

# 2010 West Virginia University Extension Annual Report of Accomplishments and Results

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## I. Report Overview

### 1. Executive Summary

As a land-grant university, West Virginia University was created to help West Virginians make their lives better. To do that, WVU relies on the WVU Extension Service as the "doorway to WVU" in every county. For nearly 100 years, WVU Extension Service has provided research-based, reliable information, education, and problem-solving programs that are timely and relevant. Our roots are deep in West Virginia, where we have a WVU office in each of the state's 55 counties, and we work to meet the needs of both rural and urban residents.

WVU Extension is best known for its strong and historic 4-H program, in which one in every five West Virginia young people (over 80,000) are developing life skills and becoming leaders in their schools and communities. We are a unique collaboration among federal, state, and local governments, private and nonprofit sectors, volunteers, and the national system of land-grant universities. We are a sought-after partner for many state and local agencies who want our expertise because of our community connections and track record of commonsense, research-based solutions.

West Virginians rely on their county WVU Extension agent to deliver educational programs and practical solutions to meet local needs. Local needs are identified by community advisory committees, created by the West Virginia State Code and known as the County Extension Service Committee, and through regular, daily interaction with major stakeholder groups. Examples include: West Virginia Cattleman's Association and other producer and commodity organizations; sister state and federal agencies addressing agriculture and natural resource issues; parents, families, schools, and organizations focused on successful youth development; healthcare and nutrition providers and advocates of healthy lifestyles; sustainable community and economic development experts and champions; firefighters and other first responders; employers focused on safe workplaces; and worker advocates.

WVU Extension agents are also WVU faculty members, having a master's or doctoral degree. They receive support from WVU Extension subject matter specialists and staff located primarily on the WVU campus in Morgantown. These Extension "state specialists" and other faculty from WVU's 13 colleges and schools provide information and current research that result in proven practices taught by WVU Extension agents. While very focused on the needs of local West Virginia communities, the current research and proven practices that undergird all WVU Extension programs are also derived from multistate collaborative work among the nation's 103 land-grant university faculties that are part of the United States Cooperative Extension System.

The regular WVU Extension workforce of 465 county agents, state specialists, and staff is augmented by an additional 1,200 seasonal employees who help deliver our large, statewide summer learning programs. More than 10,000 well-trained volunteers also help design, deliver, evaluate, and improve Extension programs each year. Employees of numerous longtime program partners help in this regard as well: Regional Education Service Agencies (RESA) of the West Virginia Department of Education; West Virginia's Department of Agriculture, its conservation

service, and its development office; county school professionals. the WV Department of Health and Human Resources, WVU Health Sciences, and others.

Many identify with WVU Extension through our 78 educational programs. Some of the most recognized programs are 4-H, Dining with Diabetes, Master Gardeners, Germ City, Firefighter Training, Community Educational Outreach Service, Family Nutrition Program, Energy Express, Soil Testing, Workplace Safety, Pesticide Recertification Training, Character Education, Beef Quality Assurance, Farm Management, Forest Stewardship, and Community Leadership Development.

WVUES offers planned programs in four areas:

Agriculture and Natural Resources agents and specialists work with farmers, landowners, and communities to support local agriculture and encourage wise use of natural resources. We are committed to helping small family farmers find ways to increase their profits. We continue to be the trusted local source for answers to home and garden questions. We're committed to ensuring a safe food supply and working with rural landowners to develop alternative enterprises. In 2010, our agriculture and natural resource programs tallied 89,945 direct contacts, including:

- Global Food Security and Hunger -- 14,184
- Farm Management -- 23,193
- Environmental Stewardship -- 5,058
- Youth Agriculture -- 41,369
- Climate Change -- 75
- Food Safety -- 3,941
- Sustainable Energy -- 2,125

4-H Youth Development professionals and programs provide educational, fun, and safe opportunities for young people to make friends, to learn, and to grow. Positive youth development is achieved through weaving essential elements into 4-H programs that promote independence, generosity, and mastery of new skills, all provided in safe and caring environments. The three primary educational areas of emphasis are healthy lifestyles; science, engineering, and technology; and developing good citizenship skills. Our literacy programs strengthen children's reading skills and promote the benefits of adults and children reading together. In 2010, our 4-H youth development programs tallied 118,805 direct contacts with youth and adults. Of those contacts, 88,289 were non-duplicated youths.

- 4-H Curriculum -- 84,661
- 4-H Camping -- 14,747
- Literacy -- 7,732
- Global Education -- 6,694
- Reaching the Underserved -- 4,971

Families and Health faculty and paraprofessionals help families thrive by providing research-based knowledge, skills, and resources for healthier lifestyle choices. Our nutrition and health education programs teach individuals and families ways to improve their diets by selecting and preparing healthier foods. Through education, we encourage healthy lifestyle choices and the benefits of being physically active. Our family resource management programs help young people and adults understand successful ways to save, spend, and manage resources. We provide education about food preservation, handling, storage, and safety. Adults working with, caring for or parenting young children receive education and materials about developmentally appropriate practices for establishing nurturing environments in which children grow and

develop successfully. Our faculty members work with adults to build leadership and interpersonal skills and provide an ongoing avenue for continued learning and global community involvement. In 2010, family and health programs tallied 291,761 direct contacts including youth and adults.

- Childhood Obesity (Nutrition and Health) -- 189,151
- Strengthening Families -- 102,610

Community Economic and Workforce Development experts help to promote collaborative community projects and build the capacities of local businesses and governments. We deliver programs that build local leadership capacity; expand and attract employment; improve retail opportunities; and provide information and recommendations on downtown revitalization, tourism, and other aspects of community, economic, and workforce development. In addition, we are helping West Virginia individuals and communities prepare for and cope with disasters. In 2010, our community development programs tallied 38,182 direct contacts.

- Workforce Development -- 13,325
- Adult Leadership Development -- 8,531
- Community Development -- 3,473
- Culture and Heritage -- 5,995

WVU Extension also operates WVU Jackson's Mill, located near Weston, the site of the nation's first state 4-H camp and the current "home" of many state youth camps, heritage and nature education programs, and learning opportunities for people of all ages. The Mill is the new location for WVU's Fire Service Extension and State Fire Academy, a place where emergency responders receive training that meets national standards.

Funding: State funding for WVU Extension Service is currently \$12.24 million (36% of total budget). WVU Extension uses that \$12.24 million to leverage other funds, for a total annual operating budget of approximately \$34 million. We raise 36 percent of our total budget through competitive grants, fees, and individual, foundation, and corporate gifts. County partners (largely county commissions and boards of education) contribute approximately 13 percent of our total budget. The remaining 15 percent of the budget consists of federal (U.S. Department of Agriculture) funds, primarily 3(b)(c) and EFNEP. Grants and fees have increased from about \$2 million in 1995 to just under \$13 million in 2010.

A few facts: WVU Extension

- Date of founding: 1915
- Total direct client contacts, both youths and adults in 2010: 536,200
- Total direct and indirect client contacts, both youths and adults in 2010: 3,848,088
- Number of county agents: 2010: 95
- Number of state specialists: 2010: 64
- Number of youths in 4-H programs in 2010, including camps: 88,289
- Number of youths attending 4-H camps in 2010: 12,699
- Number of volunteers in 2010: 12,727

Future Plans: For the future, WVU Extension Service is positioning resources and programming in key areas as we anticipate and respond to current and emerging statewide needs.

1. West Virginia is home to one of the largest Marcellus Shale natural gas deposits on the East Coast. As landowners and community members began asking questions of WVU Extension agents about this topic, we began our work to learn more, gather experts and create the resources to respond. The WVU Extension Service's Agriculture and Natural Resources Program

Unit formed a team to develop educational programming about natural gas exploration in the Marcellus shale. Team members include county extension agents, WVU geologists and water quality experts, representatives of the DEP, and representatives from industry, community and environmental groups. Initial funding for the educational programs is provided by Chesapeake Energy, EQT, and Dominion. The growth and development of the Marcellus shale in West Virginia creates both opportunities and concerns for public and private landowners, local communities, and local and state governments. In 2013, the expertise and knowledge that the citizens of West Virginia need to make informed decisions about the oil and natural gas industry will be formalized into educational programs and educational resources.

2. Science, Technology, Engineering, and Math (STEM) will be developed and promoted within our 4-H and Youth Development program over the next several years. This year, WVU Extension has hired a new STEM specialist and he has received funding to develop STEM toolkits to be used in each of the 55 counties in WV. These toolkits will give youth the opportunity to do hands-on activities with the STEM disciplines and ultimately increase interest in the study of science and science careers. Plans are being made to incorporate STEM activities into all of our youth programs including camps, clubs, youth agriculture and healthy lifestyle programs.

3. Plans are being made to continue the work begun this year, to develop and expand WVU Extension's outreach to Guanajuato, Mexico. As a result of the WV-Guanajuato 4-H training & linkages project, the University of Guanajuato in Mexico invited WVU Extension Service to bring a delegation of 20 participants to present and engage in a colloquium and relationship-building among educators and high school students representing West Virginia, Pennsylvania, and Guanajuato. This program was funded by the Director of Extension, University of Guanajuato, Mexico, the 4-H Extension Agent, University of Guanajuato, Mexico, ICA Extension Professionals, the Center for Patagonia Ecosystem Research, Patagonia Learning Adventures, Families in Villa Ortega, Patagonia, Chile, IFYE National Conference Planning Committee, and WVU.

4. WVU Extension continues to develop its reporting system which will allow faculty and staff to keep accurate data on its work and the audiences who benefit from its programs. This year, the content of the system has been formed and we are in the process of testing it. Next year, we expect that faculty and staff will use the system and that our data will be greatly improved. By 2013, we are hoping that the work time that faculty use to report in the promotion and tenure system will be greatly reduced and that more time can be devoted to implementing programs and serving West Virginians.

5. Cyberbullying is hurting kids and their families. Seeing that damage in her own community. A WVU Extension 4-H agent in the Wyoming County WVU Extension Service Office, led a multicounty team that developed "Who Is Hiding Behind That Screen?" The program will be implemented on both state and national levels.

6. The WVU Extension Service's Small Farm Center is showing farmers how to retain more of the \$7 billion West Virginians spend on food each year. Extension educators are helping farmers see their products as "food for customers" rather than as "crops for sale. Extension agents remain the backbone of local farmers markets. And the local foods movement is making farmers markets more prevalent and more profitable. The annual Extension-led Small Farm Conference introduces farmers to new methods for meeting consumers' needs and for creating food pathways to greater profits.

7. The statistics for West Virginia's ATV-related deaths and injuries are alarming - and WVU Extension has a program that is tackling the problem through a curriculum and awareness programs to educate families and youths on safety measures for riding ATVs. The curriculum, the first national 4-H youth curriculum for ATV safety, will provide research, education, and service to the people of West Virginia and will be distributed nationally.

8. Helping West Virginians improve their health takes more than just an apple a day, and WVU Extension works every day to address diabetes and obesity and promote healthy lifestyles. One recently launched program combines many of the expert educational aspects of our health programs through an online wellness initiative. The "Wild, Wonderful Wellness Challenge" is a year-long program which

includes a weekly wellness challenge that is simple and has measurable outcomes. The focus of the program is on health and wellness rather than on dieting or weight loss. The website includes recipes, tips, and blogs to help motivate and update those who log onto the site. The site is led by WVU Extension's new childhood obesity specialist.

**Total Actual Amount of professional FTEs/SYs for this State**

| Year: 2010 | Extension |      | Research |      |
|------------|-----------|------|----------|------|
|            | 1862      | 1890 | 1862     | 1890 |
| Plan       | 166.0     | 0.0  | 0.0      | 0.0  |
| Actual     | 163.0     | 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 University Panel
- External Non-University Panel
- Combined External and Internal University Panel
- Combined External and Internal University External Non-University Panel
- Expert Peer Review
- Other

**2. Brief Explanation**

Merit review was done in the following way: Each unit director (agriculture and natural resources, 4-H youth development, families and health and community workforce education and development) reviews the data collected throughout the reporting system each year and approves a program summary, written by the program team leaders and other specialists with assistance from the evaluation specialist. That summary report is used to report to NIFA and USDA. Each program area team develops a plan of work that specialists and agents use to plan their own plans of work. Membership in teams is optional, but most faculty members join one or more teams. Membership helps them develop educational programs and do evaluation and research. The unit directors, at their weekly leadership meeting, discuss the direction of WVU Extension programs, develop plans of work, and collaborate with each other on mutually achievable goals and objectives. This year, WVU ES has been creating a new reporting system that will allow Extension educators to report outputs and outcomes based on their plan of work. Objectives and indicators have been developed for each of the major areas of WVU-ES work. These coorespond to the planned programs underwhich we will report in 2012 and beyond. This new system will allow WVU ES to have a more accurate picture of the work that is being done in WV and be better able to plan for the future. It is also hoped that the amount of time spent on promotion and tenure activities each year will be greatly reduced.

### III. Stakeholder Input

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

- Use of media to announce public meetings and listening sessions
- Targeted invitation to traditional stakeholder groups
- Targeted invitation to non-traditional stakeholder groups
- Targeted invitation to traditional stakeholder individuals
- Targeted invitation to non-traditional stakeholder individuals
- Targeted invitation to selected individuals from general public
- 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
- Survey of selected individuals from the general public
- Other

#### Brief explanation.

At special events where the public gathers, such as the WVU Day at the Legislature and the West Virginia State Fair, WVU Extension has made an effort to gather post-evaluative information on stakeholders satisfaction. We also gather evaluative information at most educational events all year round. This information not only tells us if participants are satisfied, but also whether and how participants have benefited. The results of these evaluative efforts are generally positive, but critical comments are always used to inform program improvement.

This year, we have also analyzed and interpreted the data provided to us by the Extension Brand Value Research. Three hundred and sixty five individuals were interviewed in West Virginia. Participants were members of a representative online panel and included a demographic mix of consumers. This information has helped us understand the issues surrounding the awareness and knowledge of citizens of West Virginia about Extension's work. Overall, West Virginia's statistics are considerably higher than the national average. For instance, 61 percent of West Virginians have heard about their state's Extension program as compared to 37 percent nationally. Additionally, 11 percent said that they have used WVU Extension in the past 12 months, as compared to 5 percent nationally. Of the programs of WVU-ES, 4-H is by the far the best known.

#### 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
- Open Listening Sessions
- Needs Assessments
- Use Surveys
- Other

**Brief explanation.**

A member of the administrative staff generally attends all Extension service committees in each of our 55 counties. These committees are made up of community members including local government officials, members of the Board of Education, as well as the Extension agent. Members of our staff also attend regular meetings of associations connected with Extension such as the Farm Bureau, professional associations such as cattleman, oil and gas, poultry, etc. WVU-ES agents are fully involved in the CEOS (Community Education Outreach Service) formerly our Extension homemaker group. These women are actively involved in leadership roles in the community and directly influence Extension programming. Each of our unit directors has identified stakeholders who have interest in the work of WVU-ES. The following chart lists the stakeholder organizations that we will focus our inquiry on:

- Public Officials
- Legislators
- County Extension Service Committee Members
- State Treasurer's Office
- Board of Education Members
- County Commission Members
- Professional Organizations
- Farm Bureau Members
- Cattleman Association
- Poultry Association
- Oil and Gas Association
- Conservation Association
- Fairs and Festival Association
- Firefighter Association
- AFL-CIO
- Extension-related groups
- 4-H Leaders
- Collegiate 4-H members
- CEOS members/leaders
- Master Gardeners
- Visiting Committee
- Development Council Members
- Other
- WVU faculty/administrators

**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
- Survey of traditional Stakeholder groups
- Meeting with traditional Stakeholder individuals
- Survey of traditional Stakeholder individuals
- Meeting with the general public (open meeting advertised to all)
- 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
- Meeting with invited selected individuals from the general public
- Survey of selected individuals from the general public
- Other

**Brief explanation.**

Each week, the WVUES leadership team (Associate Provost, Director of Communications, Assistant Director of Resources, Director of Operations, Finance Director, and Unit Directors meet to discuss the feedback that they have received from multiple sources. This information is used to improve operations and programming and often to address problems raised by our constituency. The budget is often a focus of discussion and decisions are made in response to stakeholder feedback. Assessment data is processed at the state level for most programs. Currently, there are about 15 program teams that meet quarterly or as needed. These teams, consisting of agents, specialists, and upper-level staff have the responsibility of making recommendations to WVUES administration about new programming based on emerging needs in the state. Membership in the teams is fairly consistent, but members may resign and join other teams, based on their plan of work.

The Associate Provost for Extension and Outreach, David Miller, serves a dual role as representative of the University President to the WV legislature. Mr. Miller regularly meets with legislators and other officials to discuss the work of Extension and how the State of WV can support Extension through state appropriations.

This year we have developed a survey which we will administer to our stakeholder groups. We will gather information about their perceptions of our work and how what we do fits into their organization's mission and goals so that we might serve them and work with them. Questions have been focused on these major themes:

- How does/can Extension address the critical issues of strategic importance to you?
- How does/can Extension address the needs of under-served populations in our state?
- How well does Extension communicate the results of its work to you?
- How can we improve the effectiveness and/or efficiency of our programs?

We plan to use this information to strategically plan for the future. The results of this survey will be reported in next year's Federal report.

### 3. A statement of how the input will be considered

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

#### Brief explanation.

We have used input given us by stakeholders to plan new initiatives for WVU Extension including, but not limited to the following:

1. West Virginia is home to one of the largest Marcellus Shale natural gas deposits on the East Coast. As landowners and community members began asking questions of WVU Extension agents about this topic, we began our work to learn more, gather experts and create the resources to respond. The WVU Extension Service's Agriculture and Natural Resources Program Unit formed a team to develop educational programming about natural gas exploration in the Marcellus shale. Team members include county extension agents, WVU geologists and water quality experts, representatives of the DEP, and representatives from industry, community and environmental groups. Initial funding for the educational programs is provided by Chesapeake Energy, EQT, and Dominion. The growth and development of the Marcellus shale in West Virginia creates both opportunities and concerns for public and private landowners, local communities, and local and state governments. In 2013, the expertise and knowledge that the citizens of West Virginia need to make informed decisions about the oil and natural gas industry will be formalized into educational programs and educational resources.

