local issues that affect the community, processes for getting things done in the community, and other factors related to the roles and responsibilities of community leaders, and changes in attitudes about the factors important in relationships between leaders and followers as well as individuals' assessments of their leadership capacity.

Percent of participants scoring greater than the mean on the following indices in follow up survey: 49% personal growth and self-efficacy, 53% community commitment, 53% shared future and purpose for the community, 63% community knowledge, and 54% civic engagement.

Plans are to use scores from benchmark data as the starting point for comparison of scores over time. In 2009, programs will be required to participate in an evaluation survey designed by Dr. Ken Pigg that is being used in a multi-state NRI funded project. An evaluation process is being centralized in the State CD Extension office for use with Regional staff. Administration will take place approximately 6 months to 1 year following the end of the educational program. An evaluation plan has been designed by a team of state and regional faculty that includes: a demographic questionnaire at the beginning of the program, a post/pre test (survey); individual session assessments, anticipated actions and actions taken assessment (NCR Recommendations), and creation of a process for focus groups for long-range evaluation efforts.

Key Items of Evaluation

An NRI research project is investigating the relationship between individual level outcomes of participation in community leadership education programs with community level outcomes which are intended as a result of the intervention.

In phase 1, findings indicate the participation in community-based leadership development education programs produced significant learning when compared to those in control counties where no programs were available. There were significantly larger gains in learning and attitude changes in all six of the indices being used to measure individual-level effects or impacts. Yet to be determined is the community effect of these programs (phase 2). In early 2008 an online survey was conducted to determine the effects of participation in community-based leadership development education programs in 6 states and 24 localities. Each locality was selected based on their relative score on a "viability index" created by summing the ratios of per capita income and population growth for the locality and the state as a whole. A balance was achieved by selecting half from the upper quartile and half from the lower quartile so long as other criteria were met such as the operation of a leadership development program in the location in the past five years. In addition, a balanced group of 12 control localities was selected where no leadership development program had been held to further demonstrate the effects of such programs.

The research methodology used relied upon previously developed instrumentation that had proven reliable in several applications (Pigg, 2000). Participants were asked to rate themselves on their knowledge and skills prior to the educational program and after this experience was complete. For the control locations the same approach was used except the framework was shifted to reflect a time frame, "five years ago" vs. "today." From this data, the pre-program scores were subtracted from the post-program scores and "impact" scores were computed. In addition, the individual indicators were organized into six indices, based on previous study, for summarizing the impacts experienced. Reliability coefficients were computed for each of these indices and all produced high reliability coefficients (.8 or above), meaning these are very reliable indices.

In the treatment counties, a list of participants in leadership development programs was obtained from the respective sponsors of the programs and each person on the list was contacted by email or phone and invited to participate. Over 600 people responded to this online survey with an overall response rate of 62%; in some cases a lower number of respondents is reported due to missing data. In the control counties the number of respondents in the population was not known so the response rate could not be computed. The total number of respondents from these counties was over 150.

Program #30

V(A). Planned Program (Summary)

1. Name of the Planned Program

Building Inclusive Communities

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
608	Community Resource Planning and Development	15%			
803	Sociological and Technological Change Affecting Individuals, Families and Communities	40%			
805	Community Institutions, Health, and Social Services	35%			
806	Youth Development	10%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	5.0	0.0	0.0	0.0
Actual	6.4	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
465363	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Provide facilitation, training, workshops. Conduct intensive courses and conferences to share state of the art knowledge and research and to integrate research with community needs. Assist with organizational development, fund development, and tailoring content to local community need, and gaining non-profit status. Work with media and facilitate partnerships to assist in working to meet needs of Spanish-Speaking and other minority populations.

2. Brief description of the target audience

Targeted audience is all social groups in the community, including low-income and minority, youth and adults. No limitation on gender, ethnic or religious diversity, lifestyle choice, etc. Also targeted are those who are currently serving in a leadership role in an agency, organization, neighborhood, club, community, business or aspire to serve; local and state government officials and professionals working in community development.

V(E). Planned Program (Outputs)**1. Standard output measures**

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	3200	12000	330	1200
2008	14927	2514	1389	654

2. Number of Patent Applications Submitted (Standard Research Output)**Patent Applications Submitted**

Year	Target
Plan:	0
2008 :	0

Patents listed**3. Publications (Standard General Output Measure)****Number of Peer Reviewed Publications**

	Extension	Research	Total
Plan	1	0	
2008	4	1	5

V(F). State Defined Outputs**Output Target****Output #1****Output Measure**

- Number of partners engaged.

Year	Target	Actual
2008	42	100

Output #2**Output Measure**

- Number of conferences, courses or workshops held.

Year	Target	Actual
2008	8	19

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Individuals have an understanding of the diverse relationships that exist within communities and organizations.
2	Increased utilization and development of networks that bridge between diverse cultural groups.
3	Individuals, organizations, and communities value and celebrate their cultural, ethnic, and racial diversity.
4	% of participants in the Community Development Academy that report changes in communities' capacities and collaboration as a result of their application of skills and knowledge after 3 years.
5	% participants will gain knowledge and skills in building inclusive communities.
6	% participants that indicate application of skills and knowledge gained after one year.
7	People understand and appreciate the cultural attributes of a diverse society.
8	More people from different cultural and racial groups participate in University programs.
9	Individuals develop skills in leadership, facilitation, group process, public deliberation planning and evaluation that make it possible to create, develop, and work with diverse groups.
10	Communities understand the opportunities presented by change.
11	Diverse elements of the community are engaged in civic affairs.
12	Educational resources are accessible and relevant to the needs of all members of the community.
13	Intercultural competence is demonstrated.
14	Individuals are engaged in activities that broaden their view of the world.
15	Public leaders reflect the diversity of the communities they serve.
16	Communities are integrated in that the public policies reflect the diverse interests of the people who live and work in areas affected.
17	Collaborative relationships among different interest groups are the norm for addressing complex community issues.
18	Communities have developed and use an inclusive planning and decision-making process that helps them effectively address societal changes.

Outcome #1**1. Outcome Measures**

Individuals have an understanding of the diverse relationships that exist within communities and organizations.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Communities are undergoing tremendous change. Even small villages that have relied for generations on maintaining their traditions are facing changes as demographic and economic restructuring takes place across Missouri. Change places a premium on developing all the capacities that exist within a community. People need to develop the capacity to work in diverse environments and engage a cross-section of the community in decision-making by valuing and respecting differences and understanding differences are a source of strength.

What has been done

The three-courses of the Community Development Academy develop understanding and skills to engage diverse groups in community action. Course 1 was conducted twice, and courses 2 and 3 each once. Work with nonprofit organizations included similar foci. Alianzas developed networks of service providers, shared resources and increased their understanding of the issues facing new immigrants in those communities. Training programs, cultural festivals, and workshops were conducted and Bi-National Health Week events were held in three University of Missouri Extension Regions.

Results

Sixty-three percent of survey respondents participating in the CDA between 2004 and 2007 increased their understanding of the diverse relationships that exist within communities, and 39% increased interactions among diverse groups.

Networks in southeast and central Missouri hosted cultural festivals that brought together diverse groups of people to celebrate culture, bridge differences, and enhance networking of community resources. An evaluation using a pre/post test measure of cultural competency workshops was conducted in three counties for a total of 143 participants. Respondents noted the overall quality of the cultural competency workshops was measured as satisfactory (based on 88 responses) and another instrument measured the pre/post test outcomes showing an increased cultural awareness and knowledge (based on 78 completed responses).

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services
803	Sociological and Technological Change Affecting Individuals, Families and Communities
806	Youth Development

Outcome #2**1. Outcome Measures**

Increased utilization and development of networks that bridge between diverse cultural groups.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Community service providers, nonprofits, civic groups, foundations, local governments, and others are being asked to do more with fewer resources. Few groups have access to all the resources they need to accomplish their goals on their own. Bridging networks can increase access to resources, expand a group's view of the world, increase understanding of different cultures and increase capacity to address complex communities issues by cultivating networks that bridge across cultural differences.

What has been done

Networks in west central, southwest, northwest Missouri have been formed to bring together service providers in these regions to share resources and increase their understanding of the issues facing new immigrants in those communities. Training programs, cultural festivals, and workshops have been conducted that enhance skills in cultural competency, resource development, ESOL, and working in collaborations to develop individual and organizational capacities that begin to bridge differences between cultures.

Results

Networks have fostered new projects, provided support to existing efforts, and leveraged resources from a variety of institutions to increase the scope of services available in communities. Over 67 organizations provided leadership to Bi-national Health Week providing health screenings and education to approximately 1500 underserved Hispanic people. In one community nearly a third of the participants indicated that they received health care/information for the first time in the U.S. Ongoing health screening at the Mexican Consulate continued throughout the year.

A grant writing workshop evaluation indicated 65% of the participants will begin to make sure their organizational purpose, vision, and goals are in place and begin to start to gather data to develop grant proposals. Nearly 48% indicated they will write a stronger statement of need. Prior to the course 69% of the participants indicated they had little or no knowledge of grant writing and afterwards more than 95% felt that they had a lot or a great deal of understanding of the grant writing process.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
805	Community Institutions, Health, and Social Services

Outcome #3**1. Outcome Measures**

Individuals, organizations, and communities value and celebrate their cultural, ethnic, and racial diversity.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Community service providers, nonprofits, civic groups, foundations, local governments, and others are being asked to do more with fewer resources. Few groups have access to all the resources they need to accomplish their goals on their own. Bridging networks can increase access to resources, expand a group's view of the world, increase understanding of different cultures and increase capacity to address complex communities issues by cultivating networks that bridge across cultural differences.

What has been done

Networks in west central, southwest, northwest Missouri have been formed to bring together service providers in these regions to share resources and increase their understanding of the issues facing new immigrants in those communities. Training programs, cultural festivals, and workshops have been conducted that enhance skills in cultural competency, ESOL, and working in collaborations to develop individual capacities that begin to bridge differences between cultures.

Results

Networks formed as part of the Alianzas program have fostered new projects, provided support to existing efforts, and leveraged resources from a variety of institutions to increase the scope of services available in communities.

In partnership with UMKC, with funding from the Kettering Foundation and the National Issues Forums Institute, we hosted a deliberative forum during the Hospital Hill Diversity Day in Kansas City. Participants reported that they were more informed about issues, perceptions and facts of healthcare cost issues.

Graduates of an ESOL program are mentoring others in their workplace and some have reported that they received promotions because of their improved English skills.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
805	Community Institutions, Health, and Social Services
806	Youth Development

Outcome #4**1. Outcome Measures**

% of participants in the Community Development Academy that report changes in communities' capacities and collaboration as a result of their application of skills and knowledge after 3 years.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	70	60

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

It is critical for community organizations to be able to effectively collaborate with other organizations, governmental institutions and agencies, and businesses both internally and externally. Particularly, small urban and rural community-based organizations must carefully choose the situations and organizations to work with because they literally cannot afford to make a mistake. Developing the capacity to participate in collaborations as well as when not to participate is essential.

What has been done

Delivery of the three-course Community Development Academy provided a strong emphasis on developing the capacity to work with others and participate in collaborative relationship. The Empowering Communities for the Future course focused on issues related to community sustainability, through formal sessions on working collaboratively and application of methods to develop skills. Course 1 was conducted twice, and courses 2 and 3 each once. Other programs, workshops and resources on collaboration were also utilized.

Results

During 2008, an online survey of CDA participants was sent to 110 people who completed at least one of the three CDA courses between 2004 and 2007; 53 responded (48% return rate).

Nearly 60% of the CDA participants in CDA said they now were better at leveraging resources, with 11 estimating a combined value of \$389,140 in increased resources. Learning was used to mobilize nearly 600 volunteers that provided over 13,170 hours, estimated to be of an additional value of \$212,300. Nearly half, 49%, of participants successfully initiated, mobilized, or coordinated a new community project. Nine projects were related to community viability, nine to building inclusive communities, six to community leadership, and four to community decision-making.

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services
803	Sociological and Technological Change Affecting Individuals, Families and Communities
806	Youth Development

Outcome #5

1. Outcome Measures

% participants will gain knowledge and skills in building inclusive communities.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Communities are undergoing tremendous change. Even small villages that have relied for generations on maintaining their traditions are faced with changes as demographic and economic restructuring takes place across Missouri. These changes place a premium on developing all the capacities that exist within the community. To do this people need to develop the capacity to work in diverse environments and engage a cross-section of the community in decision-making. Other programs, workshops and resources were also utilized.

What has been done

Delivery of the three-course Community Development Academy focused on assuring that all voices are represented and presented methods to engage all in community action. The courses attracted a broad diversity of participants, including participants from around the country and the world. The diversity of the participants affects the learning and provides a diversity of contexts on building communities. Course 1 was conducted twice, and courses 2 and 3 each once.

Results

During 2008, an online survey of CDA participants was sent to 110 people who completed at least one of the three CDA courses between 2004 and 2007, and 53 responded (48% return rate). Sixty-three percent of participants increased their understanding of the diverse relationships that exist within communities, and 39% increased interactions among diverse groups.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
806	Youth Development

Outcome #6**1. Outcome Measures**

% participants that indicate application of skills and knowledge gained after one year.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

There is increasing pressure on educational programs to measure the impact they have in communities over time. Participants and those who support program development want to be sure that their investment in the program will have an impact over time. They want dollars invested in education to translate into the capacity to manage change in their communities.

What has been done

The Community Development Academy is an applied learning program. The courses combine leading edge thinking with practical application to enhance the capacity of people to work effectively with a broad range of community issues. Each issue requires some form of decision-making process and implementation in the community arena beyond the individual, the family, or business firm. The program is designed to help people create their own change in their communities.

Results

During 2008, an online survey of CDA participants was sent to 110 people who completed at least one of the three CDA courses between 2004 and 2007, and 53 responded (48% return rate). Sixty-six percent of respondents reported that they were incorporating the content of the CDA courses into their work. 'After graduating and getting a job, I came to appreciate how much the CDA prepared me for this job. I realized that the CDA had equipped me with all the CD skills that my fellow employees are learning gradually through a series of conferences/workshops over a long period of time. In a nutshell, the CDA puts one ahead of the pack.'

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities

Outcome #7**1. Outcome Measures**

People understand and appreciate the cultural attributes of a diverse society.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Communities are undergoing tremendous change. Even small villages that have relied for generations on maintaining their traditions are faced with changes as demographic and economic restructuring takes place across the Missouri. These changes place a premium on developing all the capacities that exist within the community. To do this people need to develop the capacity to work in diverse environments and engage a cross-section of the community in decision-making.

What has been done

The three-course Community Development Academy focused on developing understanding and skills to engage diverse groups in community action. Course 1 was conducted twice, and courses 2 and 3 each once. Work with nonprofit organizations included similar foci. Alianzas programs built networks of service providers, community members and local leaders that focused on sharing resources and increasing an understanding of the issues facing newcomers and the communities that receive them. Cultural diversity presentations, training programs, cultural festivals, and workshops were supported.

Results

During 2008, an online survey of CDA participants was sent to 110 people who completed at least one of the three CDA courses between 2004 and 2007, and 53 responded (48% return rate). Thirty-nine percent reported they had increased their interactions among diverse groups.

Alianzas supported a study examining some of the factors that influence youth to leave or stay in rural communities, with emphasis on Hispanic/Latino and non-Hispanic/Latino youth in Sullivan County. This study is adding to a growing set of data from all over the U.S. and giving new insights to the factors that contribute to positive youth development.

One customer noted after participating in a conflict resolution workshop; 'This workshop allowed participants to do an inventory of their personality emphases and blends of orientations using the language of color. As participants we gained an understanding of our own strengths, needs, and motivators, while also learning to value the differences among the people around us.'

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities

Outcome #8

1. Outcome Measures

More people from different cultural and racial groups participate in University programs.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri is a diverse state. Historically, the state is approximately 11% African American. The Latino population in Missouri currently stands at approximately 2.5% of the total state population but is increasing more rapidly than any other group, more than 130% since 1990 and has impacted rural areas. Of the 115 counties in Missouri, all but four saw an increase in this population. Most of the overall population increase in the past census was due to an increase in non-white populations.

What has been done

Programs supported organizations working with diverse populations to increase cultural competency and connect diverse groups of people resources. Alianzas worked with the rapidly growing Latino population and the communities that receive them. Alianzas provided programs to support cultural diversity and awareness training. Cambio de Colores facilitated the sharing of current research findings on issues of community integration. The Community Development Academy prepared people to work in diverse settings and reentry programs facilitate the integration of prisoners back into their communities.

Results

Building Inclusive Communities has greatly increased Extension's contact with diverse groups. Nearly one fourth of program participants were Hispanic (24%), fifty-two percent were women and 15.2% were black. The growth of the Alianzas program has extended the reach of Extension programs into diverse communities. The Community Development Academy has been credited with increasing participant understanding of the diverse relationships that exist within communities. Sixty-three percent report that their understanding of diversity increased quite a bit or extensively.

Bi-national Health Week events were held in three Missouri regions where providers and volunteers collaborated in bringing screenings and health information to primarily underserved Latino populations in Missouri. More than 1500 people attended the events and 179 adults completed surveys. Of those surveyed, they expressed healthcare concerns and needs and 89% indicated the services they received were very helpful. Follow-up referrals were scheduled as needed. Also, 96% indicated they would attend a healthcare event like this in the future.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
805	Community Institutions, Health, and Social Services
608	Community Resource Planning and Development

Outcome #9**1. Outcome Measures**

Individuals develop skills in leadership, facilitation, group process, public deliberation planning and evaluation that make it possible to create, develop, and work with diverse groups.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

The pace of change is so fast that it is increasingly difficult for community leaders and community serving organizations to manage issues as they arise. They need to be able to anticipate changes that will affect them in the future. In order for communities to deal effectively with change and make organizations sustainable they need the capacity to develop leaders, engage diverse segments of the community, develop effective plans, and evaluate the effectiveness of the work they do. Service providers and community members are facing greater challenges in providing and getting culturally competent services as the population changes.

What has been done

Programs were conducted in communities around the state to help organizations develop their capacities to be more effective in their communities. We worked to strengthen community nonprofit organizations in planning, group process, collaboration, and board development. The Community Development Academy focused on developing individual skills in group process, planning, deliberation, leadership, and evaluation.

Results

Seventy-five percent of participants in the Community Development Academy reported that their knowledge of community development group process increased quite a bit or extensively; over 63% reported that their knowledge of community development tools increased quite a bit or extensively; and over 63% credited the Community Development Academy with increasing their skills in using the community development process quite a bit or extensively.

In an evaluation of a program on volunteer management (5 point scale) participants reported they were making it a priority to express appreciation to their current volunteers (5.0), recruiting volunteers with confidence (4.83), providing accurate and detailed information to potential volunteers (4.67) could fire a volunteer if necessary (4.42) and overall received valuable information from the workshop (4.83).

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities

Outcome #10**1. Outcome Measures**

Communities understand the opportunities presented by change.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Communities are undergoing tremendous change. Even small villages that have relied for generations on maintaining their traditions are faced with changes as demographic and economic restructuring takes place across Missouri. These changes place a premium on developing all the capacities that exist within the community. To do this people need to develop the capacity to work in diverse environments and engage a cross-section of the community in decision-making. More communities are asking for support in learning about the Hispanic influx in Missouri.

What has been done

Programs were conducted in communities that helped organizations develop their capacities to be more effective in their communities. We worked to strengthen community nonprofit organizations in planning, group process, collaboration, and board development. The Community Development Academy focused on developing individual skills in group process, planning, deliberation, leadership, and evaluation. Alianzas provided training and cultural awareness for numerous communities and organizations addressing issues associated with the growing Hispanic population.

Results

Participants at community forums held by Alianzas expressed the knowledge they gained, and numerous follow-up requests led to referrals to other services because of something they learned at the initial session.

The Cambio de Colores conference drew 171 people from more than 60 organizations. As a result University of Missouri Extension, community leaders, and residents indicated increased awareness and learning about the Hispanic/Latino culture and the belief systems that are emerging in Missouri, resources, and best practices available in the state to accommodate the unmet challenges of Hispanic/Latino immigrants and the communities that receive them.

Eleven Health Fairs were held in 5 rural counties (Barry, Jasper, Lawrence, McDonald, Newton) for new community members resulting in 383 full screenings and 55 partial screenings.

The third edition of 'Creating a 501(c)3 in Missouri' was published in 2007. Twenty seven consultations were held with organizations interested in starting new 501(c)3 organizations and at least 11 applications were filed.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities

Outcome #11

1. Outcome Measures

Diverse elements of the community are engaged in civic affairs.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Missouri is a diverse state racially, ethnically, and politically. Most of the overall population increase in the past census was due to an increase in non-white populations. Communities are undergoing tremendous change and must rely on all the capacities that exist within the community. To do this people need to develop the capacity to work in diverse environments and engage a cross-section of the community in decision-making.

What has been done

Programs were conducted in communities around the state that organizations develop their capacities to be more effective in their communities. We worked to strengthen community nonprofit organizations in planning, group process, collaboration, and board development. The Community Development Academy focused on developing individual skills in group process, planning, deliberation, leadership, and evaluation.

Results

Alianzas is engaged in civic affairs by participating in the UMKC Hispanic Advisory Council, the Hospital Hill Diversity Council, Mana De Kansas City and the Kansas City Hispanic Chamber of Commerce. This engagement has led to further networks, partnerships and collaborations with these organizations and others; promoting and supporting a greater understanding of diversity and its benefits to achieve more inclusive communities.

One graduate of the Community Development Academy stated, 'CDA has helped me better understand community relationships and address some of the issues while respecting all people in my community. One of the greatest lessons for me was to include everybody, especially those usually left behind in the CD process and in decision making. This has worked to empower members of my community and it has also helped me build relationships and new contacts.'

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities

Outcome #12

1. Outcome Measures

Educational resources are accessible and relevant to the needs of all members of the community.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The increasing diversity of the population in Missouri makes it difficult to ensure that educational resources are available to the populations that need them. The increase in the Latino community, particularly in rural areas with limited educational resources places a premium on developing materials that are culturally and linguistically appropriate.