2. Science, Technology, Engineering, and Math (STEM) will be developed and promoted within our 4-H and Youth Development program over the next several years. This year, WVU Extension has hired a new STEM specialist and he has received funding to develop STEM toolkits to be used in each of the 55 counties in WV. These toolkits will give youth the opportunity to do hands-on activities with the STEM disciplines and ultimately increase interest in the study of science and science careers. Plans are being made to incorporate STEM activities into all of our youth programs including camps, clubs, youth agriculture and healthy lifestyle programs.

3. Plans are being made to continue the work begun this year, to develop and expand WVU Extension's outreach to Guanajuato, Mexico. As a result of the WV-Guanajuato 4-H training & linkages project, the University of Guanajuato in Mexico invited WVU Extension Service to bring a delegation of 20 participants to present and engage in a colloquium and relationship-building among educators and high school students representing West Virginia, Pennsylvania, and Guanajuato. This program was funded by the Director of Extension, University of Guanajuato, Mexico, the 4-H Extension Agent, University of Guanajuato, Mexico, ICA Extension Professionals, the Center for Patagonia Ecosystem Research, Patagonia Learning Adventures, Families in Villa Ortega, Patagonia, Chile, IFYE National Conference Planning Committee, and WVU.

**Brief Explanation of what you learned from your Stakeholders**

1. We learned that we need to pay more attention to our online presence and to take advantage of new technologies and social media opportunities that will allow us to communicate more effectively. This year we have invested considerable time and effort into redoing the WVU Extension website (<http://www.ext.wvu.edu/>). Our new website features short clips about current activities including tips for healthy living, gardening, family relationships, etc. The front page also feature a specialist who offers assistance in his or her area of expertise. We have increased our use of social media. Facebook users can log into a number of WVU-ES groups and learn about upcoming events.
  
2. We learned that we need to focus our nutrition and health programming on preventing childhood obesity because we have one of the highest rates of childhood obesity in the country. This year we have hired two new specialists in the area of childhood obesity and food safety. Through their hiring we have greatly increased our offerings in this area and developed collaborative work with WVU Health Sciences and other state health organizations. We will be participating in an "obesity summit" in the coming year.
  
3. We have heard from our stakeholders about the need for educational enhancement for our youth in the STEM subject areas. To respond to this need, we have hired a new STEM specialist in the 4-H and Youth unit. Although just recently joining WVU-ES, he has already connected with the College of Engineering at WVU and is also connected with scientist in the College of Agriculture. We expect to report great strides in our 4-H STEM program area in next year's report.

**IV. Expenditure Summary**

| <b>1. Total Actual Formula dollars Allocated (prepopulated from C-REEMS)</b> |                       |                 |                    |
|------------------------------------------------------------------------------|-----------------------|-----------------|--------------------|
| <b>Extension</b>                                                             |                       | <b>Research</b> |                    |
| <b>Smith-Lever 3b &amp; 3c</b>                                               | <b>1890 Extension</b> | <b>Hatch</b>    | <b>Evans-Allen</b> |
| 4088825                                                                      | 0                     | 0               | 0                  |

| <b>2. Totalled Actual dollars from Planned Programs Inputs</b> |                                |                       |                 |                    |
|----------------------------------------------------------------|--------------------------------|-----------------------|-----------------|--------------------|
|                                                                | <b>Extension</b>               |                       | <b>Research</b> |                    |
|                                                                | <b>Smith-Lever 3b &amp; 3c</b> | <b>1890 Extension</b> | <b>Hatch</b>    | <b>Evans-Allen</b> |
| <b>Actual Formula</b>                                          | 4088825                        | 0                     | 0               | 0                  |
| <b>Actual Matching</b>                                         | 7336175                        | 0                     | 0               | 0                  |
| <b>Actual All Other</b>                                        | 0                              | 0                     | 0               | 0                  |
| <b>Total Actual Expended</b>                                   | 11425000                       | 0                     | 0               | 0                  |

| <b>3. Amount of Above Actual Formula Dollars Expended which comes from Carryover funds from previous</b> |   |   |   |   |
|----------------------------------------------------------------------------------------------------------|---|---|---|---|
| <b>Carryover</b>                                                                                         | 0 | 0 | 0 | 0 |

**V. Planned Program Table of Content**

| S. No. | PROGRAM NAME                    |
|--------|---------------------------------|
| 1      | Environmental Stewardship       |
| 2      | Adult Leadership Development    |
| 3      | Childhood Obesity               |
| 4      | Farm Management                 |
| 5      | 4-H Curriculum                  |
| 6      | Workforce Development           |
| 7      | Global Education                |
| 8      | Culture and Heritage            |
| 9      | Community Development           |
| 10     | Youth Agriculture               |
| 11     | Global Food Security and Hunger |
| 12     | Literacy                        |
| 13     | Reaching the Underserved        |
| 14     | Strengthening Families          |
| 15     | 4-H Camping Program             |
| 16     | Climate Change                  |
| 17     | Sustainable Energy              |
| 18     | Food Safety                     |

**Add previously unplanned program**

**V(A). Planned Program (Summary)**

**Program # 1**

**1. Name of the Planned Program**

Environmental Stewardship

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

| <b>KA Code</b> | <b>Knowledge Area</b>                                   | <b>%1862 Extension</b> | <b>%1890 Extension</b> | <b>%1862 Research</b> | <b>%1890 Research</b> |
|----------------|---------------------------------------------------------|------------------------|------------------------|-----------------------|-----------------------|
| 102            | Soil, Plant, Water, Nutrient Relationships              | 10%                    |                        |                       |                       |
| 133            | Pollution Prevention and Mitigation                     | 2%                     |                        |                       |                       |
| 205            | Plant Management Systems                                | 2%                     |                        |                       |                       |
| 211            | Insects, Mites, and Other Arthropods Affecting Plants   | 35%                    |                        |                       |                       |
| 212            | Pathogens and Nematodes Affecting Plants                | 35%                    |                        |                       |                       |
| 213            | Weeds Affecting Plants                                  | 2%                     |                        |                       |                       |
| 214            | Vertebrates, Mollusks, and Other Pests Affecting Plants | 2%                     |                        |                       |                       |
| 216            | Integrated Pest Management Systems                      | 10%                    |                        |                       |                       |
| 403            | Waste Disposal, Recycling, and Reuse                    | 2%                     |                        |                       |                       |
|                | <b>Total</b>                                            | 100%                   |                        |                       |                       |

**Add knowledge area**

**V(C). Planned Program (Inputs)**

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

| <b>Year: 2010</b> | <b>Extension</b> |             | <b>Research</b> |             |
|-------------------|------------------|-------------|-----------------|-------------|
|                   | <b>1862</b>      | <b>1890</b> | <b>1862</b>     | <b>1890</b> |
| Plan              | 15.0             | 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    |
| 375000              | 0              | 0              | 0              |
| 1862 Matching       | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 465000              | 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**

West Virginia University Extension Service has a long term commitment with NRCS, Conservation Districts and farmers to bring research and technology to the agriculture community. The Extension Service has historically assisted vegetable crop production, development of IPM for cropland, nutrient management for inclusion in the NRCS 590 standard, and has provided training to farmers on organic and sustainable crop production. This assistance and cooperation has resulted in a better understanding of farmer and agency needs to provide sound and coordinated vegetable production and resource management plans. New demonstrations at the Plant Materials Center in Alderson WV were established in 2010 to evaluate and demonstrate the positive attributes of adding cover crops to cropping systems.

Research has also clearly demonstrated that adding sheep to a cattle operations increases livestock producer income through greater output of livestock products per acre, better utilization of grassland resources and positive soil effects including macro-nutrient cycling and buffering of pH. This year, two CIG research project evaluated the suitability of using sheep and cattle for improved ecological soil conditions. To demonstrate the successes of these two funded projects a series of presentations and posters were conducted.

Pesticide education is an important function of WVU Extension because 1) we have landowners, homeowners, farmers, and commercial applicators using pesticides and they need to do so responsibly and 2) educational recertification credits are required for those holding a pesticide applicators license in WV. This is beneficial for counties with no agricultural agent, those with agricultural agents that don't have the expertise to provide the training, and it avoids agents all over the state spending time to develop similar trainings. A variety of other educational programs also offer pesticide recertification credits. Credits have also been offered at various conferences and meetings for commercial applicators, who need more credits than private applicators.

Researchers at West Virginia University's Tree Fruit Research and Education Center have implemented and supervised a cost-sharing program, funded by the USDA-NRCS, that aims to help local orchardists implement advanced integrated pest management, or IPM. In addition, a plant pathologist at West Virginia University's Tree Fruit Research and Education Center has produced an improved computer program for forecasting infection periods of fire blight, a destructive bacterial disease of apples and pears in the United States and over 40 other countries. Losses from fire blight cost the tree fruit industry in West Virginia thousands of dollars in losses every year and epidemics of the disease can be devastating.

**2. Brief description of the target audience**

Private and commercial pesticide applicators in West Virginia, including growers, farmers, personnel of commercial businesses. Extension personnel, State Association members, the larger agricultural industry, Certified nutrient Management Planners Conservation Agency, and Master Gardeners.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

| 2010          | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|---------------|------------------------|--------------------------|-----------------------|-------------------------|
| <b>Plan</b>   | 4500                   | 29400                    | 900                   | 700                     |
| <b>Actual</b> | 4832                   | 24289                    | 226                   | 185                     |

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

**Patent Applications Submitted**

Year: 2010  
 Plan: 0  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

| 2010          | Extension | Research | Total |
|---------------|-----------|----------|-------|
| <b>Plan</b>   | 0         | 0        |       |
| <b>Actual</b> | 9         | 14       | 223   |

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of training activities in environmental stewardship.

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 75     | 91     |

**Output #2**

**Output Measure**

- Number of educational materials in environmental stewardship created or updated

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 150           | 355           |

**Output #3**

**Output Measure**

- Number of educational materials about environmental stewardship distributed

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 2200          | 0             |

**Output #4**

**Output Measure**

- Number of people receiving educational materials about environmental stewardship.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 2200          | 28000         |

**Output #5**

**Output Measure**

- Number of new grants and contracts supporting initiatives in environmental stewardship.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 3             | 1             |

**Output #6**

**Output Measure**

- Number of monitor activities for insects and diseases

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 5             | 0             |

**Output #7**

**Output Measure**

- Number of pesticide recommendations given to clients

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 1025          | 0             |

**Output #8**

**Output Measure**

- Number of plant specimens diagnosed for diseases, insects, and insect infestation or damage

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 1040          | 0             |

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME                                                                                    |
|--------|-------------------------------------------------------------------------------------------------|
| 1      | Number of participants who changed their attitudes or opinions about environmental stewardship. |
| 2      | Number of participants who improved a skill related to environmental stewardship.               |
| 3      | Number of participants who adopt a skill related to environmental stewardship                   |
| 4      | Number of participants who changed a habit or procedure related to environmental stewardship.   |
| 5      | Number of groups or organizations that collaborated with environmental stewardship initiatives. |
| 6      | Number of changes in social conditions due to Extension's efforts in environmental stewardship. |

**Add Cross-cutting Outcome/Impact Statement or Unintended or Previously Unknown Outcome Measure**

**Outcome #1**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants who changed their attitudes or opinions about environmental stewardship.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure  
 Change in Action Outcome Measure  
 Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 900                 | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

**Outcome #2**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants who improved a skill related to environmental stewardship.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 1800                | 4349   |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Farmers in WV need assistance in reducing erosion, improving nutrient management, protecting soil quality, and using of integrated pest management on cropland. A critical element of these plans is to insure correct timing and accepted methods of cover crop production to improve nutrient cycling, minimize the loss of nutrients to ground or surface water, and improve irrigation water management and soil quality.

**What has been done**

WVU Extension Service has trained farmers on organic and sustainable crop production. This year, WVU Extension has offered programs centered around practices that capture and sequester carbon on farms, offered grazing workshops, workshops on commercial applications, principles of composting, and soil fertility management, to name a few.

**Results**

Participants gained skills in the fundamentals of nutrient management including: 1) analyzing field soil organic matter, adding sheep to improve nutrient cycling, increasing pasture productivity and profitability, and adopting nutrient management principles in order to save fertilizer and increase forage production.

**4. Associated Knowledge Areas**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 133 - Pollution Prevention and Mitigation
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 214 - Vertebrates, Mollusks, and Other Pests Affecting Plants
- 216 - Integrated Pest Management Systems
- 403 - Waste Disposal, Recycling, and Reuse

**Outcome #3**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants who adopt a skill related to environmental stewardship

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 3400                | 2416   |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Integrated Pest Management is a sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks. Losses from fire blight cost the tree fruit industry in WV thousands of dollars in losses every year and epidemics of the disease can be devastating.

**What has been done**

Certified planners worked with individual land owners to develop site specific nutrient management plans.

Researchers at WVU's Tree Fruit Research and Education Center have implemented and supervised a cost-sharing program, funded by the USDA-NRC, that aims to help local orchardist implement advanced integrated pest management plans. A plant pathologist at WVU has produced an improved computer program for forecasting infection periods of fire blight.

**Results**

West Virginia orchardists have taken advantage of the USDA cost-share program to implement reduced-risk pest management practices and develop and implement site specific nutrient management plans.

**4. Associated Knowledge Areas**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 133 - Pollution Prevention and Mitigation

- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 214 - Vertebrates, Mollusks, and Other Pests Affecting Plants
- 216 - Integrated Pest Management Systems
- 403 - Waste Disposal, Recycling, and Reuse

#### **Outcome #4**

##### **1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants who changed a habit or procedure related to environmental stewardship.

##### **2. Associated Institution Types**

- 1862 Extension

##### **3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

##### **3b. Quantitative Outcome**

| <b>Year</b> | <b>Quantitative Target</b> | <b>Actual</b> |
|-------------|----------------------------|---------------|
| 2010        | 350                        | 10            |

##### **3c. Qualitative Outcome or Impact Statement**

###### **Issue (Who cares and Why)**

Pesticide education is an important function of WVU Extension because 1) we have landowners, homeowners, farmers, and commercial applicators using pesticides and they need to do so responsibly and 2) educational recertification credits are required for those holding a pesticide applicators license.

###### **What has been done**

Three programs were targeted to commercial applicators including: right-of-way workers, aquatic, and forestry, and these were approved for recertification credits by 10 states. IPM sessions were also taught by a representative of Dow Chemical, ArborChem (pesticide manufacturer), Alligare (pesticide manufacturer and distributor) and a WVU Specialist.

###### **Results**

Certified planners continued to earn educational credits this year and as a result, 10 individuals received Nutrient Management Consultant certificates in West Virginia.

#### 4. Associated Knowledge Areas

- 102 - Soil, Plant, Water, Nutrient Relationships
- 133 - Pollution Prevention and Mitigation
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 214 - Vertebrates, Mollusks, and Other Pests Affecting Plants
- 216 - Integrated Pest Management Systems
- 403 - Waste Disposal, Recycling, and Reuse

#### Outcome #5

##### 1. Outcome Measures

- Not Reporting on this Outcome Measure

Number of groups or organizations that collaborated with environmental stewardship initiatives.

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

##### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 65                  | 1      |

##### 3c. Qualitative Outcome or Impact Statement

###### **Issue (Who cares and Why)**

West Virginia University Extension Service has a long term commitment with NRCS, Conservation Districts and farmers to bring research and technology to the agriculture community. NRCS has committed technical and financial assistance for vegetable and other producers to develop voluntary conservation plans. A critical element of these plans is to improve nutrient cycling, minimize the loss of nutrients to ground or surface water, and improve irrigation water management and soil quality.

###### **What has been done**

A WVU-ES specialist was instrumental in changing WV Nutrient Management Certification Advisory Committee in West Virginia. The WVU-ES specialist organized all the Continuing

Education Credit workshops for certified nutrient management planners and also organized the fundamentals workshop for new professionals wanting to become a certified Nutrient Management planner, and to serve as the Proctor for the Nutrient Management Certification Exam.

#### Results

The Nutrient Management Certification Advisory Committee in West Virginia successfully offered Continuing Education Credit workshops for certified nutrient management planners as well as the fundamentals workshop for new professionals wanting to become a certified Nutrient Management planner, and to serve as the Proctor for the Nutrient Management Certification Exam.

#### 4. Associated Knowledge Areas

- 102 - Soil, Plant, Water, Nutrient Relationships
- 133 - Pollution Prevention and Mitigation
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 214 - Vertebrates, Mollusks, and Other Pests Affecting Plants
- 216 - Integrated Pest Management Systems
- 403 - Waste Disposal, Recycling, and Reuse

#### Outcome #6

##### 1. Outcome Measures

- Not Reporting on this Outcome Measure

Number of changes in social conditions due to Extension's efforts in environmental stewardship.

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

##### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 18                  | 0      |

##### 3c. Qualitative Outcome or Impact Statement

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

**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.)
- Other (USDA Farm Bill Programs)

**Brief Explanation**

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

**(OPTIONAL SECTION)**

**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.
- Comparison between locales where the program operates and sites without program intervention
- Other

## **Evaluation Results**

Six new training video clips were produced for the 2010 environmental stewardship program. These were edited into a 2 hour and 15 minute program. It was then reproduced on two DVD's and sent to each county along with a pretest/posttest and evaluation. The results were very favorable and the video was used in each county, with a total audience of approximately 450.