What has been done

The Alianzas program expands University of Missouri Extension's capacity to work with immigrant populations in Missouri. Alianzas has translated materials into Spanish and developed training materials to teach Spanish to English-speaking resource people. The Bi-national Health Week is a project that connects health care resources to immigrant populations. Alianzas uses a variety of communication and outreach strategies to reach this community.

Results

Alianzas published two resources that are relevant to diversity and are utilized as an educational resource by communities. They are 'Partnering with Latinos/Hispanics in Missouri - A Resource guide for University of Missouri Extension' and 'Important Missouri Laws: A Guide for New Residents.'

A lecture on alternative medicine and traditional healing practices in Mexico was videotaped and translated into English. One hundred copies of this DVD will be distributed to University of Missouri Extension personnel, health professionals, and health and social service agencies throughout Missouri.

Three electronic mailing lists (i.e., listservs), with a total of 72 subscribers, were maintained to afford Bi-National Health Week planning councils in Missouri the opportunity to communicate about planning issues.

A webpage for the Bi-National Health Week in Missouri was maintained on the Alianzas website that includes information about the BHW on a national and state level, videos and evaluation reports of previous BHWs in Missouri, and additional resources and materials to support planning councils across the State.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
803	Sociological and Technological Change Affecting Individuals, Families and Communities

Outcome #13

1. Outcome Measures

Intercultural competence is demonstrated.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Intercultural competence is important to the integration of communities around Missouri experiencing an influx of newcomers. The potential for conflict is high when the receiving community does not understand the newcomers. Programs in intercultural competence help bridge the differences between the newcomer and receiving communities and contribute to successful integration. Alianzas identified the need for additional cultural diversity training, especially as it relates to outreach efforts with the Hispanic community.

What has been done

Alianzas worked with 15 communities to implement programs in cultural competency, trained Extension faculty to work with diverse groups, and built networks of community organizations to serve as bridges between newcomers and the receiving community. Cambio de Colores facilitated the sharing of current research findings on issues of community integration. The Community Development Academy prepared people to work in diverse settings. We supported seed funding to support the Alianzas Cultural Academy that will be held in 2009.

Results

Two cultural competency workshops were offered to 47 healthcare professionals in Jasper and McDonald counties. A pre-test/post-test comparison (based on 16 responses) showed an increase of reported knowledge gained in cultural competence.

Graduates of an ESOL program are mentoring others in their workplace and some have reported that they received promotions because of their improved English skills.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
608	Community Resource Planning and Development

Outcome #14**1. Outcome Measures**

Individuals are engaged in activities that broaden their view of the world.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Intercultural competence is important to the integration of communities around Missouri experiencing an influx of newcomers. The potential for conflict is high when the receiving community does not understand the newcomers. Programs in intercultural competence help bridge the differences between the newcomer and receiving communities and contribute to successful integration.

What has been done

Alianzas worked with 15 communities to implement programs in cultural competency, trained staff in Extension to work with diverse groups, and built networks of community organizations to serve as bridges between newcomers and the receiving community. Cambio de Colores facilitated the sharing of current research findings on issues of community integration. The Community Development Academy prepared people to work in diverse settings. Alianzas continually facilitates and promotes a greater understanding of global perspectives as it relates to community inclusion.

Results

The GateKeepers program that matches college students with elementary students in Hannibal and Palmyra in a mentoring program is self-sufficient. It has a program manager and activities/educational program coordinator who collaborates with MU Extension and area agency staff to conduct mentor training and the facilitation of group events. Hannibal-LaGrange college faculty and staff volunteers along with teachers from the local districts participate in the career ladder program of the two districts.

The Cambio de Colores conference drew 171 people from more than 60 organizations who indicated they better understand the circumstances of new immigrants and how to facilitate their integration into Missouri communities.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
608	Community Resource Planning and Development

Outcome #15**1. Outcome Measures**

Public leaders reflect the diversity of the communities they serve.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri is a diverse state. Historically, the state is approximately 11% African American. The Latino population in Missouri currently stands at approximately 2.5% of the total state population but is increasing more rapidly than any other group, more than 130% since 1990 and has impacted rural areas. Of the 115 counties in Missouri, all but four saw an increase in this population. Most of the overall population increase in the past census was due to an increase in non-white populations.

What has been done

Alianzas worked with 15 communities to implement programs in cultural competency, trained Extension faculty to work with diverse groups, and built networks of community organizations to serve as bridges between newcomers and the receiving community. Cambio de Colores facilitated the sharing of current research findings on issues of community integration. The Community Development Academy prepared people to work in diverse settings.

Results

Numerous organizations throughout Missouri such as the Hispanic Chamber, Mexican Consulate, the UMKC Hispanic Advisory Counsel, Ozark Regional Alliances (ORA), the Consortium of Hispanic Organizations and leaders of Centro Latinos all care about the diversity in the community they serve and Alianzas has partnered with these organizations and created the community voices to increase leadership skills and bridge to community leadership opportunities.

Consultations with community organizations contributed to the development of engagement and planning processes such as the Circles of Hope which has successfully engaged African American women in the shaping of public policy on transportation, healthcare, and emergency response.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
608	Community Resource Planning and Development

Outcome #16**1. Outcome Measures**

Communities are integrated in that the public policies reflect the diverse interests of the people who live and work in areas affected.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri is a diverse state racially, ethnically, and politically. Most of the overall population increase in the past census was due to an increase in non-white populations. Communities are undergoing tremendous change and must rely on all the capacities that exist within the community. To do this people need to develop the capacity to work in diverse environments and engage a cross-section of the community in decision-making. Newcomers in the community realized they need a voice and are seeking ways to become better informed about public policies and community norms.

What has been done

Alianzas worked with 15 communities to implement programs in cultural competency, trained staff in Extension to work with diverse groups, and built networks of community organizations to serve as bridges between newcomers and the receiving community. Cambio de Colores facilitated the sharing of current research findings on issues of community integration. The Community Development Academy prepared people to work in diverse settings.

Results

Two communities are planning for the launch of the Community Voices program to increase the understanding of public policies and norms for newcomers in their respective communities.

A project looking at the integration of newcomers in three rural communities has led to an increased understanding of the cultural, economic, social and human resources that newcomers bring to rural places that they can invest in their integration into the local community.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
608	Community Resource Planning and Development

Outcome #17

1. Outcome Measures

Collaborative relationships among different interest groups are the norm for addressing complex community issues.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Community organizations rarely have all the resources they need to address any single issues. Issues themselves are often too complex for a single group to address even when they have resources. Effectively addressing complex issues often requires that groups (public, private, non-profit, and for profit) work together to understand the issues and develop effective strategies. New resources and services may result from these collaborative efforts.

What has been done

Extension worked with community-based organizations to help them develop their capacity to work with other organizations and groups. Workshops focused on building understanding of the concept of collaboration, and consultations helped community organizations practice the concepts and develop collaborative relationships.

Results

Alianzas fostered collaborative partnerships with various groups addressing the healthcare need of underserved Hispanic residents especially through Bi-National Health Week and the Kansas City Hospital Hill Diversity Forum on health care costs.

The first statewide conference for nonprofit organizations, of which Extension was a key partner, led to the formation of a steering committee to guide the development of a statewide association of nonprofits that will incorporate in 2009.

The joint effort of Friends of the Garden, the Springfield-Greene County Park Board, University of Missouri Extension, and the Greene County Extension Council led to total contributions of over \$202,000 during 2007 that will be used to establish a regional Botanical Garden.

Collaboration among agencies/churches led to the establishment of a thrift store and food pantry that provided more than 85 families with food and has made used clothing accessible to the community.

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services
608	Community Resource Planning and Development
803	Sociological and Technological Change Affecting Individuals, Families and Communities

Outcome #18

1. Outcome Measures

Communities have developed and use an inclusive planning and decision-making process that helps them effectively address societal changes.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

It is increasingly difficult to anticipate the issues and changes that will be affecting the development communities and community organizations in the future. Planning helps groups analyze change as it is occurring and look into the future to see what may be coming that will affect their organization and community.

What has been done

Board development programs, strategic planning sessions, and visioning sessions were conducted with community organizations as a means of organizing to deal with change. Workshops and consultations were conducted with groups and organizations to develop individual capacities and increase the effectiveness of the groups. Programs focused on planning and visioning programs that engaged diverse elements of the community and/organization in the process.

Results

Non-profit organizations reported leveraging \$3,518,740 as part of the educational programming provided by just four specialists.

Five Missouri communities aided in the planning by Extension resources were designated Missouri Dream Communities which provides them special State incentives for implementing the plans they have developed.

More than 123 programs and consultations were held around Missouri focusing on the development of nonprofits and community-based organizations. Programs were held on grant writing, fundraising, board development, mediation and conflict resolution, acquiring 501(c)3 status, financial management, working with volunteers, planning, and resource development. There were a diversity of organizations including, interagency councils, housing and economic development boards, shelter, art galleries, community development groups, shelter workshops, health clinics, courts, community service providers, arts and education programs, and health care initiatives.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
803	Sociological and Technological Change Affecting Individuals, Families and Communities

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Brief Explanation

Several external factors affected the Building Inclusive Communities Program. The public discourse on issues of immigration has created a climate of anger and fear in a number of communities experiencing a large influx of Latino immigrants. This discourse has added to local tensions and decreased levels of trust among immigrant groups and local communities toward service and education programs.

Programs designed to strengthen nonprofits tend to focus on small community-based organizations that have fewer other options for educational resources. Changes to the rules governing charitable organizations may affect how community-based organizations operate. A steering committee was established to guide the development of a new statewide association of nonprofits potentially increasing the voice of nonprofits in public policy. An association should be formed in early 2009.

Population changes continue to affect these programs. Few organizational resources deal directly with immigrants moving into small communities. Organizations that emerge to serve as bridging institutions are often under-funded, have limited prospects for growing their resource base, and have to compete with other groups and organizations that have longer histories, more capacity, and an existing resource base to strengthen their position. The lack of bridging institutions in many communities is negatively affecting their ability to effectively integrate the new populations into the community. The slowdown of economic growth in 2008 and a projected recession of state funds in 2009 and possible budget reductions in 2010 has placed additional demands on existing service providers while simultaneously reducing the money in the system for their work. This has increased workload of organizations, the demand for the programs that support the work of nonprofit organizations, and the premium placed on effective planning and board development. Economic changes have exacerbated community tensions between newcomer and receiving communities.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Retrospective (post program)
- During (during program)
- Case Study

Evaluation Results

The Community Development Academy was the only program that engaged a systemic programmatic evaluation in 2008. Evaluation tools are being developed for Alianzas and the Bi-national Health week. Strengthening Community Nonprofit Organizations and Alianzas are in the process of developing programmatic evaluation processes. Both programs developed frameworks for evaluating their program and are currently in the process of developing effective measures.

The Community Development Academy regularly collects post program evaluation at the close of the course. In 2008, an online evaluation was implemented to measure the extent to which participation in the CDA prepared participants to practice community development. In the spring of 2008 the survey was sent to 110 people who had completed at least 1 of the 3 CDA courses between 2004 and 2007. Fifty-three of the 110 responded, leaving us with a response rate of 48%. Fifty percent of respondents were women (74% were white, and 43.4% worked for the University of Missouri. Participant responses indicated that their involvement in CDA led to changes in community development practices, increased resources, increased volunteerism and new projects.