## **Key Items of Evaluation**

**V(A). Planned Program (Summary)**

**Program # 2**

**1. Name of the Planned Program**

Adult Leadership 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 |
|---------|-----------------------------------------------------|-----------------|-----------------|----------------|----------------|
| 102     | Soil, Plant, Water, Nutrient Relationships          | 10%             |                 |                |                |
| 802     | Human Development and Family Well-Being             | 50%             |                 |                |                |
| 805     | Community Institutions, Health, and Social Services | 30%             |                 |                |                |
| 806     | Youth Development                                   | 10%             |                 |                |                |
|         | <b>Total</b>                                        | 100%            |                 |                |                |

Add knowledge area

**V(C). Planned Program (Inputs)**

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

| Year: 2010 | Extension |      | Research |      |
|------------|-----------|------|----------|------|
|            | 1862      | 1890 | 1862     | 1890 |
| Plan       | 2.0       | 0.0  | 0.0      | 0.0  |
| Actual     | 5.0       | 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    |
| 50000               | 0              | 0              | 0              |
| 1862 Matching       | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 97500               | 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 goals of the adult leadership planned program include: 1) to develop the reputation of the Extension Service as a credible provider of leadership development education; 2) to increase knowledge and awareness of Extension professionals, community groups and individuals of the value and importance of enhanced leadership skills; 3) to prepare people to assume leadership roles in their communities, and make existing and emerging leaders more effective in what they do; 4) to strengthen individuals and families through continuing education, leadership development and community involvement for the betterment of all; 5) to strengthen the faculty and staff skills, knowledge and techniques to develop an effective volunteer management program; 6) to increase volunteer leadership skills through participation in WVU-ES programs; and to train and involve Master Gardeners in educational programs, community service, and leadership development.

Activities include training Extension faculty and adult volunteers in regional trainings; training CEOS adult volunteers in public speaking and other leadership techniques; training community volunteer managers in the basics of effective management of volunteer programs; conducting team leadership and youth/adult partnership conferences; conducting one session on leadership resources at the Extension professional development day each year; participating in other leadership professional development opportunities; partnering with other leadership organizations in West Virginia; holding leadership workshops for West Virginia citizens; providing 30 hours of Master Gardener (MG) classes for every trained MG; managing MG volunteer activities and recognizing their service; providing leadership development and other advanced MG training.

**2. Brief description of the target audience**

The primary audience includes CEOS members, Master Gardner and Master Naturalist members, community members, state and local officials, and WVU Extension professionals.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

| 2010          | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|---------------|------------------------|--------------------------|-----------------------|-------------------------|
| <b>Plan</b>   | 15000                  | 66000                    | 2000                  | 8000                    |
| <b>Actual</b> | 7858                   | 277863                   | 673                   | 42493                   |

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

**Patent Applications Submitted**

Year: 2010  
 Plan: 0  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

|               |                  |                 |              |
|---------------|------------------|-----------------|--------------|
| <b>2010</b>   | <b>Extension</b> | <b>Research</b> | <b>Total</b> |
| <b>Plan</b>   | 1                | 0               |              |
| <b>Actual</b> | 0                | 0               | 0            |

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of training activities in adult leadership development

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 500           | 187           |

**Output #2**

**Output Measure**

- Number of educational materials created or updated.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 101           | 205           |

**Output #3**

**Output Measure**

- Number of educational materials about adult leadership development distributed.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 15000         | 17000         |

**Output #4**

**Output Measure**

- Number of outside organizations or groups participating in adult leadership initiatives

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 200           | 35            |

**Output #5**

**Output Measure**

- Number of new grants and contracts supporting adult leadership initiatives

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 20     | 7      |

**Output #6**

**Output Measure**

- Number of pounds of vegetables donated to the hungry by Master Gardener programs

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 3000   | 0      |

**Output #7**

**Output Measure**

- Amount of dollars secured in new funds to support adult leadership programs

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 100000 | 0      |

**Output #8**

**Output Measure**

- Number of volunteer hours contributed by adult leadership development participants

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 491500 | 125728 |

**Output #9**

**Output Measure**

- Number of West Virginians who volunteered their time because of their involvement in adult leadership development initiatives

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 6500   | 7858   |

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME                                                                                                   |
|--------|----------------------------------------------------------------------------------------------------------------|
| 1      | Number of participants in adult leadership program initiatives who increased their knowledge                   |
| 2      | Number of participants in adult leadership development initiatives who adopted a skill                         |
| 3      | Number of people and organizations that collaborated with adult leadership development initiatives.            |
| 4      | Number of new adult leadership initiatives resulting from this program                                         |
| 5      | Amount of money raised by program participants to support initiatives in adult leadership development          |
| 6      | Number of counties whose economic conditions have changed because of adult leadership development initiatives. |
| 7      | Number of participants who improved a skill                                                                    |
| 8      | Number of economic conditions that have been improved because of adult leadership activities.                  |

**Add Cross-cutting Outcome/Impact Statement or Unintended or Previously Unknown Outcome Measure**

**Outcome #1**

**1. Outcome Measures**

Not Reporting on this Outcome Measure

Number of participants in adult leadership program initiatives who increased their knowledge

**2. Associated Institution Types**

1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 8000                | 7600   |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

It is part of the mission of WVU-ES to develop citizens to assume leadership roles in their communities and make existing and emerging leaders more effective. To do this county faculty and staff must also strengthen their skills, knowledge and techniques to develop an effective volunteer management program.

**What has been done**

4-H volunteer leaders received training on "Parts of an Effective meeting," "Ages and Stages," "Positive Relationships with a Caring Adult," "4-H Skill-a-thons," "What makes A Good 4-H Club," "New Leader Training," and Best Financial Practices Training.

Master Gardener participants received training in botany, propagation, soil science, plant pathology, entomology, vegetable and herb culture, and tree and small fruit culture.

**Results**

4-H Leaders gained knowledge about managing 4-H groups and about best financial practices for their 4-H organizations.

Master Gardener participants gained knowledge of where their food came from and about botany, propagation, soil science, plant pathology, entomology, vegetable and herb culture, and tree and small fruit culture.

**4. Associated Knowledge Areas**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 802 - Human Development and Family Well-Being
- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development

**Outcome #2**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants in adult leadership development initiatives who adopted a skill

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 2500                | 850    |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

It is part of the mission of WVU-ES to develop citizens to assume leadership roles in their communities and make existing and emerging leaders more effective. To do this county faculty and staff must also strengthen their skills, knowledge and techniques to develop an effective volunteer management program.

**What has been done**

Activities include training volunteers in leadership techniques; training community volunteer managers in the basics of effective management of volunteer programs; conducting team leadership and youth/adult partnership conferences; partnering with other leadership organizations in West Virginia; providing 30 hours of Master Gardener (MG) classes for every trained MG; managing MG volunteer activities and recognizing their service; providing leadership development and other advanced MG training.

**Results**

\* 4-H camp counselors completed the required 4 hours of face-to-face training and 4 hours of additional training.

\* 4-H club leaders turned in required forms, adopted by-laws and constitutions, and held fundraisers.

\* Hancock CEOS County Council brought their program into line with WVU-ES financial best

practices and have decided to have one county-wide club instead of several small ones.  
\* 175 MG participants became certified Master Gardener Volunteers and donated a minimum of 30 hours of volunteer time to their community. Other MG participants maintained the title of Certified Master Gardener by attending a minimum of 6 hours of educational training and serving a minimum of 12 hours of volunteer time per year.

**4. Associated Knowledge Areas**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 802 - Human Development and Family Well-Being
- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development

**Outcome #3**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of people and organizations that collaborated with adult leadership development initiatives.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 105                 | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 802 - Human Development and Family Well-Being

- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development

**Outcome #4**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of new adult leadership initiatives resulting from this program

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 5                   | 3      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

WV citizens are trained to be leaders through the 4-H, CEOS, and Master Gardner programs and each program monitors how trainees use their skills in the community. Success of adult leadership programs are measured by change to organizations and county groups.

**What has been done**

WVU Extension provided leadership development for CEOS groups, community groups, and Master Gardner. As part of this training, participants gain skills in recruiting and developing their own leadership.

**Results**

- \* In one county, CEOS members doubled their enrollment.
- \* In one county, a new Master Gardener Association was founded which has sparked a lot of networking. The association has 35 new member/volunteers.
- \* In one county, the Extension Service Committee helped set the upcoming budgets of the Board of Education and the County Commission.

**4. Associated Knowledge Areas**

- 102 - Soil, Plant, Water, Nutrient Relationships

- 802 - Human Development and Family Well-Being
- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development

**Outcome #5**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Amount of money raised by program participants to support initiatives in adult leadership development

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 6000                | 41000  |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 802 - Human Development and Family Well-Being
- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development

**Outcome #6**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of counties whose economic conditions have changed because of adult leadership development initiatives.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 30                  | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 802 - Human Development and Family Well-Being
- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development

**Outcome #7**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants who improved a skill

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | {No Data Entered}   | 4300   |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

It is part of the mission of WVU-ES to develop citizens to assume leadership roles in their communities and make existing and emerging leaders more effective. To do this county faculty and staff must also strengthen their skills, knowledge and techniques to develop an effective volunteer management program.

**What has been done**

Activities include training volunteers in leadership techniques; training community volunteer managers in the basics of effective management of volunteer programs; conducting team leadership and youth/adult partnership conferences; partnering with other leadership organizations in West Virginia; providing 30 hours of Master Gardener (MG) classes for every trained MG; managing MG volunteer activities and recognizing their service; providing leadership development and other advanced MG training.

**Results**

- \* 4-H Leaders gained skills in working with young children and implementing a Cloverbud program.
- \* Low-income participants gained skills related to being successful in the workplace such as interviewing for a job, beginning a community partnership and serving in leadership roles.
- \* Beginner gardeners gained skills in planting their own food and preparing garden and lawns for fall.
- \* Senior adult participants learned basic computer skills including creating and formatting documents and setting up an e-mail account.
- \* Local YMCA staff gained skills in positive discipline techniques, sexual harassment prevention, child abuse prevention, and professionalism.

**4. Associated Knowledge Areas**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 802 - Human Development and Family Well-Being
- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development

**Outcome #8**

**1. Outcome Measures**

Not Reporting on this Outcome Measure

Number of economic conditions that have been improved because of adult leadership activities.

**2. Associated Institution Types**

1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | {No Data Entered}   | 3      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Adult leadership training programs in West Virginia should lead to more more adults volunteering time to their communities. As a result a greater number of social and economic needs will be met.

**What has been done**

CEOS, Master Gardner, and 4-H leaders all volunteer time to make the state of West Virginia a better place to live. WVU Extension trains leaders and volunteers through these programs.

**Results**

\* In one county, adult volunteer trainees started a recycling program.

\* As a result of Master Gardener activities, 45+ seniors received fresh fruit at least once in July and August.

\* West Virginia volunteers raised \$41,400.00 to help citizens in need.

**4. Associated Knowledge Areas**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 802 - Human Development and Family Well-Being
- 805 - Community Institutions, Health, and Social Services

- 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.)
- Other

### Brief Explanation

This year, West Virginia suffered economic downturn, although maybe not as severe as other states. The mining accident in WV where 29 miners lost their lives, did affect programming because resources were spent on helping citizens adjust to the tragedy. Volunteer efforts went toward helping the victims.

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

### (OPTIONAL SECTION)

### 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.
- Comparison between locales where the program operates and sites without program intervention
- Other

**Evaluation Results**

30 percent of the Master Gardeners increased their knowledge of botany and gardening.

Sixteen individuals successfully completed the class portion of the Master Gardener program and are now doing their volunteer service to be certified.

**Key Items of Evaluation**

**V(A). Planned Program (Summary)**

**Program # 3**

**1. Name of the Planned Program**

Childhood Obesity

**V(B). Program Knowledge Area(s)**

1. Program Knowledge Areas and Percentage

| KA Code | Knowledge Area                                                   | %1862 Extension | %1890 Extension | %1862 Research | %1890 Research |
|---------|------------------------------------------------------------------|-----------------|-----------------|----------------|----------------|
| 702     | Requirements and Function of Nutrients and Other Food Components | 10%             |                 |                |                |
| 703     | Nutrition Education and Behavior                                 | 30%             |                 |                |                |
| 724     | Healthy Lifestyle                                                | 30%             |                 |                |                |
| 801     | Individual and Family Resource Management                        | 10%             |                 |                |                |
| 802     | Human Development and Family Well-Being                          | 20%             |                 |                |                |
|         | <b>Total</b>                                                     | 100%            |                 |                |                |

Add knowledge area

**V(C). Planned Program (Inputs)**

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

| Year: 2010 | Extension |      | Research |      |
|------------|-----------|------|----------|------|
|            | 1862      | 1890 | 1862     | 1890 |
| Plan       | 14.0      | 0.0  | 0.0      | 0.0  |
| Actual     | 25.0      | 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    |
| 375000              | 0              | 0              | 0              |
| 1862 Matching       | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 737500              | 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 Adult Family Nutrition Program teaches low-income families food and nutrition techniques and healthy practices by using the USDA's MyPyramid. The program helps participants prepare balanced meals, improve food safety, foster food security, enhance food consumerism, read food labels, and increase physical activity.

The Youth Family Nutrition Program includes nine educational sessions that normally occur during a day or overnight camping experience. Key messages focus on basic nutrition & physical activity.

4-H Health Initiative- 4-H Health Officers are trained and supported to lead motivational, fun club activities. Standard curriculum includes: 1) health messages and hands on activities; 2) meaningful 4-H Health Officer leadership roles; 3) reinforcement of key health messages; and 4) involvement of faculty, staff, youth, parents, and volunteers.

The Heart Health program improves the ability of women in West Virginia to: 1) modify health habits to reduce chronic disease risks; 2) assess personal behaviors; 3) talk to a health care providers; 5) recognize symptoms of heart attack and stroke and respond appropriately; 6) access community health resources.

Love Your Heart Talks uses a curriculum developed especially for W.Va. women. In addition to workshops, materials and consultation are provided to Extension agents in conducting their community presentations.

Camp NEW helps youth and their parents identify and practice lifestyle changes. The program consisted of a two-week summer residency program for children and their parents; developmentally appropriate activities; groups counseling; and a structured, 12-month follow-up intervention.

Community Education Outreach Service (CEOS) Health Motivator-- The Health Motivator program increases physical activity knowledge and behaviors among CEOS club members who are predominantly older women. Health Motivators lead health activities and motivate club participants to practice healthy behaviors.

The Taking Charge program increases the capacity of informal and formal rural community networks to motivate older adults to self-manage chronic conditions, improve healthy lifestyles, and enhance their independence. Seniors receive targeted messages on physical activity, eating habits, and the prevention chronic diseases and falls.

The Diabetes Education program includes Dining with Diabetes and the WV Diabetes Symposium and Workshop. Dining with Diabetes combines clinical testing, self-management, and nutrition education with cooking demonstrations. The symposium reaches faculty and health-care providers from around the state and region.

WV Games for Health utilizes partnerships and collaborations to use exergames as a mode of physical activity. Exergames can be used in many different setting including home, school, community centers, etc., thus overcoming barriers of access to facilities and equipment.

The Maintain Don't Gain program helps participants not gain weight during the holidays. A series of weekly newsletters focus on physical activity, healthy eating, reducing stress, and food safety. The

program is conducted under the umbrella of Healthier Jefferson County but is coordinated by WVU Jefferson County Extension.

5-2-1-0 Health Program is a campaign conducted in 4-H camps in three counties. The 5-2-1-0 campaign stands for: 5 fruits and vegetables a day, 2 hours or less of screen time, 1 hour or more of active play, 0 sugary drinks.

Hands-On Cooking Classes is a program to teach basic cooking skills in order to encourage healthy eating at home. The program covers basic knife and measuring skills, preparing dinners under 500 calories, and preparing holiday foods in a healthy manner.

**2. Brief description of the target audience**

The primary target audience includes: 1) low-resource West Virginia adults and youth; 2) adult West Virginians who have diabetes and their caregivers; 3) healthy older adults, and 4) health care professionals and Extension educators.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

| 2010          | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|---------------|------------------------|--------------------------|-----------------------|-------------------------|
| <b>Plan</b>   | 37000                  | 640000                   | 115000                | 200000                  |
| <b>Actual</b> | 43673                  | 404036                   | 136478                | 872101                  |

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

**Patent Applications Submitted**

Year: 2010  
 Plan: 0  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

| 2010          | Extension | Research | Total |
|---------------|-----------|----------|-------|
| <b>Plan</b>   | 0         | 1        |       |
| <b>Actual</b> | 12        | 7        | 0     |

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of training activities (separate classes held) in nutrition and health.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 7000          | 1159          |

**Output #2**

**Output Measure**

- Number of educational materials in nutrition and health created or updated.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 500           | 12            |

**Output #3**

**Output Measure**

- Number of state and national presentations on nutrition and health

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 12            | 21            |

**Output #4**

**Output Measure**

- Number of educational materials in nutrition and health distributed.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 15000         | 75000         |

**Output #5**

**Output Measure**

- Number of outside organizations collaborating with nutrition and health initiatives.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 250           | 350           |

**Output #6**

**Output Measure**

- Number of new grants and contracts received to support nutrition and health programs

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 41            | 4             |

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME                                                                            |
|--------|-----------------------------------------------------------------------------------------|
| 1      | Number of participants who increased their knowledge of nutrition and health.           |
| 2      | Number of participants who adopted a skill related to nutrition and health.             |
| 3      | Number of participants who changed a habit or procedure related to nutrition and health |
| 4      | Number of West Virginia food handlers who were certified in SafeServ                    |
| 5      | Groups and organizations changed their policies and procedures.                         |

**Add Cross-cutting Outcome/Impact Statement or Unintended or Previously Unknown Outcome Measure**

## **Outcome #1**

### **1. Outcome Measures**

Not Reporting on this Outcome Measure

Number of participants who increased their knowledge of nutrition and health.

### **2. Associated Institution Types**

1862 Extension

### **3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

### **3b. Quantitative Outcome**

| <b>Year</b> | <b>Quantitative Target</b> | <b>Actual</b> |
|-------------|----------------------------|---------------|
| 2010        | 15200                      | 34000         |

### **3c. Qualitative Outcome or Impact Statement**

#### **Issue (Who cares and Why)**

Childhood obesity has reached epidemic proportions in the U.S. and particularly in WV. The Youth Risk Behavior Surveillance Summary for 2007 indicated that 13 percent of US teenagers were obese, but 14.7 percent of WV teens were obese. Another 17 percent are overweight. All WVU Extension childhood obesity and nutrition programs aim toward reducing that rate.

#### **What has been done**

The programs that increase participant knowledge of healthy food behaviors include: the adult and youth family nutrition programs, 4-H Health Initiative, Health Heart, Love Heart Talks, Camp NEW You, Health Motivator, Taking Charge, Diabetes Education, WV Games for Health, Maintain Don't Gain, 5-2-1-0, and Hands on Cooking

#### **Results**

Participants in the child obesity/nutrition programs at WVU Extension increased their knowledge of healthy food groups and how much to eat from each group, including foods that are high in calcium, fiber, carbohydrates, and good fats. They also increased their knowledge of food management techniques such as shopping, reading nutrition fact labels, the plate method, and food safety practices.