Community Development Practices—Seventy-four percent of participants reported their knowledge of the community development process increased quite a bit or extensively; 75.4% reported their understanding of CD principles increased quite a bit or extensively; 63% reported their knowledge of CD tools increased quite a bit or extensively; 63% increased their understanding of the diverse relationships that exist within communities and 39% increased their interaction with diverse groups.

Increased Resources—For 47% of the participants the value of the Community Development Academy translated into increased resources for their organizations or communities. Nearly 60% of those responding said they now were better at leveraging resources thanks to CDA. Eleven cited accessing additional resources totaling \$389,140.

Increased Volunteerism—The use of learning in CDA has mobilized nearly 600 volunteers serving more than 13,170 hours with an estimated value of \$226,392. New volunteers were attracted and seasoned volunteers were energized.

Key Items of Evaluation

Community Development Academy—The Community Development Academy evaluation reported above was conducted for the second time in 2008. The survey is conducted annually to assess how participation in the course translates into the increased capacity of the participants and leads to changes in communities. The challenge is that some participants will have completed 1 course and others all three. By the time each participant completes all three courses they could have seen the online survey three times. This could lead to survey fatigue and affect the quality of the data collected. Analysis of the results of the 2008 survey will result in revisions to the program. The instrument will be reviewed and revised based on analysis of the survey results and the needs of the program.

Strengthening Nonprofit Community Organizations—There is currently no systematic programmatic evaluation. Evaluations of workshops will focus on the learning from that event. Much of the work in this program area is ongoing and in consultation with nonprofits over time. A framework for programmatic evaluation is being designed to focus on eight core areas of work: collaboration, strategic planning, working with volunteers, marketing, board development, starting a nonprofit, financial management, and basic operating guidelines. A one-page questionnaire will be developed for each program area. In addition, a case study protocol will be developed that can be conducted with selected organizations to collect in-depth data that evaluates our work with nonprofits over time.

Alianzas—The Alianzas program is also developing a framework for evaluation similar to the Strengthening Nonprofit Organizations program. One of the larger efforts is focused on building networks of stakeholders and service providers. These relationships have led to a number of programmatic opportunities utilizing volunteer efforts to support this statewide initiative. The challenge to effectively measure the contributions is associated with the diversity of competencies and human capital within the partnerships and collaborations. During Bi-National Health Week events, surveys are administered with adult participants identifying their healthcare needs and level of satisfaction as a consumer. In addition, consumers obtain follow-up referrals and treatments provided by volunteer providers. The Alianzas Program Team identified the need for cultural diversity training and Alianzas is developing the protocol to initiate a cultural academy that promotes a greater cultural awareness about Hispanic/Latinos to University faculty and community members alike. Alianzas continues to support the recruitment, retention and staffing of Hispanics at UMKC and serves on the Hispanic Advisory Board and other community organizations promoting Hispanic leadership and development.

Program #31**V(A). Planned Program (Summary)****1. Name of the Planned Program**

Creating Community Economic Viability

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
608	Community Resource Planning and Development	50%			
803	Sociological and Technological Change Affecting Individuals, Families and Communities	20%			
806	Youth Development	30%			
	Total	100%			

V(C). Planned Program (Inputs)**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	3.0	0.0	0.0	0.0
Actual	3.5	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
252071	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

To facilitate entrepreneurship as an economic development strategy, we will: work in selected settings (communities and regions in the state) to develop models of excellent entrepreneurial community practice and community economic development; enhance capacity and effectiveness of community members to support entrepreneurship through workshops, training, counseling, developing partnerships, providing referrals, organizational development, participatory visioning and planning; help communities respond to the needs and plans of their entrepreneurs through planning, leadership development, working with the media and building partnerships; develop advanced entrepreneurship skills among Extension specialists through development and delivery of new curricula; and share knowledge and learning that encourages the enhancement of local economies and quality of life through entrepreneurial efforts through web, media, partners, conferences, workshops, seminars, and public policy briefings.

2. Brief description of the target audience

Targeted audience is all social groups in the community, including low-income and minority, youth and adults. No limitation on gender, ethnic or religious diversity, lifestyle choice, etc. Primary Audiences: predominantly rural towns, communities, counties and/or multi-county regions and their residents in Missouri that have experienced economic downturn, and have few other opportunities; of these communities, work with ones that have demonstrated a reasonable amount of motivation to work on their situations. Secondary Audiences: communities that would like to learn more about entrepreneurial communities; Extension staff, state and non-profit staff that could benefit from advanced entrepreneurship training.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	1000	10000	600	1200
2008	5687	1662	104	2

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	3	9	12

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of communities or regions.

Year	Target	Actual
2008	10	11

Output #2

Output Measure

- Number of workshops on community entrepreneurship (based on energizing entrepreneurs).

Year	Target	Actual
2008	5	39

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Increased knowledge and understanding of local or regional economy and community economic development strategies and their applicability to the situation.
2	Increased knowledge of entrepreneurship.
3	Increase in resources leveraged to address community economic change.
4	Development of community foundations, revolving loan funds, community development corporations.
5	Number of schools with change in school curricula.
6	% increase in tax receipt levels indicative of increase in equity, wealth and income levels in the community.
7	Dollars generated for community foundations, revolving loan funds, community development corporations.
8	Increased leadership skills in community.
9	Change in number of businesses/jobs created or retained.
10	Increased cooperation across community services/Increase in networks and partnerships.
11	Increased capacity of community to support entrepreneurship and local community economic development.
12	Increase in youth remaining in communities.
13	Change in employment levels.
14	Number of businesses created, half of which will be created by youth.

Outcome #1**1. Outcome Measures**

Increased knowledge and understanding of local or regional economy and community economic development strategies and their applicability to the situation.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Many community leaders, local elected officials and volunteers lack an understanding of the factors that influence the local economy, what makes up the local economy, the roll of entrepreneurship and small business, how to use economic data to craft development strategies and a basic understanding of the art of economic development. There is some resistance to taking a broader, regional approach to community economic development.

What has been done

We provided planning, economic analysis, entrepreneurship training, organizational and leadership development assistance, and seed money for 11 (6 added this year) pilot areas selected via an RFP process. Assistance spanned the academic disciplines. We partnered with the state professional economic development organization to provide training programs. A rural sociology graduate class conducted a community survey in Brookfield. The Community Policy Analysis Center (CPAC) conducted baseline economic studies in 8 of the 11 regional projects.

Results

Through presentations, workshops and individual contacts, ExCEED has increased awareness of the importance of entrepreneurship in the economy and the need for new approaches and visions for community economic development. Entrepreneurship and place-based economic development are topics that the professional economic development organization is addressing with its members. We are seeing an increase in requests for presentations and workshops from local organizations, county commissions and Extension councils.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
806	Youth Development
803	Sociological and Technological Change Affecting Individuals, Families and Communities

Outcome #2**1. Outcome Measures**

Increased knowledge of entrepreneurship.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Traditional approaches to economic development, generally tied to external industry attraction, are poor choices for most rural communities. Rural communities lack the financial resources to offer incentives and abatements, have limited skilled workforce, limited access to essential infrastructure and markets. We also work with communities to raise awareness of the importance of youth entrepreneurship training and support.

What has been done

ExCEED presented 8 workshops; the projects sponsored an additional 53 training programs with 879 attendees. We have also partnered with the state economic development association (MEDC) to develop a series of workshops designed for local community leaders, elected officials and economic development staff. The first of the series, 'Fundamentals of Economic Development,' was presented 5 times during the fiscal year with 139 attendees. Additional offerings are under development for the coming year.

Results

Mississippi River Hills has formed an association, adopted a logo and production standards. Work is well underway in the Old Trails Region to implement a tourism and local foods promotion effort. Through a USDA-RBOG, we are working in northeast Missouri to develop a regional economic development strategy. The All Natural region sponsored 4 business start-up workshops, 4 workshops for non-profit organizations and 1 artist-based economy workshop.

Results directly attributed to the five Fundamentals of Economic Development workshop include modification of local economic development approaches and implementation of specific initiatives, such as an Enhanced Enterprise Zone, in participating communities and counties.

ExCEED received the Community Development Society 2008 Innovative Program Award.

Ozark Heritage Region is reaching out to the local business community to include them in the youth entrepreneurship education program and will expand to include more youth competition.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
806	Youth Development

Outcome #3**1. Outcome Measures**

Increase in resources leveraged to address community economic change.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	433793

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Communities tend to take a narrow view of resources, generally thinking only in terms of financial resources, and consequently struggle to support community economic initiatives. Entrepreneurial communities pursue opportunities without being limited by the resource on hand--they are resourceful in their thinking and find and leverage a wide array of resources through partnerships, collaborations and new approaches to community economic development.

What has been done

At state and local level, we are actively engaged in identifying grant opportunities and local organizations to support local initiatives. Regional projects are actively engaging community volunteers to support local initiatives. We are working with them to establish procedures to track volunteer hours and contributions.

Results

ExCEED projects generated \$183,500 in grants/contributions this year, including an USDA-RBEG grant to Chariton County for a youth revolving loan fund. Brookfield was recognized by the Federal Home Loan Bank as Missouri's 'Capital Community for 2007' and received a \$15,000 grant.

The ExCEED program received a \$43,914 USDA-RBOG to work with 6 northeast Missouri counties to develop a regional economic development strategy. The ExCEED program received a \$100,000 grant from the Kellogg Foundation to participate in the national Rural People, Rural Policy initiative. The City of Marshall's Tourism Committee received a \$60,000 grant to further their efforts at developing and promoting tourism in the community.

During FY08, ExCEED communities generated 6,038 hours of volunteer hours valued at \$103,793.

A follow-up survey of attendees in ExCEED-sponsored grant writing workshops in 2007 found that they directly attributed \$86,500 in grants to their participation in the workshops.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
803	Sociological and Technological Change Affecting Individuals, Families and Communities

Outcome #4**1. Outcome Measures**

Development of community foundations, revolving loan funds, community development corporations.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	3

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The creation of foundations and endowments allow communities to capture a portion of the wealth that now leaves rural communities when elderly residents transfer their assets to non-resident heirs. Access to business capital is problematic as many rural banks don't make commercial loans.

What has been done

Using concepts introduced through training such as Hometown Competitiveness and Energizing Entrepreneurs, 2 projects have successfully undertaken the development of community foundations to support long-term community and economic development and a third project has initiated a revolving loan fund.

Results

Brookfield's 'Hometown LEGACY Foundation' continues its efforts at fundraising and partnered with the Kansas City Chiefs to sponsor a golf tournament which raised \$20,000 for the foundation.

Mississippi River Hills Association was formed as a non-profit to guide the project as it moves forward; board is representational of the industry segments engaged in the project; 501 (c) 3 status is pending.

Chariton County's Mind Your Own Business project established a youth revolving loan fund to provide financial support to youth-owned businesses started in the county and received a USDA-RBEG grant.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
806	Youth Development

Outcome #5

1. Outcome Measures

Number of schools with change in school curricula.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	13	21

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Retaining and attracting young people is essential for the future of rural places. One proven strategy is to create local employment and business opportunities for young people. The introduction of entrepreneurship and business ownership into the curriculum helps send a strong message that there is a future for them in the community.

What has been done

ExCEED continues to make curriculum available to schools which are interested in integrating entrepreneurship into the overall curriculum. While we had a number of successes during the 2006-07 school year, this year has proven to be more challenging. The availability of the new 'Entrepreneurship Investigation' curriculum, from the University of Nebraska-Lincoln, has garnered some interest and we are hopeful that new opportunities will develop during the 2008-09 school year.

Results

Interest in the Ozark Heritage Region's youth entrepreneurship program continues to be high, although weather and other challenges resulted in only 11 schools completing the program this year. Impacts in the region are being seen with several schools integrating the curriculum and one school adding a dedicated course on entrepreneurship. Chariton County's efforts resulted in all schools in the county participating in the youth entrepreneurship effort, 9 youth businesses and 1 family vegetable/fruit farm established, and 20 training events with 164 students attending. Brookfield had 125 students attend a regional youth entrepreneurship summit and also had 4 youth-owned businesses start in the community. Mississippi River Hills had 5 youth-owned businesses start. Overall, 21 schools in these three different regions of the state implemented some form of entrepreneurship curriculum and an additional 17 schools have been provided with curriculum for consideration for the next school year.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #6

1. Outcome Measures

% increase in tax receipt levels indicative of increase in equity, wealth and income levels in the community.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	10

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The bottom line for any economic development initiative has to be an increase in wealth - for the community and for the entrepreneurs. One measure of that is the increase in tax receipts (sales, income, property) in the community and region. Increases in equity and community wealth suggest that the residents are better off financially.

What has been done

We provided planning, economic analysis, entrepreneurship training, organizational and leadership development assistance, and seed money for 11 (6 added this year) pilot areas selected via an RFP process. Assistance spanned the academic disciplines. We partnered with the state professional economic development organization to provide training programs. A rural sociology graduate class conducted a community survey in Brookfield. The Community Policy Analysis Center (CPAC) conducted baseline economic studies in 8 of the 11 regional projects.

Results

Between FY2005 and FY2007, tourism expenditures in each of the six counties in the Mississippi River Hills Association region (as measured by 17 tourism-related SIC codes) increased by an average of 10.51%. St. Francois County saw the highest increase with 16.26% and Perry County experienced the slowest growth at 5.06%.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development

Outcome #7

1. Outcome Measures

Dollars generated for community foundations, revolving loan funds, community development corporations.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	318000

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Rural communities tend to be 'land-rich, cash-poor' and struggle with economic vitality, underemployment and out migration of youth. By taking control of their own future, through development of foundations, loan funds and CDCs, communities can change this pattern. One essential element is access to capital and by creating local sources of capital, communities are empowered to write a new future for their community.

What has been done

Projects have been actively engaged in raising funds to support their activities and have formed foundations and endowments to ensure the continuation of their initiatives. ExCEED staff stress the importance of understanding the impact of inter-generational wealth transfer and encourage communities to form foundations or endowments that can help mitigate the economic impact of this transfer of wealth.

Results

Three pilot ExCEED regional projects raised a total of \$315,500 including \$283,000 for their foundations. Chariton County raised \$32,500 for their youth revolving loan fund -- \$5,000 raised locally and a \$27,500 USDA-RBEG grant was received. Brookfield received an Ameren CDC grant (\$175,000) to assist local business expansion.

ExCEED projects generated \$183,500 in grants/contributions this year, including an USDA-RBOG grant to Chariton County for a youth revolving loan fund. Brookfield was recognized by the Federal Home Loan Bank as Missouri's 'Capital Community for 2007' and received a \$15,000 grant. The ExCEED program received a \$43,914 USDA-RBOG to work with 6 northeast Missouri counties to develop a regional economic development strategy. The ExCEED program received a \$100,000 grant from the Kellogg Foundation to participate in the national Rural People, Rural Policy initiative. The City of Marshall's Tourism Committee received a \$60,000 grant to further their efforts at developing and promoting tourism in the community.

During FY08, ExCEED communities generated 6,038 hours of volunteer hours valued at \$103,793.

A follow-up survey of attendees in ExCEED sponsored grant writing workshops in 2007 found that they directly attributed \$86,500 in grants to their participation in the workshops.

Brookfield partnered with the Kansas City Chiefs to sponsor a golf tournament which raised \$20,000 for the foundation.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
803	Sociological and Technological Change Affecting Individuals, Families and Communities
608	Community Resource Planning and Development

Outcome #8

1. Outcome Measures

Increased leadership skills in community.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

For many complicated reasons, having a large, diverse group of potential leaders is a real challenge for many rural communities. We often see the same small number of people taking, or being asked to take, leadership roles in the community. The reasons vary from a reluctance to take on these roles, lack of self-confidence, lack of willingness on the part of the community, reluctance to welcome new leaders, and no thought to including youth.

What has been done

Leadership development is a corner stone of ExCEED's engagement process. Three of our community projects have sponsored leadership development programs for both youth and adults. Many have used University of Missouri Extension's EXCEL program while others have developed their own programs. Northwest Missouri is developing a leadership program for local leaders and efforts are underway to promote youth leadership development in the region.

Results

Regardless of the approach, all projects have seen new faces in the community leadership pool. Projects sponsored 4 programs with 84 participants (adult and youth) 44 of which assumed leadership roles in community. Individuals are serving in leadership positions in the community (Chamber of Commerce, City Council, local newspaper and high school student council president). One Extension Council added two youth members. In Chariton County, 2 graduates are co-chairing the Brunswick Chamber of Commerce and 30 of the 40 youth who participated in leadership training beyond the 8th grade forum are engaged in various roles with student organizations, 8 others are actively involved in civic community organizations outside the school setting.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
608	Community Resource Planning and Development

Outcome #9**1. Outcome Measures**

Change in number of businesses/jobs created or retained.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	704

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Failure of traditional economic development strategies has forced rural regions to seek new ways to spur economic activity. Communities create wealth through businesses, jobs and services to sustain the population. Lack of new businesses creates loss of residents, in particular youth, and erosion of the sustainability of the community over time. Entrepreneurship can create new businesses, strengthen/expand existing businesses and generate jobs and careers essential to the vitality of the community.

What has been done

We are focusing on training and awareness building opportunities that encourage youth and adults to consider self-employment/entrepreneurship and linking with Extension's Business Development Program (BDP) and SBDCs for business training and counseling services; helping communities identify existing and potential entrepreneurs.

Results

Our Business Development Program reported 612 new and 73 retained jobs in the ExCEED project areas along with \$13,159,991 in new investment. ExCEED projects reported an additional 19 new jobs, 16 business expansions, 33 new businesses and \$160,000 in new investment.

Chariton County's youth entrepreneurship efforts resulted in the start-up of 9 youth-owned enterprises and 1 family vegetable/fruit farm as well as 20 training events with 164 students attending. Brookfield had 125 students attend a regional youth entrepreneurship summit and also had 4 youth-owned businesses start in the community. Mississippi River Hills had 5 youth-owned businesses start.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
806	Youth Development

Outcome #10

1. Outcome Measures

Increased cooperation across community services/Increase in networks and partnerships.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Community-based collaboration is the process by which citizens, agencies, organizations and businesses make formal, sustained commitments to work together to accomplish a shared vision. Collaboration is the highest and most difficult level of working with others - more formal than networking, cooperation and coordination. But in many rural regions, even networking across sectors (e.g., elected officials and community leaders) is challenging.

What has been done

ExCEED requires projects to have a diverse leadership team to guide the projects. We are working to engage campus faculty and programs with the regional projects and to foster additional partnership with key organization. A quarterly newsletter provides updates on projects, new initiatives, highlights Extension programs and/or staff expertise, links to current literature on entrepreneurship as well as conferences and training events and provides examples of community entrepreneurship and innovation.

Results

The development of networks and partnerships is a key outcome for the project. Mississippi River Hills held open regional meetings which resulted in the formation of stakeholder groups which represent wineries and vineyards; agricultural producers; hospitality; retailers of locally produced goods; artisans; and local government sectors. Community engagement in the project is a key outcome and 54 different regional entities are participating, 25 people serve on committees and 30 people have leadership roles in the project. External connections include market contacts such as Whole Foods Market.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
608	Community Resource Planning and Development

Outcome #11

1. Outcome Measures

Increased capacity of community to support entrepreneurship and local community economic development.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Most rural communities have no real economic development policy and program. By creating an understanding of the powerful role entrepreneurship can play in building stronger local economies and community, we can foster local support and create a willingness to invest time, money and people to create an entrepreneurial development system (EDS). An EDS is necessary to transform a region; the system needs to be collaborative, comprehensive and regionally focused.

What has been done

ExCEED conducts workshops and seminars that educate local elected officials and community leaders on community economic development and the role entrepreneurship plays in the health of rural communities; provides skills development (e.g., grant writing). ExCEED partnered with MEDC to present the Fundamentals of Economic Development workshop 11 times to 139 attendees, who provided an overall rating of 3.51 (on a 4-point scale) when asked about the increase in their capacity to support entrepreneurship.

Results

Chariton County is conducting an entrepreneurial survey of the county to identify potential and existing entrepreneurs as well as citizen understanding and awareness of entrepreneurial support systems present in the county. Northwest Missouri does a weekly newspaper column to educate citizens on entrepreneurship and highlight local entrepreneurial activities. Eight of 11 participants in a Northwest Missouri training on building and sustaining entrepreneurship plan to start/expand a business. Brookfield conducted an existing business survey to identify training needs. The Osage County Agri-Tourism Council sponsored a business showcase with 33 exhibitors and over 300 attendees. Exhibitors reported making several successful business contacts that resulted in sales and contracts.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities

Outcome #12

1. Outcome Measures

Increase in youth remaining in communities.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Declining populations are a particular challenge for rural Missouri, especially the loss of young people who leave the rural communities for employment in metropolitan areas. One need that we hear from many rural leaders and residents is about reversing the historical and significant trend of youth out-migration. How communities can more effectively involve young people and help them stay or return is a frequently raised concern.

What has been done

Successful engagement of youth is essential for a community's long-term health and viability. We work with our projects to identify youth entrepreneurs and provide training, encouragement, mentoring and financial assistance to support their development and business potential. Projects are also working to include youth in community leadership roles. Two projects, Chariton County and Brookfield, have VISTA volunteers working exclusively with youth in their community.

Results

Brookfield recognized youth entrepreneurial successes at the annual chamber of commerce banquet with an award. Recipient Sam Correll recently opened Parks Sign Company, a graphic arts sign company. At the Brookfield's high school graduation each graduate was presented with a mailbox inscribed with their name and personalized invitation that read: Because we have shared in your life and watched with pride as your individual contributions have become a part of our town's history; the entire Brookfield community, school, city, organizations, businesses and citizens reach out to you at graduation and extend this invitation to always consider this special place your home.

At this time, ExCEED is not measuring this impact. It will be part of the broader, long-term evaluation of the project.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
806	Youth Development

Outcome #13

1. Outcome Measures

Change in employment levels.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Failure of traditional economic development strategy of external attraction; need to focus on growing businesses from within the community, identify the assets of the region to build businesses; locally-owned businesses more engaged and committed to the community.