### **4. Associated Knowledge Areas**

- 702 - Requirements and Function of Nutrients and Other Food Components
- 703 - Nutrition Education and Behavior

- 724 - Healthy Lifestyle
- 801 - Individual and Family Resource Management
- 802 - Human Development and Family Well-Being

## **Outcome #2**

### **1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants who adopted a skill related to nutrition and health.

### **2. Associated Institution Types**

- 1862 Extension

### **3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

### **3b. Quantitative Outcome**

| <b>Year</b> | <b>Quantitative Target</b> | <b>Actual</b> |
|-------------|----------------------------|---------------|
| 2010        | 1500                       | 15248         |

### **3c. Qualitative Outcome or Impact Statement**

#### **Issue (Who cares and Why)**

Health and nutrition programs for adults not only provide participants with knowledge and skills to improve their own health and wellbeing, they also provide information that they can pass down to younger people in their families and in youth programs.

#### **What has been done**

The Adult Family Nutrition Program teaches food and nutrition by using the USDA's MyPyramid and preparing balanced meals. It improves food safety by using proper food storage, preparation, and handling techniques, fosters food security by ensuring adequate access and availability of local community resources, enhances food consumerism by stretching the monthly food dollar, planning menus, and reading food labels, and increases physical activity by learning new behaviors and increasing time devoted to being active.

#### **Results**

Changes by adults in the Family Nutrition Program include:

- \* 97.4% increased their daily intake of foods from healthy food groups.
- \* decreased by 75% their daily intake of alcohol and increased by 38% their daily intake of fiber.
- \* 82% improved their food management skills by an average of 34%.
- \* 89% improved their nutrition practices by an average of 25%.

#### 4. Associated Knowledge Areas

- 702 - Requirements and Function of Nutrients and Other Food Components
- 703 - Nutrition Education and Behavior
- 724 - Healthy Lifestyle
- 801 - Individual and Family Resource Management
- 802 - Human Development and Family Well-Being

#### Outcome #3

##### 1. Outcome Measures

- Not Reporting on this Outcome Measure

Number of participants who changed a habit or procedure related to nutrition and health

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

##### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 1600                | 389    |

##### 3c. Qualitative Outcome or Impact Statement

###### **Issue (Who cares and Why)**

The goal of the Diabetes Education program is to improve the health of WV people by 1) enhancing the capacity of Extension educators and healthcare partners to impart diabetes education and 2) by increasing knowledge of diabetes and its complications among people with diabetes and their families, and by increasing their ability to manage diabetes.

###### **What has been done**

The WVU Extension Service Diabetes (DwD) education program includes Dining with Diabetes, a community-based education program for adults with diabetes and their families and the WV Diabetes Symposium and Workshop, Bridging the Gap with Education. Dining with Diabetes combines clinical testing, self-management skills, and nutrition education with cooking demonstrations and healthy recipes. The Diabetes Symposium and Workshop reaches Extension faculty and health-care providers from around the state and the region. It brings high-quality speakers to WV to present best practices in diabetes prevention and management and cutting edge research in a 2.5 day symposium.

###### **Results**

Results showed that after participation, DwD participants were more likely to: 1) exercise for 20 minutes or more, 2) eat a greater variety of fruits and vegetables, 3) take medicines as prescribed, 4) check blood sugar levels, 5) eat 5 servings or more of fruits and vegetables, 6) eat 3 servings of dairy products, 7) use canola or olive oil, 8) use herbs or spices in place of salt, 9) consider serving sizes when making meal selections, 10) control consumption of carbohydrates, and 11) use the Nutrition Facts Label to plan meals. On post-test, 48% of participants said they had seen a health care provider for diabetes or made an appointment, 27.4% said that they asked a health care provider for any of the diabetes tests, and 89.5% said that they made healthier food choices.

#### 4. Associated Knowledge Areas

- 702 - Requirements and Function of Nutrients and Other Food Components
- 703 - Nutrition Education and Behavior
- 724 - Healthy Lifestyle
- 801 - Individual and Family Resource Management
- 802 - Human Development and Family Well-Being

#### Outcome #4

##### 1. Outcome Measures

- Not Reporting on this Outcome Measure

Number of West Virginia food handlers who were certified in SafeServ

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

##### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 90                  | 0      |

##### 3c. Qualitative Outcome or Impact Statement

**Issue (Who cares and Why)**

**What has been done**

**Results**

#### 4. Associated Knowledge Areas

- 702 - Requirements and Function of Nutrients and Other Food Components
- 703 - Nutrition Education and Behavior
- 724 - Healthy Lifestyle
- 801 - Individual and Family Resource Management
- 802 - Human Development and Family Well-Being

#### Outcome #5

##### 1. Outcome Measures

- Not Reporting on this Outcome Measure

Groups and organizations changed their policies and procedures.

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

##### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | {No Data Entered}   | 75     |

##### 3c. Qualitative Outcome or Impact Statement

###### Issue (Who cares and Why)

Older women benefit from increased daily physical activity. Schools need curriculum to incorporate activity into the daily routine. Children, away from home at camp, can learn about food, nutrition, and physical activity during group activities.

###### What has been done

The Health Motivator program increases physical activity knowledge and behaviors among the Community Educational Outreach Service (CEOS) The goal of this project is to engage CEOS leaders in leading health activities to educate and motivate club participants to practice healthy behaviors. WV Games for Health encourages the use of Exergames in many different setting including home, school, community centers, etc., thus overcoming barriers of access to facilities and equipment. The Youth Family Nutrition program is conducted during day or overnight camps. Key messages focus on basic nutrition & physical activity, including: 1) eating a variety of foods, 2) increased knowledge of the essentials of human nutrition, 3) improved practices in food preparation and safety, and 4) increased ability to select low-cost nutrition foods.

### Results

\* State presidents of the National Volunteer Outreach Network (CEOS partners) are planning to implement the CEOS Health Motivator program in their states in the future.

\* Most teachers who participated in the WV Games for Health program (97%) used Dance Dance Revolution in their PE curriculum. 57% reported incorporating DDR into other school activities

\* 4-H camps in WV changed their menus and added physical activity. For example, youth at Wirt County 4-H camp were served meals that were lower in fat and sugar than in the past. The youth were also required to take part in physical activity each day at camp. All campers were required to take part in dance activities each morning, sports in the afternoon and running games in the evenings.

### 4. Associated Knowledge Areas

- 702 - Requirements and Function of Nutrients and Other Food Components
- 703 - Nutrition Education and Behavior
- 724 - Healthy Lifestyle
- 801 - Individual and Family Resource Management
- 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.)
- Other

#### Brief Explanation

Changes in the funding of the Family Nutrition Program have resulted in additional funds for programs.

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

#### (OPTIONAL SECTION)

#### 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.
- Comparison between locales where the program operates and sites without program intervention
- Other

## Evaluation Results

• Love Your Heart Talks/The Heart Truth® pre and post-surveys were completed by participants at some of the trainings to help evaluate workshop quality, knowledge gain, and planned behavior change. A total of 32 participants completed pre and post surveys in 2010. A comparison of means was conducted with paired samples. Highlights of these results are:

Question  
Pre-Survey Mean  
Post-Survey Mean  
Paired Samples Correlation  
T-Test  
Significance

I know the signs of a heart attack in women.  
3.03  
3.47  
.135  
P=.004

I know the personal behaviors that can increase risk for heart disease and stroke.  
3.19  
3.59  
.054  
P=.003

I can name 5 ways to reduce my risk for heart disease and stroke.  
3.03  
3.59  
.034

P=.001  
 I know the questions to ask a doctor about my risk for heart disease and stroke.  
 2.90  
 3.55  
 .129  
 P<.000  
 I am aware of community resources to help women reach their heart health goals.  
 2.66  
 3.38  
 -.133  
 p<.000  
 Ratings: 1=Strongly Disagree; 2=Disagree; 3=Agree; 4=Strongly Agree  
 I gained new information about women's heart health.  
 N/A  
 4.00

The Family Nutrition Program conducts a full evaluation of behavioral changes related to nutrition. This year, participants improved on 14 behaviors. Of these behaviors six showed an increase from last year, and two remain the same as last year.

**% of Improved Behavior by Question**

**2009-2010**

**2008-2009**

**% Increase or Decrease\***

Plan meals ahead  
 52%  
 55%  
 -3%  
 Compare prices before buying food  
 42%  
 44%  
 -2%  
 Run out of food before the end of the month  
 40%  
 40%  
 0%  
 Shop with a grocery list  
 48%  
 49%  
 -1%  
 Let foods set out more than 2 hours  
 32%  
 30%  
 2%  
 Thaw frozen foods at room temperature  
 61%  
 59%  
 2%  
 Think about healthy food choices

45%  
52%  
-7%  
Prepare foods without adding salt  
43%  
44%  
-1%  
Use "nutrition facts" on food labels to make food choices  
63%  
61%  
2%  
Children eat within 2 hours of waking up  
39%  
44%  
-5%  
Are you physically active  
32%  
23%  
9%  
Does physical appearance limit exercise  
24%  
24%  
0%  
Do you drink regular soda every day  
28%  
26%  
2%  
Do you eat meals with family  
23%  
19%  
4%  
\*Percent change in scores from 2009 to 2010

### Key Items of Evaluation

WVU Extension employees were asked to complete an online survey one month after the February Heart Health Month. The purpose was to measure usefulness of content and self-reported action steps. Seventy employees completed the survey. Highlights included:

Of the suggested actions to do after the workshop:

- 65% of the participants shared heart health messages with colleagues and encouraged them to wear red on February 5
- 63% had their blood pressure checked
- 60% measured their waist circumference
- 54% put up the heart health calendar at their worksite
- 48% tried some tips from the heart health calendar
- 56% added minutes of physical activity to their day
- 71% added more fruits and vegetables to their plate
- 26% took the online heart health check up
- 35% scheduled an appointment with their healthcare provider

- 43% had a heart-healthy lunch with colleagues
- 10% watched the Heart of the Mountains video (part of the Love Your Heart Talks kit) or the Heart Truth video

The CEOS on the Move Walking Challenge was evaluated by both the members and leaders. Highlights of the member survey results include:

- 86.7% of walkers planned to continue walking after the challenge.
- 322 walkers reported a total of 79,747,196 steps walked in 6 weeks. This is 39,873 total miles and an average of 124 miles per person.
  - The average total steps walked increased by 4,341.8 steps in 6 weeks, a statistically reliable difference ( $p=.001$ ).
  - The main motivational reasons to join the group were: More physical activity, knew other participants, sounded enjoyable, weight loss, told by doctor to exercise and guilt about not exercising enough.
  - The top three barriers to regular walking: were weather, health/illness and being busy/time.
  - The top three self-reported benefits from the walking group were felt better, lost weight, and more exercise/energy.

Highlights of the leader survey include:

- Walking Group Leaders completed a post-survey.
- 54.5% of walking group leaders were not the club Health Motivator, an indicator that additional
- CEOS members stepped up to become walking group leaders.
- 66.7% were interested in getting walking group information in 2011.
- Groups met an average of 4.7 times during the 6-week challenge.
- 12.1% of the groups partnered with other community organizations.

**V(A). Planned Program (Summary)**

**Program # 4**

**1. Name of the Planned Program**

Farm 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                   | 20%             |                 |                |                |
| 307     | Animal Management Systems                  | 20%             |                 |                |                |
| 502     | New and Improved Food Products             | 20%             |                 |                |                |
| 602     | Business Management, Finance, and Taxation | 20%             |                 |                |                |
| 604     | Marketing and Distribution Practices       | 20%             |                 |                |                |
|         | <b>Total</b>                               | 100%            |                 |                |                |

Add knowledge area

**V(C). Planned Program (Inputs)**

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

| Year: 2010 | Extension |      | Research |      |
|------------|-----------|------|----------|------|
|            | 1862      | 1890 | 1862     | 1890 |
| Plan       | 6.0       | 0.0  | 0.0      | 0.0  |
| Actual     | 6.0       | 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    |
| 250000              | 0              | 0              | 0              |
| 1862 Matching       | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 147500              | 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 Farm Management program area includes the following:

Grassland Management: Cow-calf production is a major livestock enterprise in West Virginia but long term costs have been high compared to income. Feed is about 75% of total production cost and hay often accounts for half of the feed cost and about a third of total cost. Extending the grazing season minimizes hay feeding while knowing hay production costs allows farmers to fine tune management to reduce costs and enables them to know what is reasonable to pay for hay or for producing additional fall or winter grazing. Mixed species grazing can help control pasture weeds in pastures and improve sod quality for reducing erosion. Activities are designed to 1) reduce feed costs by forage testing and refined supplemental feeding; 2) reduce purchased fertilizer costs by recycling nutrients in hay, purchased supplements and pasture; 3) improve hay quality through harvest and storage management; 4) improve information transfer with pasture walks and 5) improved calf gain and health through pasture weaning.

Sustainable Agriculture: Farm families need training in how to sustain their farm operations into the future, including changing their operations to include more sustainable production systems that are also more profitable. Managing risk or managing to be profitable while reducing risk is usually addressed in two ways: 1) the immediate real time aspect where farmers decide what price to pay for their cattle, or which fertilizer they need, and 2) future planning about how to minimize income tax exposure, or to buy crop insurance.

Farm Management: Farm families need training in how to keep good records that allow farmers to "know" their businesses. Knowing and understanding their businesses allows managers to make comparisons and utilize the various tools and programs available to them.

Value-added Marketing: Farm families need training in how to make long term, major management changes that alter the path that they follow into the future, including adding value to their crops.

## 2. Brief description of the target audience

This program will target cattle producers participating in WV Beef Quality Assurance marketing pools and livestock producers who could benefit from these marketing practices, small farmers and limited resource farmers, primarily vegetable and fruit growers, but at another time, dairy and small-ruminant producing families will also be included. The audience can be divided into three sectors. 1) the professionals namely the WVU Extension Agriculture and Natural Resources unit members who will ultimately provide the majority of the face-to-face contact and instruction; 2) the professionals of other agencies and allied businesses with whom we share our clientele; 3) the farm families themselves who are primarily beef producers, with the others involved in small ruminants, tree fruits, market gardens, dairy, contract poultry, and many smaller ones. The majority are part-time operations. The majority of these producers are farm owners who also have a farm woodlot to steward.

### V(E). Planned Program (Outputs)

#### 1. Standard output measures

| 2010          | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|---------------|------------------------|--------------------------|-----------------------|-------------------------|
| <b>Plan</b>   | 16400                  | 84000                    | 3500                  | 7000                    |
| <b>Actual</b> | 22693                  | 43684                    | 500                   | 1000                    |

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

**Patent Applications Submitted**

Year: 2010  
 Plan: 0  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

| 2010          | Extension | Research | Total |
|---------------|-----------|----------|-------|
| <b>Plan</b>   | 0         | 0        |       |
| <b>Actual</b> | 10        | 1        | 11    |

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of training activities in farm management
- Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 52     | 94     |

**Output #2**

**Output Measure**

- Number of educational materials related to farm management created or updated.
- Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 8      | 10     |

**Output #3**

**Output Measure**

- Number of educational materials about farm management distributed

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 130000        | 23000         |

**Output #4**

**Output Measure**

- Number of people receiving educational materials

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 130000        | 23000         |

**Output #5**

**Output Measure**

- Number of new outside organizations or groups participating in farm management initiatives.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 14            | 12            |

**Output #6**

**Output Measure**

- Number of new grants and contracts supporting farm management initiatives.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 3             | 1             |

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME                                                                                                                     |
|--------|----------------------------------------------------------------------------------------------------------------------------------|
| 1      | Number of participants in farm management initiatives who increased their knowledge                                              |
| 2      | Number of participants in farm management initiatives who change their attitudes or opinions.                                    |
| 3      | Number of participants in farm management initiatives who improved their skill level                                             |
| 4      | Number of participants in farm management initiatives who increased their motivation to adopt a skill or accomplish an activity. |
| 5      | Number of participants in farm management initiatives who adopted a new skill.                                                   |
| 6      | Number of participants in farm management initiatives who changed a habit or procedure.                                          |
| 7      | Number of new initiatives in your program area that have been implemented by trainees of farm management initiatives.            |
| 8      | Number of changes in economic conditions because of the efforts of farm management initiatives.                                  |

**Add Cross-cutting Outcome/Impact Statement or Unintended or Previously Unknown Outcome Measure**

**Outcome #1**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants in farm management initiatives who increased their knowledge

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 1200                | 20700  |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Farm families need training in how to make long-term, major management changes that alter the path that they follow into the future.

**What has been done**

Activities include: training on contract grazing management, proper soil sampling, soil fertility, forage sampling; the Annual Farmer Short Course, hay and silage shows; pasture walks; individual consultations with farmers on soil testing and weed control; farmers' market training; WV Small Farm Conference; training to use Dell Handheld computers; farmer tax classes; cost per unit of production classes; and risk management trainings.

**Results**

Farm family participants in farm management programs increased their knowledge of: the care and housing of poultry, the positive effects of adding cattle to sheep operations, improved cycling of manure nutrient on farms, the basics of event sourcing with local food, extensive high tunnel and season extension, oil health, local food opportunities, value adding, event sourcing with local food, processing food, filing Schedule F and Schedule C tax forms, labeling, and market management.

**4. Associated Knowledge Areas**

- 205 - Plant Management Systems
- 307 - Animal Management Systems

- 502 - New and Improved Food Products
- 602 - Business Management, Finance, and Taxation
- 604 - Marketing and Distribution Practices

## **Outcome #2**

### **1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants in farm management initiatives who change their attitudes or opinions.