What has been done

We are focusing on training opportunities that encourage youth and adults to consider self-employment/entrepreneurship; linking with Extension's Business Development Program (BDP) and SBDCs for training and counseling for existing businesses.

Results

At this time, ExCEED is not measuring this impact. It will be part of the broader, long-term evaluation of the project.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities

Outcome #14**1. Outcome Measures**

Number of businesses created, half of which will be created by youth.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	25	33

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Declining populations are a particular challenge for rural Missouri, especially the loss of young people who leave the rural communities for employment opportunities in metropolitan areas. The loss of youth not only impacts the population, but also means that there are fewer people to take over businesses when the owners retire or to start new businesses in the community.

What has been done

The ExCEED program works with projects to present business training, connect businesses to counselors, and implement youth entrepreneurship training and loan programs. All 5 ExCEED projects include youth entrepreneurship as part of their project, with 2 as their primary focus. 21 schools (7 middle schools, 14 high schools) have adopted entrepreneurship curriculum and 355 students participated in classes. Copies of curriculum were provided to 17 schools in the Northwest Missouri project.

Results

The benefit from youth entrepreneurship training is long-term and it may be several years before we see a definitive connection between training and youth business ownership. Our Business Development Program reported 612 new and 73 retained jobs in the ExCEED project areas along with \$13,159,991 in new investment. ExCEED projects reported an additional 19 new jobs, 16 business expansions, 33 new businesses and \$160,000 in new investment.

Chariton County's youth entrepreneurship efforts resulted in the start-up of 9 youth-owned enterprises and 1 family vegetable/fruit farm as well as 20 training events with 164 students attending. Brookfield had 125 students attend a regional youth entrepreneurship summit and also had 4 youth-owned businesses start in the community. Mississippi River Hills had 5 youth-owned businesses start.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
806	Youth Development

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

The primary external factors that impact outcomes are challenges in getting rural communities, elected officials, state government and key decision makers to recognize the need for new strategies for community economic development and to adopt and support efforts, such as ExCEED, to facilitate new approaches. Economic development efforts in Missouri, as many states, continue to focus on external recruitment of businesses rather than on entrepreneurship and development of "home-grown" businesses. Public programs that do focus on entrepreneurs define them in terms of technology and high-growth enterprises. While these strategies can be very successful, they rarely impact rural communities. Many of our rural communities continue to struggle with population decline, especially the loss of young people, contrasted with growth in the senior and migrant populations -- both of which put serious strains on the local community.

Another limiting factor is access to financial resources, both for the program and the communities. One of the key needs in most of the regional projects is access to capital that allows the region to plan and implement new community economic development strategies. The five pilot projects benefited from a small grant from the University of Missouri to participate with ExCEED and to implement new community economic development strategies and all have indicated that their project would not have achieved its current level of success without the financial and technical assistance provided by the University. As the project moves forward it will be essential that we identify and secure additional funding sources that can assist these rural regions in developing and implementing new community economic development strategies.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- During (during program)
- Time series (multiple points before and after program)
- Case Study
- Comparisons between program participants (individuals, group, organizations) and non-participants

Evaluation Results

The five pilot communities have completed their third year of engagement with ExCEED and report steady progress toward their established goals. Faculty continue to work with the projects to help them develop common outcomes and better mechanisms for tracking results, local match, volunteer hours, etc. Cumulative outcomes reported by one or more of the projects include: contributions to local Foundation/Endowments, \$318,000; other grants received, \$330,000; 6,038 hours of volunteer hours valued at \$103,793; leadership Programs/Participants, 4/84; participants who have assumed a leadership role in the community, 44; youth education/training events, 46; youth participants 1,078; youth-owned businesses started, 28; training Programs, 67; attendees at training programs, 885; new businesses started, 61; business expansions, 23; new jobs, 729, retained jobs, 118; new investment, 235.9 million; business visitations, 40; schools engaged, 21 (7 middle schools and 14 high schools).

Key Items of Evaluation

ExCEED will undertake an in-depth program evaluation in late summer or early fall of 2009 that will include retrospective analysis and the development of case studies with the five pilot projects. At that time the five pilot projects will have been engaged for three years. The goal of the evaluation will be to determine the impact of the project, the learning that occurred, changes made by the community/residents and project long-term impact of the strategies that they have implemented. Currently, each of the projects submits quarterly activity and impact reports that provide information on progress toward outcomes.

We have learned from our engagement with the five pilot projects that more up-front evaluation and benchmarking as well as better defined progress reports and training for community leaders on evaluation are needed. The new regional projects, engaged in the fall of 2007, began with visioning sessions that included collection of participant knowledge and awareness. This will be repeated at the end of the engagement to measure learning.

The five pilot communities have completed their third year of engagement with ExCEED and report steady progress toward their established goals. ExCEED continues to work with the projects to help them develop common outcomes and better mechanisms for tracking results, local match, volunteer hours, and cumulative outcomes.

Program #32**V(A). Planned Program (Summary)****1. Name of the Planned Program**

Aging

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
608	Community Resource Planning and Development	25%			
802	Human Development and Family Well-Being	25%			
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures	50%			
	Total	100%			

V(C). Planned Program (Inputs)**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	3.0	0.0	0.0	0.0
Actual	5.6	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
410268	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

Conduct workshops and multi-session programs, meetings; Develop products, curriculum and resources; Develop curriculum for advocacy groups; Provide training; Work with media; Partner with AARP, Missouri Department of Health and Senior Services, Area Agencies on Aging and national organizations; Assemble and maintain relevant website on how-to strategies.

2. Brief description of the target audience

Older adults and their families, persons who work with older adults, persons in mid-life who are preparing for aging, persons over 60, grandparents, baby boomers, homecare providers, disability and aging advocacy groups, home builders/contractors of elderly housing, real estate agents, aging service providers (health and mental health).

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	750	5000	0	0
2008	8795	14720	2322	20

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Number of workshops.

Year	Target	Actual
2008	0	229

Output #2**Output Measure**

- Number of newsletter articles.

Year	Target	Actual
2008	0	2

Output #3**Output Measure**

- Number of radio spots.

Year	Target	Actual
2008	0	0

Output #4**Output Measure**

- Number of one-on-one counseling sessions.

Year	Target	Actual
2008	0	0

Output #5**Output Measure**

- Number of unique website visits.

Year	Target	Actual
2008	0	31699

Output #6**Output Measure**

- Number of participant contacts.

Year	Target	Actual
2008	0	25857

Output #7**Output Measure**

- Number of students reached.

Year	Target	Actual
2008	0	2342

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	# of participants who help manage caregiving roles and responsibilities.
2	Percent of participants who report making changes in family elder care as a result of participation.
3	# of families who use decision making skills to improve quality of life for both caregivers and receivers.
4	Vital productive older adults.
5	Self sufficient older adults.
6	Increased volunteer capacity from older adults.
7	Increased affordable healthcare systems.
8	Increased sense of intergenerational community connectedness.
9	Increased knowledge of how to manage caregiving roles and responsibilities.
10	Increased knowledge of the availability of family elder care.
11	Increased knowledge of decision-making skills necessary to make quality of life decisions for caregivers and receivers.

Outcome #1**1. Outcome Measures**

of participants who help manage caregiving roles and responsibilities.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri's population continues to age. More and more we face young adults who are living as a sandwich generation--caring for both their children and their parents. Public input into the Plan of Work process indicated a great need for programs that address both the aging adults, but also their families and caregivers. The ultimate goal of these programs is to ensure adults can live independently and enjoy a high quality life.

What has been done

MU Extension provides educational programs and resources to support successful aging and to strengthen the aging family. Programs are also provided to support the caregivers of aging families.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
802	Human Development and Family Well-Being
608	Community Resource Planning and Development
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

Outcome #2**1. Outcome Measures**

Percent of participants who report making changes in family elder care as a result of participation.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	30	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri's population continues to age. More and more we face young adults who are living as a sandwich generation--caring for both their children and their parents. Public input into the Plan of Work process indicated a great need for programs that address both the aging adults, but also their families and caregivers. The ultimate goal of these programs is to ensure adults can live independently and enjoy a high quality life.

What has been done

MU Extension provides educational programs and resources to support successful aging and to strengthen the aging family. Programs are also provided to support the caregivers of aging families.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures
802	Human Development and Family Well-Being
608	Community Resource Planning and Development

Outcome #3**1. Outcome Measures**

of families who use decision making skills to improve quality of life for both caregivers and receivers.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri's population continues to age. More and more we face young adults who are living as a sandwich generation—caring for both their children and their parents. Public input into the Plan of Work process indicated a great need for programs that address both the aging adults, but also their families and caregivers. The ultimate goal of these programs is to ensure adults can live independently and enjoy a high quality life.

What has been done

MU Extension provides educational programs and resources to support successful aging and to strengthen the aging family. Programs are also provided to support the caregivers of aging families.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
608	Community Resource Planning and Development
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures
802	Human Development and Family Well-Being

Outcome #4**1. Outcome Measures**

Vital productive older adults.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri's population continues to age. More and more we face young adults who are living as a sandwich generation—caring for both their children and their parents. Public input into the Plan of Work process indicated a great need for programs that address both the aging adults, but also their families and caregivers. The ultimate goal of these programs is to ensure adults can live independently and enjoy a high quality life.

What has been done

MU Extension provides educational programs and resources to support successful aging and to strengthen the aging family. Programs are also provided to support the caregivers of aging families.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
802	Human Development and Family Well-Being
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures
608	Community Resource Planning and Development

Outcome #5**1. Outcome Measures**

Self sufficient older adults.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri's population continues to age. More and more we face young adults who are living as a sandwich generation—caring for both their children and their parents. Public input into the Plan of Work process indicated a great need for programs that address both the aging adults, but also their families and caregivers. The ultimate goal of these programs is to ensure adults can live independently and enjoy a high quality life.

What has been done

MU Extension provides educational programs and resources to support successful aging and to strengthen the aging family. Programs are also provided to support the caregivers of aging families.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
802	Human Development and Family Well-Being
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

Outcome #6**1. Outcome Measures**

Increased volunteer capacity from older adults.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri's population continues to age. More and more we face young adults who are living as a sandwich generation--caring for both their children and their parents. Public input into the Plan of Work process indicated a great need for programs that address both the aging adults, but also their families and caregivers. The ultimate goal of these programs is to ensure adults can live independently and enjoy a high quality life.

What has been done

MU Extension provides educational programs and resources to support successful aging and to strengthen the aging family. Programs are also provided to support the caregivers of aging families.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures
802	Human Development and Family Well-Being
608	Community Resource Planning and Development

Outcome #7**1. Outcome Measures**

Increased affordable healthcare systems.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri's population continues to age. More and more we face young adults who are living as a sandwich generation—caring for both their children and their parents. Public input into the Plan of Work process indicated a great need for programs that address both the aging adults, but also their families and caregivers. The ultimate goal of these programs is to ensure adults can live independently and enjoy a high quality life.

What has been done

MU Extension provides educational programs and resources to support successful aging and to strengthen the aging family. Programs are also provided to support the caregivers of aging families.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
802	Human Development and Family Well-Being
608	Community Resource Planning and Development
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

Outcome #8**1. Outcome Measures**

Increased sense of intergenerational community connectedness.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri's population continues to age. More and more we face young adults who are living as a sandwich generation—caring for both their children and their parents. Public input into the Plan of Work process indicated a great need for programs that address both the aging adults, but also their families and caregivers. The ultimate goal of these programs is to ensure adults can live independently and enjoy a high quality life.

What has been done

MU Extension provides educational programs and resources to support successful aging and to strengthen the aging family. Programs are also provided to support the caregivers of aging families.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures
802	Human Development and Family Well-Being

Outcome #9**1. Outcome Measures**

Increased knowledge of how to manage caregiving roles and responsibilities.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri's population continues to age. More and more we face young adults who are living as a sandwich generation--caring for both their children and their parents. Public input into the Plan of Work process indicated a great need for programs that address both the aging adults, but also their families and caregivers. The ultimate goal of these programs is to ensure adults can live independently and enjoy a high quality life.

What has been done

MU Extension provides educational programs and resources to support successful aging and to strengthen the aging family. Programs are also provided to support the caregivers of aging families.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures
608	Community Resource Planning and Development
802	Human Development and Family Well-Being

Outcome #10**1. Outcome Measures**

Increased knowledge of the availability of family elder care.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri's population continues to age. More and more we face young adults who are living as a sandwich generation--caring for both their children and their parents. Public input into the Plan of Work process indicated a great need for programs that address both the aging adults, but also their families and caregivers. The ultimate goal of these programs is to ensure adults can live independently and enjoy a high quality life.

What has been done

MU Extension provides educational programs and resources to support successful aging and to strengthen the aging family. Programs are also provided to support the caregivers of aging families.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures
608	Community Resource Planning and Development
802	Human Development and Family Well-Being

Outcome #11**1. Outcome Measures**

Increased knowledge of decision-making skills necessary to make quality of life decisions for caregivers and receivers.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri's population continues to age. More and more we face young adults who are living as a sandwich generation--caring for both their children and their parents. Public input into the Plan of Work process indicated a great need for programs that address both the aging adults, but also their families and caregivers. The ultimate goal of these programs is to ensure adults can live independently and enjoy a high quality life.

What has been done

MU Extension provides educational programs and resources to support successful aging and to strengthen the aging family. Programs are also provided to support the caregivers of aging families.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures
608	Community Resource Planning and Development

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation**V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- During (during program)
- Case Study

Evaluation Results**Key Items of Evaluation**

Program #33**V(A). Planned Program (Summary)****1. Name of the Planned Program**

Business Development

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
602	Business Management, Finance, and Taxation	70%			
603	Market Economics	5%			
604	Marketing and Distribution Practices	5%			
607	Consumer Economics	5%			
608	Community Resource Planning and Development	15%			
	Total	100%			

V(C). Planned Program (Inputs)**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	5.0	0.0	0.0	0.0
Actual	11.8	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
859360	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

Business counseling and training.

2. Brief description of the target audience

Small business owners, managers and their employees. Individuals who want to start a business. Partners, stakeholders and funding agencies, including elected officials.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	1562	57656	0	0
2008	1655	53790	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Number of counseling clients.

Year	Target	Actual
2008	150	796

Output #2**Output Measure**

- Training customer satisfaction (scale 1-7 high).

Year	Target	Actual
2008	6	6

Output #3**Output Measure**

- Number of applied research projects.

Year	Target	Actual
2008	1	2

Output #4**Output Measure**

- Website statistics (in millions).

Year	Target	Actual
2008	0	1

Output #5**Output Measure**

- Counseling hours.

Year	Target	Actual
2008	750	4200

Output #6**Output Measure**

- Counseling customer satisfaction (scale 1-7 high).

Year	Target	Actual
2008	6	6

Output #7**Output Measure**

- Training attendees.

Year	Target	Actual
2008	975	4309

Output #8**Output Measure**

- Training events.

Year	Target	Actual
2008	95	270

Output #9**Output Measure**

- Training hours x attendees.

Year	Target	Actual
2008	92000	9695250

Output #10**Output Measure**

- Number of counseling sessions.

Year	Target	Actual
2008	300	3420

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Increase in knowledge.
2	Business owners will start or expand a business as appropriate to their business goals.
3	Business owners will make or revise decisions about the type of business or business structure as appropriate to their business goals.
4	Business owners will prepare a business plan as appropriate to their business goals.
5	Business owners will develop financial projections as appropriate to their business goals.
6	Business owners will seek start-up funding as appropriate to their business goals.
7	Business owners will develop management systems as appropriate to their business goals.
8	Business owners will investigate legal and compliance issues for their business as appropriate to their business goals.
9	Business owners will develop a marketing plan as appropriate to their business goals.
10	Business owners will commercialize products as appropriate to their business goals.
11	Business owners will inform stakeholders of the outcome of their work with the University of Missouri Extension Business Development as appropriate to their business goals.
12	Number of jobs created.
13	Dollar amount of sales and contracts (in millions).
14	Dollar amount of business investments, including loans and equity approved loans (in millions).
15	Number of new businesses started.

Outcome #1**1. Outcome Measures**

Increase in knowledge.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	1

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Knowledge is a key to success in the business environment. Successful start up and existing businesses must create a foundation of knowledge and expertise in their field to compete and succeed. University of Missouri Extension prides itself in offering non-biased, research based education to strengthen the economic conditions of our businesses, communities, and state.

What has been done

The University of Missouri Extension Business Development Program has created specific curriculum and programming that is based on the needs and expectations of the businesses in Missouri. Program delivery and evaluation is tailored to the adult learner and increase in knowledge is evaluated through post-class surveys.

Results

The Business Development program recorded an average increase in knowledge from class attendees of 1.2/5. On a five point knowledge scale, participants rated themselves before and after the program and increased their knowledge over one full point. This increase in knowledge is directly translated to Missouri businesses making sound, educated business decisions which created stronger businesses and decreased business failures.

4. Associated Knowledge Areas

KA Code	Knowledge Area
602	Business Management, Finance, and Taxation

Outcome #2**1. Outcome Measures**

Business owners will start or expand a business as appropriate to their business goals.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Entrepreneurs and business owners are the core of our American economy and society. Education in business startup and expansion assist business owners and entrepreneurs in making valid decisions based on facts in relation to their business goals. Curriculum and counseling is offered in business start-up and growth, creating more businesses, and expanding the tax base in counties and throughout the state.

What has been done

A focal point of the Business Development program is assisting individuals in starting and growing businesses. Counseling and training specific to business start-up, growth and expansion is offered throughout the state, as well as courses in government procurement and community entrepreneurship. Business Development Specialists are skilled in core business areas: management, financial, marketing, and innovation, and offer businesses a full line of education to meet their business goals.

Results

Over 40 businesses were started, and business growth from businesses the program counseled accumulated over 142 million in increased sales and government contracts. Educational offerings and in-depth counseling assisted businesses in reaching their business goals, while many businesses started and grew at rates which far outpaced the average startup and growth rates of the state.

4. Associated Knowledge Areas

KA Code	Knowledge Area
602	Business Management, Finance, and Taxation

Outcome #3

1. Outcome Measures

Business owners will make or revise decisions about the type of business or business structure as appropriate to their business goals.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Business structure plays a key role in the success of a business. Improper business structure or ownership can adversely affect the businesses access to capital, growth, and ability to procure government contracts. Educated decisions in establishing business formation can save businesses from making costly mistakes which could impede funding and sales.

What has been done

All start up classes, as well as many targeted programs address legal formation and business structure. Businesses are given the facts regarding the various business structures, and are given assistance in making a decision which positively affects their start-up and growth. Specific programs which offer this include: Business Startup and Business Planning classes, two programs which are offered on a routine basis throughout the state.

Results

Businesses which have accessed the programming of the Business Development program have made educated decisions on legal formation and structure. Businesses were also referred to various legal, banking, and accounting professionals which supplemented the assistance in educating them on their specific ownership issues and the best legal formation.

4. Associated Knowledge Areas

KA Code	Knowledge Area
602	Business Management, Finance, and Taxation

Outcome #4**1. Outcome Measures**

Business owners will prepare a business plan as appropriate to their business goals.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research shows that business planning is key to the success of business startup as well as business continuity. Accurate business planning is more than just filling in the numbers on a business plan template. Businesses must continually plan and use feasibility studies, financial projections, and other items which are specific to their industry, their business, and their personal goals. The Business Development program offers business planning classes on a continual basis across the state to aid in business plan development and deployment.

What has been done

The Business Development program has served businesses through training and counseling in the researching, creating, deploying, and reviewing of business plans. Business Specialists offer assistance in the core areas of business planning, including finance, marketing, management, and innovation. Businesses are educated to use business plans in their daily business decision making. Specialists educate the business owner of the importance of planning and execution within their business.

Results

Over 1650 businesses were offered training and counseling, and business planning was a key focus of all training and counseling. Businesses were able to access over 23 million in investments through business planning and presentation to funders.

4. Associated Knowledge Areas

KA Code	Knowledge Area
604	Marketing and Distribution Practices
603	Market Economics
602	Business Management, Finance, and Taxation

Outcome #5**1. Outcome Measures**

Business owners will develop financial projections as appropriate to their business goals.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Educating businesses on financial projections is a key aspect of creating a more educated, successful business community. Research shows businesses which create and use accurate financial sheets and projections make more educated decisions and can more accurately control debt, cash flow, and profits. Over 70% of small businesses state they struggle with using and understanding financial reports, while lending institutions state that a key element in business success is understanding financial statements and projections.

What has been done

A three part course was established and deployed across the state in assisting entrepreneurs in understanding financial statements, controlling cash flow, and projecting financial needs. This program has been offered statewide for over two years. Additionally, in-depth counseling, through use of financial projection tools, accounting software such as QuickBooks continues to be offered to both start up and existing businesses.

Results

Financial assistance through counseling and training continue to be one of the most requested and offered programs of the Business Development Program. The Business Development program continues to offer strong counseling and training in the area of financial projections, and businesses accessed over 23 million in investments through the development and use of financial statements and projections.

4. Associated Knowledge Areas

KA Code	Knowledge Area
603	Market Economics
602	Business Management, Finance, and Taxation

Outcome #6**1. Outcome Measures**

Business owners will seek start-up funding as appropriate to their business goals.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Access to capital can be a taunting obstacle for many businesses. Seeking and securing funding through lending institutions, private funders, research grants, and various other funding possibilities is generally a maze for businesses. Understanding how to access capital, in conjunction with business planning, financial projections and market studies, is very important to the success of businesses in Missouri. Offering assistance in the identification and application process of funding can dramatically improve the success rates of capitalization.

What has been done

The Business Development program has a full line of training and counseling tools to assist small businesses in their start-up funding. Experience in this market has allowed the Business Development program to assist start-up companies in the core elements of business planning, financial projections, and market analysis, all increasing the rates of start-up funding and success.

Results

The Business Development program assisted over 40 businesses in their successful start-up endeavors, with a key component of securing start-up financing and capital. Additionally, training and counseling was offered to other businesses in their start-up endeavors, and with a knowledge increase of over 1 on a 5 point scale, potential business owners were educated on start-up financing and were able to make informed educated decisions when accessing start-up funding.