### **2. Associated Institution Types**

- 1862 Extension

### **3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

### **3b. Quantitative Outcome**

| <b>Year</b> | <b>Quantitative Target</b> | <b>Actual</b> |
|-------------|----------------------------|---------------|
| 2010        | 7000                       | 0             |

### **3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

### **4. Associated Knowledge Areas**

- 205 - Plant Management Systems
- 307 - Animal Management Systems
- 502 - New and Improved Food Products
- 602 - Business Management, Finance, and Taxation
- 604 - Marketing and Distribution Practices

### **Outcome #3**

#### **1. Outcome Measures**

Not Reporting on this Outcome Measure

Number of participants in farm management initiatives who improved their skill level

#### **2. Associated Institution Types**

1862 Extension

#### **3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

#### **3b. Quantitative Outcome**

| <b>Year</b> | <b>Quantitative Target</b> | <b>Actual</b> |
|-------------|----------------------------|---------------|
| 2010        | 750                        | 11097         |

#### **3c. Qualitative Outcome or Impact Statement**

##### **Issue (Who cares and Why)**

The task of changing the production methods and philosophy of 23,600 farms in WV from a commodity perspective to one that is more sustainable and profitable comes in small steps. Job one involves helping the small farm families to truly understand the impact their management practices had on several parameters including: environment, family, and profit. If successful, the farm manager will inquire about what opportunities exist to help them change their management to allow them to reach their goals.

##### **What has been done**

\* The 2010 WVU Winter Educational Series covered latest management ideas in 16 county/regional sites covering topics that included every aspect of their current management practices.

\* 450 farm families attended farm business or farm management seminars including income tax liability management, borrower training, financial management, and budget creation.

\* 250 farmers participated in enterprise development workshops at the 2010 WV Small Farm Conference.

##### **Results**

\* Farm families gained skills in using drip irrigation in their operations, using bed shapers, processing their own food, filing Schedule F and Schedule C tax forms, labeling, making marketing plans, making informed decisions about their risk management options, and gardening organically.

\* Farmers' market vendors improved their ability to make marketing plans and take on regulation responsibility.

#### 4. Associated Knowledge Areas

- 205 - Plant Management Systems
- 307 - Animal Management Systems
- 502 - New and Improved Food Products
- 602 - Business Management, Finance, and Taxation
- 604 - Marketing and Distribution Practices

#### Outcome #4

##### 1. Outcome Measures

- Not Reporting on this Outcome Measure

Number of participants in farm management initiatives who increased their motivation to adopt a skill or accomplish an activity.

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

##### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 816                 | 7937   |

##### 3c. Qualitative Outcome or Impact Statement

###### **Issue (Who cares and Why)**

The task of changing the production methods and philosophy of 23,600 farms in WV from a commodity perspective to one that is more sustainable and profitable comes in small steps. Job one involves helping the small farm families to truly understand the impact their management practices had on several parameters including: environment, family, and profit. If successful, the farm manager will inquire about what opportunities exist to help them change their management to allow them to reach their goals.

###### **What has been done**

Along with many educational initiatives to WV farmers, 4600 West Virginia farm families attended the 2010 WVU Winter Educational Series. This three month series of meetings carried the latest management ideas to 16 county/regional sites for a total of 48 small farm family seminars

covering topics that included every aspect of their current management practices and what they needed to do to change or improve.

**Results**

\* Soil and Water Conservation Society members intend to developing a national conservation practice adding goats to cattle operations.

\* Farm families intend to do the following: make an enterprise change, develop a food safety plan, add drip irrigation to their operations, add new and different crops to their market gardens, develop local ties with ongoing events, and develop an AgrAbility plan.

**4. Associated Knowledge Areas**

- 205 - Plant Management Systems
- 307 - Animal Management Systems
- 502 - New and Improved Food Products
- 602 - Business Management, Finance, and Taxation
- 604 - Marketing and Distribution Practices

**Outcome #5**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants in farm management initiatives who adopted a new skill.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 620                 | 4870   |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The task of changing the production methods and philosophy of 23,600 farms in WV from a commodity perspective to one that is more sustainable and profitable comes in small steps. Job one involves helping the small farm families to truly understand the impact their management practices had on several parameters including environment, family, and profit. If successful, the

farm manager will inquire about what opportunities exist to help them change their management to allow them to reach their goals.

#### **What has been done**

- \* We are working with eight producers to help them reduce livestock production costs by using recommended BMPs.
- \* 450 farm families attended farm business or management seminars.
- \* 250 farmers participated in enterprise development workshops.
- \* 6500 farm families received risk management training.
- \* 2500 WV Farm Bureau members received risk/farm management training at their regular meetings by county staff.

#### **Results**

- \* 6 farms are reducing livestock production costs by using BMPs.
- \* 1 producer improved feeding of hay on meadows and was able to save \$100/cow/year by recycling plant nutrients in hay back on meadows.
- \* 1 operator gave up rented land that could not be used in a sustainable manner through winter feeding programs.
- \* 400 farmers report they are shaping their beds.
- \* 4000 farm families report making a significant management change.
- \* 35 new farmers report adding value to their products.
- \* 21 farm families report having filed a Schedule C tax return.
- \* 8 farmers report developing better product labels.
- \* 13 farm families report intending to upgrade their labels.
- \* 385 families reported reducing their Schedule F tax liability.

#### **4. Associated Knowledge Areas**

- 205 - Plant Management Systems
- 307 - Animal Management Systems
- 502 - New and Improved Food Products
- 602 - Business Management, Finance, and Taxation
- 604 - Marketing and Distribution Practices

#### **Outcome #6**

##### **1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants in farm management initiatives who changed a habit or procedure.

##### **2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure  
 Change in Action Outcome Measure  
 Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 1500                | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

- 205 - Plant Management Systems  
 307 - Animal Management Systems  
 502 - New and Improved Food Products  
 602 - Business Management, Finance, and Taxation  
 604 - Marketing and Distribution Practices

**Outcome #7**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of new initiatives in your program area that have been implemented by trainees of farm management initiatives.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure  
 Change in Action Outcome Measure  
 Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| <b>Year</b> | <b>Quantitative Target</b> | <b>Actual</b> |
|-------------|----------------------------|---------------|
| 2010        | 8                          | 4             |

### **3c. Qualitative Outcome or Impact Statement**

#### **Issue (Who cares and Why)**

The task of changing the production methods and philosophy of 23,600 farms in WV from a commodity perspective to one that is more sustainable and profitable comes in small steps. Job one involves helping the small farm families to truly understand the impact their management practices had on several parameters including environment, family, and profit. If successful, the farm manager will inquire about what opportunities exist to help them change their management to allow them to reach their goals.

#### **What has been done**

Farm families have implemented practices they have learned during training and this has increased the number of opportunities for selling farm products in the state.

#### **Results**

- \* The Clarksburg Farmers' Market grew from 11 to 20 regular vendors and several new occasional vendors in 2010.
- \* A vendor from a significant produce operation utilizing a plasti-culture and micro irrigation production system was added to the farmers market in one county. This vendor's operation provided early & late season fruits and vegetables which greatly enhanced what the market had to offer local consumers.
- \* One of the regular market vendors added a new high tunnel unit to their produce operation. This allowed them to have produce for the market significantly later than in previous years.
- \* In one county, an indoor winter market was established in November through February.

### **4. Associated Knowledge Areas**

- 205 - Plant Management Systems
- 307 - Animal Management Systems
- 502 - New and Improved Food Products
- 602 - Business Management, Finance, and Taxation
- 604 - Marketing and Distribution Practices

### **Outcome #8**

#### **1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of changes in economic conditions because of the efforts of farm management initiatives.

#### **2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 600                 | 700    |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Farm families need training in how to make long term, major management changes that alter the path that they follow into the future. These include keeping good records that allow farmers to "know" their businesses. Knowing and understanding their businesses allows managers to make comparisons and utilize the various tools and programs available to them.

**What has been done**

Farm families have implemented practices they have learned during training and this has changed the amount of revenue they have received, thus increasing the economy of their county and state.

**Results**

- \* 20 farmers have built low-cost tunnels saving \$30,000 in construction costs and adding \$25,000 in gross receipts the first year.
- \* 45 individual food events were sourced with locally grown food from 65 farmers generating more than \$85,000 in new sales.
- \* 250 tunnels increased personal farm gross income by \$1.3 million.
- \* 385 families reported reducing their Schedule F tax liability by an average of \$750 as a result of attending of the many tax seminars.

**4. Associated Knowledge Areas**

- 205 - Plant Management Systems
- 307 - Animal Management Systems
- 502 - New and Improved Food Products
- 602 - Business Management, Finance, and Taxation
- 604 - Marketing and Distribution Practices

## **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.)
- Other

### **Brief Explanation**

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

### **(OPTIONAL SECTION)**

#### **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.
- Comparison between locales where the program operates and sites without program intervention
- Other

### **Evaluation Results**

### **Key Items of Evaluation**



**V(A). Planned Program (Summary)**

**Program # 5**

**1. Name of the Planned Program**

4-H Curriculum

**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%            |                 |                |                |
|         | <b>Total</b>      | 100%            |                 |                |                |

Add knowledge area

**V(C). Planned Program (Inputs)**

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

| Year: 2010 | Extension |      | Research |      |
|------------|-----------|------|----------|------|
|            | 1862      | 1890 | 1862     | 1890 |
| Plan       | 13.0      | 0.0  | 0.0      | 0.0  |
| Actual     | 13.0      | 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    |
| 300000              | 0              | 0              | 0              |
| 1862 Matching       | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 580000              | 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**

**Major activities in the 4-H curriculum planned program include:**

- Citizenship programs - Since its inception, 4-H has placed emphasis on the importance of young

people being engaged and well-informed citizens. By connecting to their communities and leaders, youth understand their role in civic affairs and are able to expand their role in decision-making processes.

- 4-H Workforce Prep
- Collegiate 4-H
- Post-Secondary Education
- Young Adult Programs
- Youth Leadership Development

- Healthy lifestyle programs - A core believe of 4-H is health, as evidenced by the 4our H's in the 4-H clover: Head, Heart, Hands, and Health. 4-H is committed to physical, mental, and emotional health of our nation's youth so that they may lead haelthy and productive lives into adulthood.

- Charting Program
- Environmental protection programs for youth
- Health Officer
- Hand-washing program

- Science Technology Engineering Math programs (STEM) - These programs directly positions 4-H to strengthen US global competitiveness and leadership in the sciences.

- Community ATV
- Shooting Sports
- Afterschool Programming (CYFAR)
- Youth agriculture

**2. Brief description of the target audience**

Youths 9 to 21 - 4-H is the largest youth development program in West Virginia. More than 80,000 youth are 4-H members and more than 6,400 adult volunteers work directly and indirectly with them.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

| 2010          | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|---------------|------------------------|--------------------------|-----------------------|-------------------------|
| <b>Plan</b>   | 6000                   | 67300                    | 24000                 | 48500                   |
| <b>Actual</b> | 9071                   | 113385                   | 75590                 | 162670                  |

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

**Patent Applications Submitted**

Year: 2010  
 Plan: 0  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

| 2010   | Extension | Research | Total |
|--------|-----------|----------|-------|
| Plan   | 0         | 1        |       |
| Actual | 2         | 0        | 2     |

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of 4-H training activities.
- Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 850    | 285    |

**Output #2**

**Output Measure**

- Number of 4-H educational materials distributed
- Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 15000  | 84661  |

**Output #3**

**Output Measure**

- Number of of outside organizations participating in 4-H initiatives this year.
- Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 800    | 207    |

**Output #4**

**Output Measure**

- Educational materials updated or created
- Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 3000   | 478    |

**Output #5**

**Output Measure**

- Number of grants supporting the program
- Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 25            | 15            |

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME                                                                                                                         |
|--------|--------------------------------------------------------------------------------------------------------------------------------------|
| 1      | The number of youths in 4-H who will increase their knowledge                                                                        |
| 2      | Number of 4-H participants who changed their attitudes or opinions                                                                   |
| 3      | The number of 4-H participants who improved their skill level                                                                        |
| 4      | Number of participants who increased their motivation to adopt a skill or accomplish an activity                                     |
| 5      | Number of 4-H participants who adopt a skill                                                                                         |
| 6      | Number of 4-H participants who changed a habit or procedure                                                                          |
| 7      | Number of groups or organizations that collaborated with the 4-H program.                                                            |
| 8      | Number of groups or organizations that changed their structure, philosophy, or mission because of an intervention by the 4-H program |
| 9      | Changes in social conditions.                                                                                                        |

**Add Cross-cutting Outcome/Impact Statement or Unintended or Previously Unknown Outcome Measure**

**Outcome #1**

**1. Outcome Measures**

Not Reporting on this Outcome Measure

The number of youths in 4-H who will increase their knowledge

**2. Associated Institution Types**

1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 12000               | 63000  |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

4-H is committed to the physical, mental, and emotional health of our nation's youth so that they may lead healthy and productives lives into adulthood. Youth engaged in learning and mastery is one of the essential elements of youth development.

**What has been done**

Citizenship, healthy lifestyle, and STEM educational programs at 4-H camps, clubs, and afterschool programs throughout the state.

**Results**

\* Youth gained knowledge about citizenship such as post secondary educational opportunities and how to use personality styles to work effectively with other teens.

\* Youth gained knowledge about healthy lifestyles such as healthy eating, how to start and manage romantic relationships, how and when to wash your hands, and cell phone etiquette and safety.

\* Youth gained knowledge of STEM subjects such as how the sun rays travels in a form of waves, animal species, exothermal and endothermal energy, pollution, watersheds and conservation, gun safety, equine skills, and forest ecosystems.

**4. Associated Knowledge Areas**

806 - Youth Development

**Outcome #2**

**1. Outcome Measures**

Not Reporting on this Outcome Measure

Number of 4-H participants who changed their attitudes or opinions

**2. Associated Institution Types**

1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 8000                | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Since its inception, 4-H has placed emphasis on the importance of young people being engaged, well-informed citizens. By connecting to their communities, youth understand their role in civic affairs including environmental stewardship.

**What has been done**

4-H clubs, camps, and afterschool programs have offered curriculum in environmental stewardship. This curriculum combines two 4-H curriculum areas: citizenship and STEM education.

**Results**

Youth in 4-H programs in WV changed their attitudes about being responsible for preserving our natural environment. This was evidenced by their willingness to help people learn not to litter and to recycle, being water wise and not using as much water, and informing people in their families and communities of the dangers of pollution.

**4. Associated Knowledge Areas**

806 - Youth Development

### **Outcome #3**

#### **1. Outcome Measures**

- Not Reporting on this Outcome Measure

The number of 4-H participants who improved their skill level

#### **2. Associated Institution Types**

- 1862 Extension

#### **3a. Outcome Type:**

- Change in Knowledge Outcome Measure  
 Change in Action Outcome Measure  
 Change in Condition Outcome Measure

#### **3b. Quantitative Outcome**

| <b>Year</b> | <b>Quantitative Target</b> | <b>Actual</b> |
|-------------|----------------------------|---------------|
| 2010        | 8000                       | 12000         |

#### **3c. Qualitative Outcome or Impact Statement**

##### **Issue (Who cares and Why)**

Since its inception, 4-H has placed emphasis on the importance of young people being engaged, well-informed citizens. By gaining skills in citizenship, healthy living, and science, technology, engineering and math, youth are better prepared to go on in their studies and prepare to be better functioning citizens.

##### **What has been done**

Citizenship, healthy lifestyle, and STEM educational programs at 4-H camps, clubs, and afterschool programs throughout the state.

##### **Results**

\* Youth learned citizenship skills including preparing for life after high school, public speaking, planning service projects, leadership, conducting meetings, and problem solving.

\* Youth learned healthy lifestyles skills such as reacting to emergencies, proper steps of hand-washing, CPR and first aid, handling bullying situations, folk dancing, and memory skills.

\* Youth learned science and technology skills including how to use digital cameras, making small parachutes, insulating bottles, robotics, poultry production and marketing, horticulture, forestry skills, collecting and analyzing fingerprints.

#### **4. Associated Knowledge Areas**

- 806 - Youth Development

**Outcome #4**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants who increased their motivation to adopt a skill or accomplish an activity

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 8000                | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

- 806 - Youth Development

**Outcome #5**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of 4-H participants who adopt a skill

**2. Associated Institution Types**

1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 6000                | 6521   |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The true measure of whether or not youth development programs are successful is whether participants change their behavior and grow as individuals.

**What has been done**

4-H clubs, camps, and afterschool programs in West Virginia give youth the opportunity to practice their skills in citizenship, healthy living, and scientific inquiry by incorporating deliberate youth leadership opportunities into the programming.

**Results**

- \* 4-H youth completed community service projects, re-taught lessons to younger members, and took on leadership roles in 4-H activities.
- \* WV 4-H youth represented WV at National 4-H Congress and engaged in community service projects with peers from across the nation.
- \* 4-H health officers incorporated physical activity into their club meetings.
- \* 4-H members submitted projects to county fair and raised \$80,000 for 4-H and FFA at the livestock sale.
- \* 4-H members engaged in scientific projects by developing a hypothesis and making regular observations based on their hypothesis.
- \* 4-H members planted and harvested gardens and ate foods they planted earlier during the season.

**4. Associated Knowledge Areas**

806 - Youth Development

**Outcome #6**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of 4-H participants who changed a habit or procedure

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure  
 Change in Action Outcome Measure  
 Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 6000                | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

- 806 - Youth Development

**Outcome #7**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of groups or organizations that collaborated with the 4-H program.

**2. Associated Institution Types**

1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 600                 | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

806 - Youth Development

**Outcome #8**

**1. Outcome Measures**

Not Reporting on this Outcome Measure

Number of groups or organizations that changed their structure, philosophy, or mission because of an intervention by the 4-H program

**2. Associated Institution Types**

1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 200                 | 65     |

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

With cuts to public education, community and educational groups need to contribute to the educational resources of youth. The 4-H program does link with schools and parents to provide additional resources, particularly in citizenship, healthy living, and science and technology.

#### What has been done

4-H programs have actively played a part in improving the youth development and educational offerings of their local schools. This is particularly true with our afterschool programs.

WV 4-H members are active even after they go on to college. This year our collegiate 4-H groups at WV colleges have grown and become more active.

#### Results

\* Collegiate 4-H groups in WV have become active on campus and finalized the chartering information.

\* 4-H programs have addressed the need/request of their counties for youth education programming and supported the learning objectives of the WV State Board of Education. Programs aided individual teachers in meeting the state mandated CSO's for their respective grades.

### 4. Associated Knowledge Areas

- 806 - Youth Development

### Outcome #9

#### 1. Outcome Measures

- Not Reporting on this Outcome Measure

Changes in social conditions.

#### 2. Associated Institution Types

- 1862 Extension

#### 3a. Outcome Type:

- Change in Knowledge Outcome Measure  
 Change in Action Outcome Measure  
 Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | {No Data Entered}   | 450    |

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Smoking among high school seniors reached a 19-year high of 36.5 percent in 1997. It is now down to 33.9 percent due in large part to statewide efforts.

#### What has been done

WVU Extension 4-H is one of several states that is participating in the National 4-H Health Rocks program, a program that uses interactive techniques to prevent substance abuse in youth. In this program, youth members help teach the curriculum to other youth.

#### Results

The 4-H program in WV has taken an active part in preventing substance abuse through the "Health Rocks" program. In addition, a drug free community grant was awarded to one county in the amount of \$125,000. It is renewable for another 4 years at the same amount. This makes the total award to be up to \$625,000 toward helping fight against substance abuse. The money will go toward identifying problem areas and developing an action plan, maximizing community buy in, identifying possible solutions to underage drinking, and increasing awareness, and identifying possible ways to combat prescription drug abuse.

### 4. Associated Knowledge Areas

- 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.)
- Other (Funding sources and funding opportunities)

#### Brief Explanation

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

#### (OPTIONAL SECTION)

#### 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.
- Comparison between locales where the program operates and sites without program intervention
- Other

## Evaluation Results

- The analyses from the statewide camping science experiment provided valuable evidence that campers engaged in the scientific method to develop a hypothesis and to make regular observations based on their hypothesis. Campers were asked if they were surprised by their findings and a vast majority of campers noted that they were shocked by the amount of places where germs may be found and that it is important to wash hands on a regular basis. This impact was the focus of the project. The STEM Team wanted campers to realize that germs are everywhere, not just bathrooms and kitchens and that it is crucial to keep hands clean to help abate the spread of dangerous germs.

- Campers in the CSI: 4-H Camp class successfully "solved" the camp crime at both Lincoln and Cabell County camps. As for the Embryology program, student assessments were not completed because of age, however, the students at both schools were successful in hatching and brooding live chicks.

- The ATV Safety Awareness Program continues to generate valuable information about the riding habits of the youth of this county and that data will in time be utilized to develop a more streamlined program tailored specifically to counties. Modifications based on past evaluations have made this program into a highly sought after program by school administrators. Agents receive questions from students and teachers alike about adding classes that place youth on ATV's, teaching them correct riding behaviors, and monitoring their riding skills.

STEM programs showed knowledge gained.

- Table 1. Percentage of those responding that they learned new information.

**Did you learn new information about...**

|          |                                      |
|----------|--------------------------------------|
| No       |                                      |
| Somewhat |                                      |
| Yes      |                                      |
|          | 1. Skillathons                       |
| 0%       |                                      |
| 33.3%    |                                      |
| 61.1%    |                                      |
|          | 2. Save Our Streams - Water Bugs     |
| 0%       |                                      |
| 5.9%     |                                      |
| 94.1%    |                                      |
|          | 3. Water Wonders & Soil Stories      |
| 0%       |                                      |
| 17.6%    |                                      |
| 82.4%    |                                      |
|          | 4. Enviroscope Model                 |
| 0%       |                                      |
| 14.7%    |                                      |
| 85.3%    |                                      |
|          | 5. Virginia Wildlife Center -Keynote |
| 0%       |                                      |
| 12.1%    |                                      |
| 87.9%    |                                      |

Table 2. Results of paired sample t-test for post and pre respondents gains in confidence.

**Understanding About:**

**Mean**

**Standard Deviation**

**t**

**df**

**Significant**

**(2-tailed)**

1. Save Our Streams

.56  
1.00  
3.339  
35  
**.002**

2. Water Wonders

.64  
1.05  
3.664  
35  
**.001**

3. Enviroscope Model

.67

.86  
4.641  
35  
**.000**

4.Skillathons

.50  
.85  
3.550  
35  
**.001**

5.Virginia Wildlife

.65  
.88  
4.270  
33  
**.000**

Note: Mean - the average difference between the individual post/pre means, df - degrees of freedom which means one less than the total number of completed responses, Significant\2tailed - significant if <.05.

In 2010, three counties: Grant, Hampshire and Pendleton, took the challenge of piloting a simple tool during 4-H camps to address the components of the 5-2-1-0 Health Program. The questionnaire was used in at least three camps this summer, but more work needs to be done on ways to present the actual 5-2-1-0 campaign to the campers, ways to more accurately record the related programming at camps, and a more refined method of collecting data.

**Key Items of Evaluation**

**V(A). Planned Program (Summary)**

**Program # 6**

**1. Name of the Planned Program**

Workforce 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 |
|---------|----------------------------------------------------------------------------------------|-----------------|-----------------|----------------|----------------|
| 402     | Engineering Systems and Equipment                                                      | 10%             |                 |                |                |
| 723     | Hazards to Human Health and Safety                                                     | 30%             |                 |                |                |
| 724     | Healthy Lifestyle                                                                      | 10%             |                 |                |                |
| 803     | Sociological and Technological Change Affecting Individuals, Families, and Communities | 50%             |                 |                |                |
|         | <b>Total</b>                                                                           | 100%            |                 |                |                |

Add knowledge area

**V(C). Planned Program (Inputs)**

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

| Year: 2010 | Extension |      | Research |      |
|------------|-----------|------|----------|------|
|            | 1862      | 1890 | 1862     | 1890 |
| Plan       | 1.0       | 0.0  | 0.0      | 0.0  |
| Actual     | 2.0       | 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    |
| 20000               | 0              | 0              | 0              |
| 1862 Matching       | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 127500              | 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 workforce development program area activities are designed to train the workforce in West Virginia and other parts of the country. They include an annual fire school; fire suppression simulation on aircraft; training for airport staff; safety and health training modules, classes in construction and general industry, fall protection training in residential and the modular home building industry, classes for veteran and novice union representatives; and curricula addressing both current labor issues and historical events. These activities are funded by grants, contracts, and fees for services from employers, workers, and unions at a reasonable cost. Programs are conducted in collaboration with labor unions and other organizations.

**2. Brief description of the target audience**

Firefighters, EMS, law enforcement, first responders, upper management in the fire services, airport personnel, the general population, people who seek to implement or assist in the implementation of individual or employer compliance with state, federal, and local safety and health legislation, employers/owners of businesses, volunteers, immigrants, migrant workers, youth, disabled community members, and older adults.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

| 2010          | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|---------------|------------------------|--------------------------|-----------------------|-------------------------|
| <b>Plan</b>   | 11000                  | 50000                    | 700                   | 100                     |
| <b>Actual</b> | 12746                  | 16268                    | 579                   | 836                     |

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

**Patent Applications Submitted**

Year: 2010  
 Plan: 0  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

| 2010          | Extension | Research | Total |
|---------------|-----------|----------|-------|
| <b>Plan</b>   | 0         | 2        |       |
| <b>Actual</b> | 0         | 2        | 2     |

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of training activities in workforce development.
- Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 406    | 79     |

**Output #2**

**Output Measure**

- Number of educational materials in workforce development created or updated.
- Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 20     | 20     |

**Output #3**

**Output Measure**

- Number of educational materials in workforce development distributed.
- Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 11000  | 39757  |

**Output #4**

**Output Measure**

- Number of outside organizations or groups participating in workforce development initiatives.
- Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 10     | 50     |

**Output #5**

**Output Measure**

- Number of grants and contracts supporting initiatives in workforce development.
- Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 5      | 2      |

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME                                                                                |
|--------|---------------------------------------------------------------------------------------------|
| 1      | Number of groups or organizations that collaborated with workforce development initiatives. |
| 2      | Number of participants in workforce development programs who increase their knowledge.      |
| 3      | Number of participants in workforce development programs who improve a skill.               |

**Add Cross-cutting Outcome/Impact Statement or Unintended or Previously Unknown Outcome Measure**

**Outcome #1**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of groups or organizations that collaborated with workforce development initiatives.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure  
 Change in Action Outcome Measure  
 Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 20                  | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

- 402 - Engineering Systems and Equipment  
 723 - Hazards to Human Health and Safety  
 724 - Healthy Lifestyle  
 803 - Sociological and Technological Change Affecting Individuals, Families, and

**Outcome #2**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants in workforce development programs who increase their knowledge.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 900                 | 10217  |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

\* Sheet Metal Workers gained knowledge of the new health care reform and the history of the movement for universal health care.

\* All participants increased knowledge of careers in forensic science and preparation needed.

**4. Associated Knowledge Areas**

- 402 - Engineering Systems and Equipment
- 723 - Hazards to Human Health and Safety
- 724 - Healthy Lifestyle
- 803 - Sociological and Technological Change Affecting Individuals, Families, and

**Outcome #3**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants in workforce development programs who improve a skill.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 900                 | 5748   |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Labor unions, workplaces, and other organizations have a need for training of there employees in safety-related issues. WVU Extension receives grants, contracts, and fees, to design and implement services for employers, workers, and unions at a reasonable cost. These efforts result in safer work environments in West Virginia and other parts of the country.

**What has been done**

Workforce development activities include an annual fire school; fire suppression simulation on aircraft; training for airport staff; safety and health training modules, classes in construction and general industry, fall protection training in residential and the modular home building industry, classes for veteran and novice union representatives; and curricula addressing both current labor issues and historical events.

**Results**

- \* First responders improved their emergency skills
- \* Firefighters improved skills and ability level in fire suppression, hazardous materials incidents, and rescue tactics.
- \* Workers gained skills in the basics of occupational safety and health.

**4. Associated Knowledge Areas**

- 402 - Engineering Systems and Equipment
- 723 - Hazards to Human Health and Safety
- 724 - Healthy Lifestyle
- 803 - Sociological and Technological Change Affecting Individuals, Families, and

## 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.)
- Other

### Brief Explanation

Outcomes are affected by the availability of grants and contracts that fund training opportunities. With proposed cutbacks in Federal funding, these activities could be affected.

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

### (OPTIONAL SECTION)

#### 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.
- Comparison between locales where the program operates and sites without program intervention
- Other

### Evaluation Results

**Key Items of Evaluation**

**V(A). Planned Program (Summary)**

**Program # 7**

**1. Name of the Planned Program**

Global Education

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

| KA Code | Knowledge Area                                      | %1862 Extension | %1890 Extension | %1862 Research | %1890 Research |
|---------|-----------------------------------------------------|-----------------|-----------------|----------------|----------------|
| 606     | International Trade and Development                 | 5%              |                 |                |                |
| 611     | Foreign Policy and Programs                         | 5%              |                 |                |                |
| 704     | Nutrition and Hunger in the Population              | 5%              |                 |                |                |
| 802     | Human Development and Family Well-Being             | 10%             |                 |                |                |
| 805     | Community Institutions, Health, and Social Services | 25%             |                 |                |                |
| 806     | Youth Development                                   | 50%             |                 |                |                |
|         | <b>Total</b>                                        | 100%            |                 |                |                |

**Add knowledge area**

**V(C). Planned Program (Inputs)**

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

| Year: 2010 | Extension |      | Research |      |
|------------|-----------|------|----------|------|
|            | 1862      | 1890 | 1862     | 1890 |
| Plan       | 4.0       | 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    |
| 100000              | 0              | 0              | 0              |
| 1862 Matching       | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 172500              | 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**

Global education programs at WVU Extension represent an important approach and delivery system for supporting the work of Extension faculty. For example, targeting school system professionals helps Extension to support our children, youth, and families goals. Conducting and coordinating graduate courses is a direct entrée into building collaboration with academic faculty and departments. On campus educational programs for faculty, students, staff, and school age children raise Extension's visibility and credibility in the academic community.

CHISPA, a Spanish immersion program for students, was conducted at Hedgesville High School on October 15 for over 200 high school students, primary from high schools in Berkeley County. Students are exposed to hearing Spanish consistently spoken for the day. They meet and converse with native Spanish speakers. They participate in creative and academic activities, e.g., singing, dancing, conversation, discussion of Hispanic issues, The school teachers are enriched professionally since they will also speak in Spanish during the course of the day and will have contact with the native speakers from different countries. The WVU professionals and students have the chance to increase their professional experience by designing activities for a different population than the one that they are accustomed to teaching. Hispanic teachers and students serve as resource people, thus enhancing their credibility and interaction in the larger educational community.

WVU International 4-H Youth Exchange (IFYE) Program- reciprocal placements and statewide tour for college-age youth and young adults.

WVU Cultural Attaché Program - collaborating with WVU colleagues on organizing campus presentations by representatives from different countries. Embassy officials from Mexico and China presented last year. We hosted campus visits and presentations by attaches from Peru and France in 2009.

WVU - University of Guanajuato (Mexico) 4-H Volunteer Service Project This program has been expanded to include focus on families & health, and agriculture.

WV 4-H Global Challenge,. The West Virginia project is organized in cooperation with Heifer International. The project goal is to raise \$20,000. Pamphlets and announcements continue to be distributed throughout the 4-H and Extension collaboration networks.

**2. Brief description of the target audience**

West Virginia youth, school teachers, college students, Extension faculty, staff, students, and volunteers.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

| 2010          | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|---------------|------------------------|--------------------------|-----------------------|-------------------------|
| <b>Plan</b>   | 2000                   | 7000                     | 5000                  | 25000                   |
| <b>Actual</b> | 2191                   | 965                      | 4503                  | 387                     |

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

**Patent Applications Submitted**

Year: 2010  
 Plan: 0  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

| 2010   | Extension | Research | Total |
|--------|-----------|----------|-------|
| Plan   | 0         | 0        |       |
| Actual | 1         | 0        | 1     |

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of training activities in global education

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 11     | 25     |

**Output #2**

**Output Measure**

- Number of educational materials on global education created or updated.

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 12     | 31     |

**Output #3**

**Output Measure**

- Number of people receiving educational materials in global education

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 4100   | 2191   |

**Output #4**

**Output Measure**

- Number of outside organizations or groups participating in global education initiatives this year.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 18            | 10            |

**Output #5**

**Output Measure**

- Number of grants and contracts supporting initiatives in global education.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 2             | 5             |

**Output #6**

**Output Measure**

- Presentations intended to create awareness of global issues

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 100           | 0             |

**Output #7**

**Output Measure**

- Number of fund-raising activities

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 3             | 0             |

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME                                                                                                                    |
|--------|---------------------------------------------------------------------------------------------------------------------------------|
| 1      | Number of participants who increased their knowledge about global education                                                     |
| 2      | Number of participants in global education initiatives who adopt a skill.                                                       |
| 3      | Number of groups or organization that collaborate with global education initiatives.                                            |
| 4      | Number of participants who improved their lives because of global education initiatives.                                        |
| 5      | Number of groups or organizations that changed their structure, philosophy, or mission because of global education initiatives. |

**Add Cross-cutting Outcome/Impact Statement or Unintended or Previously Unknown Outcome Measure**

**Outcome #1**

**1. Outcome Measures**

Not Reporting on this Outcome Measure

Number of participants who increased their knowledge about global education

**2. Associated Institution Types**

1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 6120                | 2191   |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

West Virginia citizens have generally lacked opportunity for exposure to other cultures. There has been a rising number of immigrants from Latin American countries into the eastern panhandle of West Virginia, which has increased the need for understanding of Spanish and Latino cultures.

**What has been done**

WVU-ES has increased its global education efforts including:

\* Spanish language study trip to Antigua Guatemala \* CHISPA \* 4-H workshop for educators from Mexico \* WVCEOS International Student \* WVU International 4-H Exchange Program \* National IFE Conference \* University of Guanajuato 4-H Volunteer Service and High School Linkages Projects \* Skill-a-thons on global education for WV 4-H youth \* Summer graduate class for educators in Guatemala \* 4-H programs in the Patagonia region of Chile \* WVU Cultural Attache Program

**Results**

West Virginia youth and adults increased their knowlege of:

\* The culture of host country of the CEOS international student  
\* Spanish/Hispanic/Latino culture and issues such as the heritage of Spanish colonialism and the impact it had on indigenous populations and civilizations  
\* Community and economic development programs in Guatemala

**4. Associated Knowledge Areas**

- 606 - International Trade and Development
- 611 - Foreign Policy and Programs
- 704 - Nutrition and Hunger in the Population
- 802 - Human Development and Family Well-Being
- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development

**Outcome #2**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants in global education initiatives who adopt a skill.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 650                 | 375    |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Offering classes in Spanish language and culture, both on and off campus, raises Extension's visibility and credibility. Conducting and coordinating graduate courses in hispanic culture is a direct entree into building collaboration with academic faculty and departments.

**What has been done**

- \* Summer graduate class for educators in Guatemala in language and culture.
- \* Brown bag presentation at WVU on global topics
- \* WVU Cultural Attache program
- \* 2 CHISPA Hispanic education experiences

**Results**

WV teachers completed three of the Content Standards and Objectives required by the West Virginia Department of Education including: 1) locate resources in the global community which relate to Spanish and or culture, 2) identify opportunities to use Spanish within and beyond the school setting, and 3) recognize the potential of Spanish for personal growth, enrichment, and enjoyment.

#### 4. Associated Knowledge Areas

- 606 - International Trade and Development
- 611 - Foreign Policy and Programs
- 704 - Nutrition and Hunger in the Population
- 802 - Human Development and Family Well-Being
- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development

#### Outcome #3

##### 1. Outcome Measures

- Not Reporting on this Outcome Measure

Number of groups or organization that collaborate with global education initiatives.

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

##### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 3                   | 0      |

##### 3c. Qualitative Outcome or Impact Statement

**Issue (Who cares and Why)**

**What has been done**

**Results**

#### 4. Associated Knowledge Areas

- 606 - International Trade and Development
- 611 - Foreign Policy and Programs
- 704 - Nutrition and Hunger in the Population
- 802 - Human Development and Family Well-Being
- 805 - Community Institutions, Health, and Social Services

- 806 - Youth Development

**Outcome #4**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants who improved their lives because of global education initiatives.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 5                   | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

- 606 - International Trade and Development
- 611 - Foreign Policy and Programs
- 704 - Nutrition and Hunger in the Population
- 802 - Human Development and Family Well-Being
- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development

**Outcome #5**

**1. Outcome Measures**

Not Reporting on this Outcome Measure

Number of groups or organizations that changed their structure, philosophy, or mission because of global education initiatives.