4. Associated Knowledge Areas

KA Code	Knowledge Area
602	Business Management, Finance, and Taxation
603	Market Economics

Outcome #7**1. Outcome Measures**

Business owners will develop management systems as appropriate to their business goals.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Over 80% of business owners are technically qualified in their area of business, while only 20% have the managerial experience and background to successfully manage their business. Many business owners prefer the daily production aspect of their business as opposed to the managerial and leadership functions which are key to the success of their business. Understanding how to effectively manage and create managerial processes in their business can dramatically increase the success and profitability of their business.

What has been done

The Business Development program has created and adapted many research proven managerial tools and techniques which they use in their training and counseling. Six Sigma, Baldrige, SMART, and other management systems and processes are used with clients and participants to assist them in seeing the value of managerial process and leadership.

Results

Missouri businesses served by the University of Missouri Extension Business Development program were educated in the importance of management systems, and in-depth counseling was offered to many businesses in the area of business management. Research based management systems were taught and deployed in Missouri businesses, allowing them to reduce cost associated with errors, increase quality, and trim their bottom line.

4. Associated Knowledge Areas

KA Code	Knowledge Area
602	Business Management, Finance, and Taxation

Outcome #8**1. Outcome Measures**

Business owners will investigate legal and compliance issues for their business as appropriate to their business goals.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Businesses which are not in compliance with local, state and national regulations and policies risk huge financial penalties, loss in profits, and business failure. Additionally, employees and customers of these businesses may be harmed by the businesses inability to comply with policies and standards. Communities in which these businesses reside risk the negative economic and societal outcomes associated with the behaviors of these businesses. Unfortunately, many small businesses are not educated on the numerous and important business regulations and policies. Education is essential for business success in this area.

What has been done

The Business Development program is a key delivery system in the awareness and education of businesses pertaining to business regulations, policies, permits, etc. The Business Development program has built a strong referral and network system throughout the whole state of Missouri to assist and refer businesses to the proper entity and organization for specific business needs. A new partnership with the state of Missouri allows the Business Development program to use and support the Secretary of State's business portal, which greatly assists small businesses in understanding compliance and regulatory issues.

Results

Small businesses in Missouri which accessed the Business Development programs website and a Specialist were offered education in many compliance and regulatory areas. This equated to a savings both by the businesses, but also to Missouri and communities, as these businesses were safer, more stable and avoided costly penalties assessed for non-compliance. Economic, societal and environmental policies have been explained to small businesses and therefore they worked to understand and stay in compliance with these policies.

4. Associated Knowledge Areas

KA Code	Knowledge Area
607	Consumer Economics
608	Community Resource Planning and Development
602	Business Management, Finance, and Taxation

Outcome #9**1. Outcome Measures**

Business owners will develop a marketing plan as appropriate to their business goals.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Marketing is often described as both an art and a science. A great product or service is worth nothing if it lacks a marketing plan. Small businesses often struggle with marketing, and do not understand their customer, their competitors, their price or their competitive advantage. Educating businesses on the science of marketing increases their marketing return on investment, securing a stronger profit margin.

What has been done

The University of Missouri Extension Business Development program has spent valuable time and energy in creating curriculum, tools, and educational offerings specific to marketing. Various new marketing research tools were added to the program, offering Business Development Specialists the ability to create invaluable market research, demographics, and marketing resources for their customers.

Results

Businesses served by the University of Missouri Extension Business Development program were offered access to market research and demographics that would have been too costly for them to access in the private market. Communities were also offered market research and were assisted in using this research to create economic development plans, and make educated decisions on the future of their communities. Businesses were able to increase sales and government contracts by over 142 million dollars, which is a key indicator of marketing and market research.

4. Associated Knowledge Areas

KA Code	Knowledge Area
603	Market Economics
602	Business Management, Finance, and Taxation
604	Marketing and Distribution Practices

Outcome #10**1. Outcome Measures**

Business owners will commercialize products as appropriate to their business goals.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Innovation and commercialization drives economic development and creates jobs, businesses, and wealth. Businesses who are innovative and are working in the area of research, commercialization and intellectual property, often face obstacles when identifying and securing funding, as well as taking a final product to market. America's future success is dependent on small business innovation and support of research and commercialization.

What has been done

The University of Missouri Extension Business Development program has specific resources available in the commercialization area. The MOFAST effort links University resources (counseling and expertise) to small businesses, entrepreneurs and researchers, significantly increasing the success of their commercialization efforts. A specific area to this program is assisting businesses in accessing federal dollars to fund their research and commercialization. Additionally, researchers are matched with businesses in efforts to spur innovation and successful commercialization and products.

Results

The University of Missouri Extension Business Development program assisted small businesses in applying for over 7 million in federal research funds, and assisting businesses and researchers secure over 2.5 million in funds. Businesses were offered in-depth counseling on research funding, feasibility and market studies, access to capital, and business management.

4. Associated Knowledge Areas

KA Code	Knowledge Area
602	Business Management, Finance, and Taxation
608	Community Resource Planning and Development

Outcome #11**1. Outcome Measures**

Business owners will inform stakeholders of the outcome of their work with the University of Missouri Extension Business Development as appropriate to their business goals.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	0	27

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Missouri businesses which were direct contacts of the University of Missouri Extension Business Development Program can greatly assist in helping others understand the importance of Extension and the positive impacts it has on the Missouri economy and communities. Satisfied contacts that have directly been benefited by our program are essential in educating stakeholders about the program.

What has been done

Businesses and individuals who have accessed the Business Development program and have benefited through the services, are given opportunities to inform and educate the stakeholders of the University of Missouri Extension Business Development program.

Results

Over 30 businesses have reported back to our program that they have made personal contact with various stakeholders in informing them of their success which was made possible by our program. A broader understanding by local, regional, and statewide stakeholders have assisted the program in marketing the services and continuing the financial support of the program.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
602	Business Management, Finance, and Taxation

Outcome #12**1. Outcome Measures**

Number of jobs created.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	165	2445

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Research proves that jobs are the key indicator of economic stability and growth. Job retention and creation is one of the essential elements in economic development. Small businesses employ over 50% of the workforce, while over 80% of new jobs are created by small businesses. Education and assistance to businesses in assisting them with job creation and growth is essential to the economic success of Missouri.

What has been done

Job growth in businesses is assisted through education, specific to marketing, finance, government procurement, management and innovation. Leading measures of increased sales and government procurements positively affect job growth. Additionally, The Business Development program offers educational offerings.

Results

The Business Development program was successful in assisting business to create and retain more than 2000 jobs. This was achieved by assisting businesses with sales, government procurement, human resources management, cost controls, and innovation. These jobs created community wealth, stability and the tax base to support the business and educational infrastructure.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
602	Business Management, Finance, and Taxation

Outcome #13**1. Outcome Measures**

Dollar amount of sales and contracts (in millions).

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	21	142

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

The economic and societal prosperity of Missouri is dependent on Missouri businesses increasing their sales and government contracts. Sales and government contracts directly support jobs and the wealth of families, communities and the state.

What has been done

Businesses are educated in ways to increase sales and government contracts both through educational offerings and one-on-one counseling. Various market research tools, government contracting tools, and management systems are used in educating businesses in sales growth and government procurement.

Results

The University of Missouri Extension Business Development program assisted businesses in securing over 142 million in increased sales and government contracts. This impact is documented through client signatures and then validated through a yearly independent research study. This increase in sales and government contracts had a direct positive impact on Missouri's businesses, economy, society, and educational system.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
602	Business Management, Finance, and Taxation

Outcome #14

1. Outcome Measures

Dollar amount of business investments, including loans and equity approved loans (in millions).

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	6	23

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Access to capital is a key element for the success of business in Missouri. Often accessing capital is very hard for small businesses as they are not adequately educated and prepared to present business plans to funders. Small businesses often fail as they are not adequately funded in their start up and growth phases.

What has been done

The University of Missouri Extension Business Development program has curriculum and counseling tools to assist small businesses in preparing business plans, and identifying possible funders. Additionally Business Development Specialists assist businesses in the business plan areas of finance, marketing, management and innovation.

Results

The Business Development program assisted businesses in accessing over 23 million in capital through loans, investments and equity. These businesses leverage this investment to increase business success and increase jobs, sales and government contracts.

4. Associated Knowledge Areas

KA Code	Knowledge Area
602	Business Management, Finance, and Taxation

Outcome #15

1. Outcome Measures

Number of new businesses started.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2008	20	42

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Small businesses are the economic engine for the state of Missouri, creating over 80% of all new jobs, and creating business opportunities in both rural and urban areas of the state. New businesses need in-depth education to be successful.

What has been done

The Business Development program has curriculum and counseling tools to educate entrepreneurs in their quest to start a new business. A three hour start-up program is offered throughout the state, which is then followed-up with one-on-one counseling to assist entrepreneurs with business planning, funding, and success.

Results

The University of Missouri Extension Business Development program assisted Missourians in starting over 40 businesses. The Business Development program offered these startups in-depth counseling and educational assistance which helped in their business success.

4. Associated Knowledge Areas

KA Code	Knowledge Area
602	Business Management, Finance, and Taxation

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Brief Explanation

As America's economy began to feel the effects of an oncoming recession, the Business Development program was still able to meet and exceed its goals in economic outcomes.As we progress into the FY08 year the constraints of the economy may alter the results for the coming year.

V(I). Planned Program (Evaluation Studies and Data Collection)**1. Evaluation Studies Planned**

- After Only (post program)
- Retrospective (post program)
- Time series (multiple points before and after program)
- Case Study
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Other (Customer satisfaction)

Evaluation Results

The University of Missouri Extension Business Development has a research-based evaluation system which uses post class survey, time elapsed surveys, case studies, client secured impact and personal and electronic interviews. The evaluation system is based on program based evaluations and all aspects of the evaluation program are reviewed by the University of Missouri Institutional Review Board.

The Business Development program evaluates the quality of its programs in the areas of training and counseling. Training is assessed through post class surveys, as well as time series surveys which are sent 12 months following the training. Counseling is evaluated through a post survey to counseling clients. Additionally, a rigorous evaluation system of performance results is used to validate impact through client validation.

Evaluation results for the Business Development training include:

96% of training attendees would recommend the program

The overall rating based on the practicality of the program was a 6.15/7

The overall rating based on instructor ability was a 6.45/7

The overall rating of the program was a 6.36/7

Participants showed an increase of knowledge of 1.2/5

Post-class training resulted in participants:

81% of participants took action after the training

Over 6% of participants received investments after the training and attributed this to the training

Over 12% of participants increased profits after the training and attributed this to the training

Evaluation results for the Business Development counseling include:

98% of counseled clients received prompt attention.

98% of counseled clients stated that the Business Specialist responded to their needs.

96% of counseled clients state that they would recommend our program

The overall counseling rating was a 6.34/7

Evaluation results for key outcomes are included within the quantitative results of the AREERA report.

Key Items of Evaluation

The University of Missouri Extension Business Development Program uses the below key evaluation items:

Outcomes:

Investments

Jobs

Business Started

Increase in Sales

Government Contracts

Research awards

Outputs:

Training: hours, events, attendees

Counseling: hours, counseling sessions, client

Stakeholder education

Audience demographics

Quality:

Overall Rating, Would recommend, Knowledge increase, Prompt Attention, Instructor Rating, Practical training, Instructor rating