**2. Associated Institution Types**

1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 2                   | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

West Virginia citizens have generally lacked opportunity for exposure to other cultures. There has been a rising number of immigrants from Latin American countries into the eastern panhandle of West Virginia, which has increased the need for understanding of Spanish and Latino cultures. School teachers need opportunities to enhance their skills in Spanish and Latino culture and language.

**What has been done**

- \* Spanish language study trip to Antiqua Guatemala
- \* 4-H workshop for educators from Mexico
- \* WVU/University of Guanajuato 4-H Volunteer Service and High School Linkage projects
- \* Summer graduate class for educators in Guatemala in language and culture study

**Results**

- \* Increased capacity to integrate 4-H into U of Guanajuato high school system
- \* Schools have better equipped teachers to serve as resource people on Spanish culture.
- \* The Chair of the Department of Foreign Languages at WVU is collaborating with Extension on a study abroad trip for teachers.

**4. Associated Knowledge Areas**

606 - International Trade and Development

- 611 - Foreign Policy and Programs
- 704 - Nutrition and Hunger in the Population
- 802 - Human Development and Family Well-Being
- 805 - Community Institutions, Health, and Social Services
- 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.)
- Other

##### **Brief Explanation**

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

##### **(OPTIONAL SECTION)**

##### **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.
- Comparison between locales where the program operates and sites without program intervention
- Other

## **Evaluation Results**

### **Key Items of Evaluation**

**V(A). Planned Program (Summary)**

**Program # 8**

**1. Name of the Planned Program**

Culture and Heritage

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

| <b>KA Code</b> | <b>Knowledge Area</b>                                                                  | <b>%1862 Extension</b> | <b>%1890 Extension</b> | <b>%1862 Research</b> | <b>%1890 Research</b> |
|----------------|----------------------------------------------------------------------------------------|------------------------|------------------------|-----------------------|-----------------------|
| 605            | Natural Resource and Environmental Economics                                           | 20%                    |                        |                       |                       |
| 801            | Individual and Family Resource Management                                              | 10%                    |                        |                       |                       |
| 803            | Sociological and Technological Change Affecting Individuals, Families, and Communities | 20%                    |                        |                       |                       |
| 805            | Community Institutions, Health, and Social Services                                    | 10%                    |                        |                       |                       |
| 806            | Youth Development                                                                      | 10%                    |                        |                       |                       |
| 903            | Communication, Education, and Information Delivery                                     | 30%                    |                        |                       |                       |
|                | <b>Total</b>                                                                           | 100%                   |                        |                       |                       |

**Add knowledge area**

**V(C). Planned Program (Inputs)**

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

| <b>Year: 2010</b> | <b>Extension</b> |             | <b>Research</b> |             |
|-------------------|------------------|-------------|-----------------|-------------|
|                   | <b>1862</b>      | <b>1890</b> | <b>1862</b>     | <b>1890</b> |
| Plan              | 9.0              | 0.0         | 0.0             | 0.0         |
| Actual            | 8.0              | 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    |
| 10000               | 0              | 0              | 0              |
| 1862 Matching       | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 670000              | 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**

This planned program includes initiatives in heritage/cultural education. Activities under this program area include conducting programs at WVU Jackson's Mill Conference Center and local fairs and festivals, recruiting volunteers, and conducting site visits of cultural/tourism sites in WV.

**2. Brief description of the target audience**

This program is directed toward the general public, community members, local fairs and festival directors, youth in schools, camps, and 4-H club members.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

| 2010          | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|---------------|------------------------|--------------------------|-----------------------|-------------------------|
| <b>Plan</b>   | 10000                  | 50000                    | 7000                  | 42000                   |
| <b>Actual</b> | 17587                  | 6353                     | 23289                 | 150                     |

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

**Patent Applications Submitted**

Year: 2010  
 Plan: 0  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

| 2010        | Extension | Research | Total |
|-------------|-----------|----------|-------|
| <b>Plan</b> | 0         | 0        |       |

|               |   |   |   |
|---------------|---|---|---|
| <b>Actual</b> | 0 | 0 | 0 |
|---------------|---|---|---|

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of training activities in culture, tourism or experiential learning

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 70            | 84            |

**Output #2**

**Output Measure**

- Number of educational materials on culture, tourism, or experiential learning that has been created or updated.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 32            | 2             |

**Output #3**

**Output Measure**

- Number of educational materials in culture, tourism, or experiential education that are distributed

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 11200         | 36000         |

**Output #4**

**Output Measure**

- Number of people receiving educational materials.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 15000         | 18000         |

**Output #5**

**Output Measure**

- Number of counties participating in culture, tourism and experiential learning initiatives.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
|-------------|---------------|---------------|

2010

16

55

**Output #6**

**Output Measure**

- Number of outside organizations or groups that are participating in culture, tourism, and experiential learning initiatives with Extension.

Not reporting on this Output for this Annual Report

**Year**

**Target**

**Actual**

2010

90

0

**Output #7**

**Output Measure**

- Number of grants and contracts

Not reporting on this Output for this Annual Report

**Year**

**Target**

**Actual**

2010

32

0

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME                                                                                                     |
|--------|------------------------------------------------------------------------------------------------------------------|
| 1      | Number of participants who increased their knowledge about culture, tourism, or experiential learning            |
| 2      | Number of participants who improved their skill level with regard to culture, tourism, or experiential learning. |

**Add Cross-cutting Outcome/Impact Statement or Unintended or Previously Unknown Outcome Measure**

**Outcome #1**

**1. Outcome Measures**

Not Reporting on this Outcome Measure

Number of participants who increased their knowledge about culture, tourism, or experiential learning

**2. Associated Institution Types**

1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 900                 | 16700  |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Fairs and festivals are important venues for educational experiences. Each county in West Virginia hosts one or more fairs and WVU Extension takes an active role in providing educational opportunities. These fairs and festivals are vital to the economy of local communities.

**What has been done**

This program includes initiatives in heritage/cultural education. Activities include conducting programs at WVU Jackson's Mill Conference Center and local fairs and festivals, recruiting volunteers, conducting site visits of cultural/tourism sites in WV, and working with local festival boards and the WV Fairs and Festivals Association to enhance the impact of fairs and festivals on WV communities.

**Results**

- \* Livestock exhibitors gained knowledge in WV Department of Agriculture rules and regulations prior to fairs.
- \* 4-H youth learned about how the legislature works.
- \* State and county fair participants learned nutritional facts and how to maintain healthy lifestyles.
- \* State and county fair participants learned about food safety and how to protect themselves against foodborne illnesses at fairs.

**4. Associated Knowledge Areas**

605 - Natural Resource and Environmental Economics

- 801 - Individual and Family Resource Management
- 803 - Sociological and Technological Change Affecting Individuals, Families, and
- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development
- 903 - Communication, Education, and Information Delivery

## **Outcome #2**

### **1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants who improved their skill level with regard to culture, tourism, or experiential learning.

### **2. Associated Institution Types**

- 1862 Extension

### **3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

### **3b. Quantitative Outcome**

| <b>Year</b> | <b>Quantitative Target</b> | <b>Actual</b> |
|-------------|----------------------------|---------------|
| 2010        | 9180                       | 700           |

### **3c. Qualitative Outcome or Impact Statement**

#### **Issue (Who cares and Why)**

We have learned from a survey of our stakeholders, that WV citizens do not necessarily always connect Extension programs such as 4-H and CEOS (Community Education Outreach Service) with WVU Extension and ultimately with WVU. Because of this "disconnect" legislators don't always consider the allocation needs of Extension. Education of legislators is needed.

#### **What has been done**

Each year, WVU Extension hosts the WVU Day at the Legislature. Prior to the day, Extension 4-H agents work with their youth to help them understand the value and workings of the State Legislature of WV. As part of that training, they are prepared to meet and greet their legislator and tell them their concerns including the value of the 4-H program and other Extension programs in their lives.

#### **Results**

700 youth and adults gained skills in how to meet and greet state legislators.

### **4. Associated Knowledge Areas**

- 605 - Natural Resource and Environmental Economics
- 801 - Individual and Family Resource Management
- 803 - Sociological and Technological Change Affecting Individuals, Families, and
- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development
- 903 - Communication, Education, and Information Delivery

#### **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.)
- Other

##### **Brief Explanation**

{No Data Entered}

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

##### **(OPTIONAL SECTION)**

##### **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.
- Comparison between locales where the program operates and sites without program intervention
- Other

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

{No Data Entered}

**V(A). Planned Program (Summary)**

**Program # 9**

**1. Name of the Planned Program**

Community 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                                             | 10%             |                 |                |                |
| 603     | Market Economics                                                                       | 10%             |                 |                |                |
| 604     | Marketing and Distribution Practices                                                   | 10%             |                 |                |                |
| 607     | Consumer Economics                                                                     | 10%             |                 |                |                |
| 608     | Community Resource Planning and Development                                            | 30%             |                 |                |                |
| 610     | Domestic Policy Analysis                                                               | 10%             |                 |                |                |
| 803     | Sociological and Technological Change Affecting Individuals, Families, and Communities | 10%             |                 |                |                |
| 805     | Community Institutions, Health, and Social Services                                    | 10%             |                 |                |                |
|         | <b>Total</b>                                                                           | 100%            |                 |                |                |

**Add knowledge area**

**V(C). Planned Program (Inputs)**

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

| Year: 2010 | 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    |
| 175000              | 0              | 0              | 0              |
| 1862 Matching       | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 1090000             | 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 Community Development planned program includes the following initiatives: Community Development Institute, First Impressions, Downtown Revitalization, Government, Planning, and Public Policy, Independent Retail Assessment, and Business Retention and Expansion. Specific activities include recruit volunteer visitors, visiting businesses and communities, conducting interview/surveys, analyzing and reporting results, developing recommendations, developing and administering trainings and curriculum modules, and evaluating the program.

**2. Brief description of the target audience**

Local businesses, community-based organizations, elected officials, community leaders, community residents, and WVU-ES professionals.

**V(E). Planned Program (Outputs)****1. Standard output measures**

| 2010          | Direct Contacts<br>Adults | Indirect Contacts<br>Adults | Direct Contacts<br>Youth | Indirect Contacts<br>Youth |
|---------------|---------------------------|-----------------------------|--------------------------|----------------------------|
| <b>Plan</b>   | 2000                      | 13130                       | 200                      | 900                        |
| <b>Actual</b> | 3473                      | 46747                       | 0                        | 570                        |

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

Year: 2010

Plan: 0

Actual: 0

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

|               |                  |                 |              |
|---------------|------------------|-----------------|--------------|
| <b>2010</b>   | <b>Extension</b> | <b>Research</b> | <b>Total</b> |
| <b>Plan</b>   | 0                | 1               |              |
| <b>Actual</b> | 0                | 1               | 1            |

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of training activities in community development.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 103           | 40            |

**Output #2**

**Output Measure**

- Number of educational materials in community development created or updated.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 91            | 65            |

**Output #3**

**Output Measure**

- Number of educational materials in community development distributed.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 2200          | 1493          |

**Output #4**

**Output Measure**

- Number of outside organizations or groups participating in community development initiatives this year.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 78            | 25            |

**Output #5**

**Output Measure**

- Number of grants and contracts supporting initiatives in community development.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 3             | 9             |

**Output #6**

**Output Measure**

- Number of public officials receiving training

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b>     | <b>Actual</b> |
|-------------|-------------------|---------------|
| 2010        | {No Data Entered} | 181           |

**Output #7**

**Output Measure**

- Number of volunteers working on programs

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b>     | <b>Actual</b> |
|-------------|-------------------|---------------|
| 2010        | {No Data Entered} | 170           |

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME                                                                                                                     |
|--------|----------------------------------------------------------------------------------------------------------------------------------|
| 1      | Number of participants who increased their knowledge of community development.                                                   |
| 2      | Number of groups or organizations that collaborate with WVU-ES community development initiatives.                                |
| 3      | Number of groups or organizations that changed their structure, philosophy, or mission due to community development initiatives. |
| 4      | Number of changes in social conditions due to community development initiatives.                                                 |

**Add Cross-cutting Outcome/Impact Statement or Unintended or Previously Unknown Outcome Measure**

**Outcome #1**

**1. Outcome Measures**

Not Reporting on this Outcome Measure

Number of participants who increased their knowledge of community development.

**2. Associated Institution Types**

1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 1300                | 630    |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Local government officials rely on the training they receive from WVU Extension to make decisions about community and economic development activities. The new information they receive leads to recommendations for continued community project advancement.

**What has been done**

Each year, WVU Extension conducts the Community Development Institute. Organizational officers receive leadership development training and club meeting facilitation. During the year they consult with WVU Extension Specialists.

**Results**

- \* Participants gained knowledge of planning procedures, its importance, and its impacts.
- \* Participants gained knowledge of leadership styles.

**4. Associated Knowledge Areas**

- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics
- 608 - Community Resource Planning and Development

- 610 - Domestic Policy Analysis
- 803 - Sociological and Technological Change Affecting Individuals, Families, and
- 805 - Community Institutions, Health, and Social Services

## **Outcome #2**

### **1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of groups or organizations that collaborate with WVU-ES community development initiatives.

### **2. Associated Institution Types**

- 1862 Extension

### **3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

### **3b. Quantitative Outcome**

| <b>Year</b> | <b>Quantitative Target</b> | <b>Actual</b> |
|-------------|----------------------------|---------------|
| 2010        | 12                         | 11            |

### **3c. Qualitative Outcome or Impact Statement**

#### **Issue (Who cares and Why)**

Local government officials rely on the training they receive from WVU Extension to make decisions about community and economic development activities. The new information they receive leads to recommendations for continued community project advancement.

#### **What has been done**

WVU Extension conducts the following programs to assist local governments with community planning and revitalization:

- \* First Impressions Program
- \* Government Planning & Public Policy
- \* Business Retention & Expansion
- \* Community Development Institute
- \* Community Planning Program

#### **Results**

This year a number of counties and cities worked with the WVU Extension Service to develop plans to enhance their community governments and the function of towns and cities. They include: Mineral, Grant, Putnam, Tucker, Lewis, and Hampshire counties, and Winfield, WV, Madison, WV, Weston, WV, West Liberty, and WV, Westover, WV.

#### 4. Associated Knowledge Areas

- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics
- 608 - Community Resource Planning and Development
- 610 - Domestic Policy Analysis
- 803 - Sociological and Technological Change Affecting Individuals, Families, and
- 805 - Community Institutions, Health, and Social Services

#### Outcome #3

##### 1. Outcome Measures

- Not Reporting on this Outcome Measure

Number of groups or organizations that changed their structure, philosophy, or mission due to community development initiatives.

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

##### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 6                   | 1      |

##### 3c. Qualitative Outcome or Impact Statement

###### **Issue (Who cares and Why)**

Community and business development in the state of West Virginia depends largely on the cooperation of the universities, business, professional organizations, and local community officials. The development of collaboratives to offer education and training is an important first step in developing communities in the rural areas of West Virginia.

###### **What has been done**

WVU Extension conducts the following programs to assist local governments with community planning and revitalization:

- \* First Impressions Program
- \* Government Planning & Public Policy
- \* Business Retention & Expansion

- \* Community Development Institute
- \* Community Planning Program

These programs, along with those offered by Northern Community College have strengthened the training opportunities for all West Virginians.

### Results

A collaborative between Extension, Northern Community College and the Chamber has formed to develop resources for business development. These groups are also working together to attract new businesses in the area.

### 4. Associated Knowledge Areas

- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics
- 608 - Community Resource Planning and Development
- 610 - Domestic Policy Analysis
- 803 - Sociological and Technological Change Affecting Individuals, Families, and
- 805 - Community Institutions, Health, and Social Services

### Outcome #4

#### 1. Outcome Measures

- Not Reporting on this Outcome Measure

Number of changes in social conditions due to community development initiatives.

#### 2. Associated Institution Types

- 1862 Extension

#### 3a. Outcome Type:

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 8                   | 11     |

#### 3c. Qualitative Outcome or Impact Statement

**Issue (Who cares and Why)**

West Virginia University Extension has maintained its community focus. As a result, county governments have continued to fund a portion of the budget needed to support the activities of county offices. Local government committee members need to understand the benefits associated with Extension outreach.

**What has been done**

WVU Extension conducts the following programs to assist local governments with community planning and revitalization:

- \* First Impressions Program
- \* Government Planning & Public Policy
- \* Business Retention & Expansion
- \* Community Development Institute
- \* Community Planning Program

**Results**

Local government planning committee members used information that was given to them by Extension educators as the basis of decisions to continue funding of County Extension office and maintain the employment of office personnel

**4. Associated Knowledge Areas**

- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics
- 608 - Community Resource Planning and Development
- 610 - Domestic Policy Analysis
- 803 - Sociological and Technological Change Affecting Individuals, Families, and
- 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.)
- Other

**Brief Explanation**

The external factors that have affected the community development planned program have been personnel related. Some members of the Extension faculty that have, in the past, contributed to this program area have suffered illnesses that have caused them to resign or cut back on their activities. This year, new faculty have been added, but it will take additional time before they assume the responsibilities of those who have left.

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

### **(OPTIONAL SECTION)**

#### **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.
- Comparison between locales where the program operates and sites without program intervention
- Other

#### **Evaluation Results**

#### **Key Items of Evaluation**

**V(A). Planned Program (Summary)**

**Program # 10**

**1. Name of the Planned Program**

Youth 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 |
|---------|------------------------------------------|-----------------|-----------------|----------------|----------------|
| 315     | Animal Welfare/Well-Being and Protection | 25%             |                 |                |                |
| 806     | Youth Development                        | 75%             |                 |                |                |
|         | <b>Total</b>                             | 100%            |                 |                |                |

Add knowledge area

**V(C). Planned Program (Inputs)**

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

| Year: 2010 | Extension |      | Research |      |
|------------|-----------|------|----------|------|
|            | 1862      | 1890 | 1862     | 1890 |
| Plan       | 12.0      | 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    |
| 450000              | 0              | 0              | 0              |
| 1862 Matching       | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 345000              | 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 agricultural education programs are vehicles for youth/adult development, which is the mission of

the Cooperative Extension Service of the USDA. Agricultural education programming offers training that develops life skills in both youth and adult participants. Development of life skills enhances the ability of youth to become functioning members of society, and helps adults gain satisfaction and accomplishment of personal/career goals. With technological advances and the increased urban/non-farm populations, individuals are now several generations removed from actual working knowledge of agricultural production; the public (youth and adult) are not prepared to make informed decisions that ensure quality and adequate food and fiber while also maintaining the environment. The mission of the 4-H Youth Agriculture is to help West Virginia youth/adults gain a greater awareness of the food, fiber, and natural resources systems and its role in the economy and society.

**Major activities**

- 4-H Youth Agriculture Program
- Agriculture in the Classroom
- Summer Agriculture Institute
- Youth Safe Farm
- 4-H/FFA Market Animal Program
- CYFAR

**2. Brief description of the target audience**

The target audience for this programming is WVU-ES personnel, agricultural industry and commodity group personnel, 4-H youth and volunteer leaders, Vo-Ag personnel, FFA youth, parents, Extension agents and specialists

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

| 2010          | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|---------------|------------------------|--------------------------|-----------------------|-------------------------|
| <b>Plan</b>   | 10200                  | 26000                    | 20400                 | 10400                   |
| <b>Actual</b> | 11393                  | 81713                    | 29976                 | 47994                   |

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

**Patent Applications Submitted**

Year: 2010  
 Plan: 0  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

| 2010 | Extension | Research | Total |
|------|-----------|----------|-------|
|      |           |          |       |

|               |   |   |   |
|---------------|---|---|---|
| <b>Plan</b>   | 0 | 0 |   |
| <b>Actual</b> | 1 | 0 | 1 |

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of training activities in youth agriculture.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 1800          | 1524          |

**Output #2**

**Output Measure**

- Number of educational materials in youth agriculture created or updated.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 75            | 3             |

**Output #3**

**Output Measure**

- Number of people receiving educational materials related to youth agriculture.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 22000         | 22908         |

**Output #4**

**Output Measure**

- Number of outside organizations participating in initiatives

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b>     | <b>Actual</b> |
|-------------|-------------------|---------------|
| 2010        | {No Data Entered} | 45            |

**Output #5**

**Output Measure**

- Number of grants and contracts

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
|-------------|---------------|---------------|

2010 {No Data Entered} 1

**Output #6**

**Output Measure**

- Number of volunteers

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b>     | <b>Actual</b> |
|-------------|-------------------|---------------|
| 2010        | {No Data Entered} | 211           |

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME                                                                                     |
|--------|--------------------------------------------------------------------------------------------------|
| 1      | Number of youth agriculture participants who increased their knowledge.                          |
| 2      | Number of participants in youth agriculture initiatives who changed their attitudes or opinions. |
| 3      | Number of participants in youth agriculture initiatives who improved their skill level.          |
| 4      | Number of participants in youth agriculture initiatives who changed a habit or procedure.        |
| 5      | Amount of money raised by program participants who support youth agriculture efforts.            |

**Add Cross-cutting Outcome/Impact Statement or Unintended or Previously Unknown Outcome Measure**

**Outcome #1**

**1. Outcome Measures**

Not Reporting on this Outcome Measure

Number of youth agriculture participants who increased their knowledge.

**2. Associated Institution Types**

1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 2240                | 8222   |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The mission of the 4-H Youth Agriculture planned program is to help WV youth and adults gain a greater awareness of food, fiber, and natural resource systems and their role in the economy and society.

**What has been done**

Individual Consultations  
Judgings  
Farm safety project  
Project workshops  
Skillathon/Quiz Bowl  
Visits/tours  
Camps/overnighters and classes  
School programs  
Fairs and expositions

**Results**

\* Youth gained knowledge about various aspects of livestock evaluation, ways to make family farms profitable, animal breed traits and anatomy, wholesale and retail issues, agricultural production methods, basic soil differences, soil and water conservation practices, dairy facts, where their food comes from and how it is produced, and how butter is made.

\* Adults gained knowledge about resources to use with 4-H and FFA members, animal ethics, skillathons, animal welfare quality assurance, and management practices for 4-H youth livestock projects.

#### 4. Associated Knowledge Areas

- 315 - Animal Welfare/Well-Being and Protection
- 806 - Youth Development

#### Outcome #2

##### 1. Outcome Measures

- Not Reporting on this Outcome Measure

Number of participants in youth agriculture initiatives who changed their attitudes or opinions.

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

##### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 410                 | 6800   |

##### 3c. Qualitative Outcome or Impact Statement

###### **Issue (Who cares and Why)**

The mission of the 4-H Youth Agriculture planned program is to help WV youth and adults gain a greater awareness of food, fiber, and natural resources systems and their role in the economy and society. In addition, the Youth Safe Farm program helps families understand the possible dangers on their farms and ways to correct them.

###### **What has been done**

Individual consultations  
Judgings  
Farm safety project  
Project workshops  
Skillathon/Quiz Bowl  
Visits/tours  
Camps/overnighters and classes  
School Programs  
Fairs and expositions

###### **Results**

- \* Parents indicated that their youth were more confident and had higher self-esteem after a sale.
- \* Community members have a better knowledge of how hard the youth work to sustain the animal of their choosing.
- \* Participants in the Youth Safe Farm project said that although they knew there were dangers on their farms, they didn't know there were so many and that the program helped them recognize more dangers. They said that they no longer look over simple easy things to fix things around the house.

#### 4. Associated Knowledge Areas

- 315 - Animal Welfare/Well-Being and Protection
- 806 - Youth Development

### Outcome #3

#### 1. Outcome Measures

- Not Reporting on this Outcome Measure

Number of participants in youth agriculture initiatives who improved their skill level.

#### 2. Associated Institution Types

- 1862 Extension

#### 3a. Outcome Type:

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 1700                | 6717   |

#### 3c. Qualitative Outcome or Impact Statement

##### **Issue (Who cares and Why)**

Agricultural education programming offers training that develops life skills in both youth and adults. Development of lifeskills enhances the ability of youth to become functioning members of society and helps adults gain satisfaction and accomplishment of personal/career goals.

##### **What has been done**

Individual consultations  
Judgings  
Farm safety project  
Project workshops  
Skillathon/Quiz Bowl  
Visits/tours

Camps/overnighters and classes  
School Programs  
Fairs and expositions

**Results**

Youth gained skills in how to properly fit and show livestock, brushing & washing, trimming meat, air rifle and pistol use, archery skills, wildlife conservation, shotgun, and muzzleloading, oral reasoning for 4-H horse judging, how to evaluate soils and make proper land use recommendations, team work, butter-making, gardening, making plastics from cornstarch, and beekeeping.

**4. Associated Knowledge Areas**

- 315 - Animal Welfare/Well-Being and Protection
- 806 - Youth Development

**Outcome #4**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants in youth agriculture initiatives who changed a habit or procedure.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 500                 | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

One of the essential elements of youth development is mastery of skills. Youth in WV 4-H agricultural programs are guided through the process of learning skills, mastering the skills, competing in competitions, and using the skills in everyday life.

**What has been done**

Youth in WV counties have successfully competed in the National 4-H Invitational

In the Youth Safe Farm project, families identify safety problems on their farms and develop a plan for addressing them. They document progress and success in the efforts.

**Results**

- \* The Braxton County 4-H Team represented WV at the National 4-H Invitational, and placed 8th in the Air Rifle competition.
- \* In the Youth Safe Farm project, 38 families identified 407 safety problems on their farms and corrected 281 of those problems.
- \* A new 2010 state team was trained, competed and has qualified for the 2011 National 4-H Land and Homesite Judging contests by winning the 2010 WV 4-H soils judging championships (Land Judging and Homesite Judging). This will be the eleventh year out of the last twelve years that Barbour County has qualified for the national contest.

**4. Associated Knowledge Areas**

- 315 - Animal Welfare/Well-Being and Protection
- 806 - Youth Development

**Outcome #5**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Amount of money raised by program participants who support youth agriculture efforts.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual  |
|------|---------------------|---------|
| 2010 | 2000000             | 4670495 |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

One of the essential elements of youth development is mastery of skills. Youth in WV 4-H agricultural programs are guided through the process of learning skills, mastering the skills, competing in competitions, and using the skills in everyday life.

**What has been done**

Funds were generated from 4-H and FAA livestock sales. Youth say that they will use this money to pay for college or further training.

**Results**

\* \$4,567,565 generated from 4-H and FFA livestock sale proceeds.

\* \$102,930 returned to community groups and organizations from youth project livestock sales.

This included such groups as county scholarship funds, county 4-H foundations, county FFA foundations, fair boards, 4-H leaders associations, community organizations, and others.

**4. Associated Knowledge Areas**

- 315 - Animal Welfare/Well-Being and Protection
- 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.)
- Other

**Brief Explanation**

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

**(OPTIONAL SECTION)**

**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.
- Comparison between locales where the program operates and sites without program intervention
- Other

## Evaluation Results

The Youth Agriculture Team developed a county indicator report which identified the types of educational activities being conducted in each county, the total dollars generated from 4-H/FFA market livestock project sales, the total dollars donated to community groups/organizations from 4-H/FFA market livestock project sales, market project summary, and a summary of the implementation of the sheep tail docking rule. Reports were received from 34 counties.

An evaluation study was undertaken during the 2009-2010 4-H year to determine the usage of Animal Science, Plant Science, Mechanical Science, and Natural Resources and Environment project curriculum enrollment and to assess the project completion rates in these project areas. Data indicate project completion rates for the 2009-2010 areas are as follows: Animal Sciences (76%) a decrease of 1%; Plant Sciences (53%), a decrease of 4%; Mechanical Sciences (61%), a decrease of 5%; and Natural Resources (57%), a decrease of 10% from the 2008-2009 4-H year; in addition, the overall project completion rate was 72%, a decrease of 3% from 2008-2009.

## Key Items of Evaluation

**V(A). Planned Program (Summary)**

**Program # 11**

**1. Name of the Planned Program**

Global Food Security and Hunger

**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            | 2%              |                 |                |                |
| 205     | Plant Management Systems                              | 2%              |                 |                |                |
| 211     | Insects, Mites, and Other Arthropods Affecting Plants | 2%              |                 |                |                |
| 212     | Pathogens and Nematodes Affecting Plants              | 2%              |                 |                |                |
| 213     | Weeds Affecting Plants                                | 2%              |                 |                |                |
| 215     | Biological Control of Pests Affecting Plants          | 2%              |                 |                |                |
| 216     | Integrated Pest Management Systems                    | 3%              |                 |                |                |
| 303     | Genetic Improvement of Animals                        | 20%             |                 |                |                |
| 307     | Animal Management Systems                             | 20%             |                 |                |                |
| 308     | Improved Animal Products (Before Harvest)             | 20%             |                 |                |                |
| 311     | Animal Diseases                                       | 10%             |                 |                |                |
| 603     | Market Economics                                      | 5%              |                 |                |                |
| 604     | Marketing and Distribution Practices                  | 5%              |                 |                |                |
| 607     | Consumer Economics                                    | 5%              |                 |                |                |
|         | <b>Total</b>                                          | 100%            |                 |                |                |

**Add knowledge area**

**V(C). Planned Program (Inputs)**

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

| Year: 2010 | Extension |      | Research |      |
|------------|-----------|------|----------|------|
|            | 1862      | 1890 | 1862     | 1890 |
| Plan       | 15.0      | 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    |
| 500000              | 0              | 0              | 0              |
| 1862 Matching       | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 782500              | 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

Aquaculture: Aquaculture began as a tool of the natural resource manager for enhancing and conserving wild animals in public waters. It has expanded into the private sector. There is need to develop policies which address issues and problems facing development of the aquaculture industry in WV. The first step was to engage WV aquaculture producers and to identify specific issues of concern. We have reviewed WV regulations, statutes, and the agencies responsible for implementation of their provisions and have reviewed regulatory/statutory schemes for aquaculture in other states. This has provided guidance regarding how WV policy might be modified.

2009 Feeder Cattle Marketing: The beef industry in West Virginia is characterized by small farms. Farm income, while often not sufficient to provide full time employment, does provide critical supplemental income. Extension personnel provide technical assistance and advice, deliver educational programming and extend organizational support to the pools. West Virginia Feeder Cattle Marketing Pools have traditionally served as a launching point for innovations in beef cattle production and marketing.

Homeowner Horticulture: There are Master Gardener Programs in 44 of West Virginia's 55 counties. These volunteers are trained in classes and activities provided by WVU Extension Service. Master Gardeners receive a minimum of 30 hours of instruction. Along with an orientation, trainees are given core training in botany, propagation, soil science, plant pathology, entomology, communication skills and pest management. Specific gardening topics such as pruning techniques, composting, houseplants, vegetable and herb culture, tree and small fruit culture, lawn and landscape design allow Master Gardeners to diversify their horticultural knowledge. The goal of the program is to provide quality horticulture training and educational workshops to qualified individuals.

Commercial Horticulture: West Virginia has many small farms which are suitable to diversification with specialty crops. Diversification provides an opportunity to significantly increase net farm income, improve community health and increase overall economic sustainability. There continues to be a limited supply of locally-grown food in West Virginia and a general lack of both quality and diversity of produce. Control over one or more environmental variables will enable a specialty crop producer to produce a higher yield of uniform produce across West Virginia. High tunnels, solar greenhouses which are passively-vented that do not use fossil fuels for heating or cooling, have been promoted. In 2009, a conservation tillage project was initiated which investigated the production of 15 cultivars of pumpkins using no-till



2010 350 182

**Output #2**

**Output Measure**

- Number of educational agriculture materials created or updated

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 400    | 4      |

**Output #3**

**Output Measure**

- Number of educational agriculture materials distributed.

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 400000 | 10715  |

**Output #4**

**Output Measure**

- Number of new groups or counties participating in agriculture initiatives.

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 10     | 0      |

**Output #5**

**Output Measure**

- Number of outside organizations or groups participating in agriculture initiatives this year.

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 75     | 364    |

**Output #6**

**Output Measure**

- Number of new grants and contracts supporting initiatives in agriculture production and marketing

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 15     | 190    |

**Output #7**

**Output Measure**

- Number of referrals of agriculture production and marketing questions

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 3000   | 878    |

**Output #8**

**Output Measure**

- Number of site visits annually.

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 900    | 648    |

**Output #9**

**Output Measure**

- Number of volunteers

Not reporting on this Output for this Annual Report

| Year | Target            | Actual |
|------|-------------------|--------|
| 2010 | {No Data Entered} | 513    |

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME                                                                                              |
|--------|-----------------------------------------------------------------------------------------------------------|
| 1      | Number of agriculture production and marketing program participants who increased their knowledge.        |
| 2      | Number of agriculture production and marketing participants who changed their attitudes or opinions.      |
| 3      | Number of agriculture production and marketing participants who improved their skill level.               |
| 4      | Number of agriculture production and marketing participants who adopt a skill                             |
| 5      | Number of groups or organizations that collaborated with agriculture production and marketing initiatives |
| 6      | Number of new initiatives in agriculture production and marketing that were implemented this year.        |
| 7      | Amount of money raised by agriculture production and marketing participants to support initiatives        |
| 8      | Number of agriculture production and marketing participants who improved their lives                      |
| 9      | Number of grass carp permitted by WV DNR because of changes in attitudes toward the environment.          |
| 10     | Number of operations selling live trout and/or eggs.                                                      |
| 11     | Value of farm-raised trout sold in WV                                                                     |
| 12     | Number of changes in the physical environment due to agriculture production and marketing efforts         |
| 13     | Changes in the social environment related to global food security and hunger educational programs         |

**Add Cross-cutting Outcome/Impact Statement or Unintended or Previously Unknown Outcome Measure**

**Outcome #1**

**1. Outcome Measures**

Not Reporting on this Outcome Measure

Number of agriculture production and marketing program participants who increased their knowledge.

**2. Associated Institution Types**

1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 9000                | 11700  |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

There is need to address issues facing development of aquaculture. The beef industry in WV is characterized by small farms which provide critical supplemental income. WV Feeder Cattle Marketing Pools have served as a launching point for innovations in beef cattle production and marketing. WV has many small farms which are suitable for diversification with fruits and vegetables and provide an opportunity to increase net farm income, improve community health, and increase economic sustainability.

**What has been done**

Educational programs are carried out in each commodity area. This includes commodity area conferences, dinner meetings, county meetings, demonstrations, workshops, field days, pasture walks, twilight tours, publications, and site visits. The West Virginia Master Gardener Program operates in 44 of West Virginia's 55 counties. Trainees are given core training in botany, propagation, soil science, plant pathology, entomology, communication skills and pest management as well as horticulture techniques.

**Results**

- \* Aquaculture participants gained knowledge in aquaculture management, fish health, pond management methods, and the benefits to health when fish are consumed on a regular basis.
- \* Horticulture participants gained knowledge of constructing high tunnel structures, gardening to raise their own food, pruning trees, preparing soils, pesticides and pest management, quality standards for fruits and vegetables, season extension, preparing honeybees for winter, and regional apple production.
- \* Livestock producers gained knowledge of their responsibilities to produce quality cattle by communicating with both prospective and successful buyers.

**4. Associated Knowledge Areas**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 215 - Biological Control of Pests Affecting Plants
- 216 - Integrated Pest Management Systems
- 303 - Genetic Improvement of Animals
- 307 - Animal Management Systems
- 308 - Improved Animal Products (Before Harvest)
- 311 - Animal Diseases
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics

**Outcome #2**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of agriculture production and marketing participants who changed their attitudes or opinions.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 4000                | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

There is need to address issues facing development of aquaculture. The beef industry in WV is characterized by small farms which provide critical supplemental income. WV Feeder Cattle Marketing Pools have served as a launching point for innovations in beef cattle production and marketing. WV has many small farms which are suitable for diversification with fruits and

vegetables and provide an opportunity to increase net farm income, improve community health, and increase economic sustainability.

#### **What has been done**

Educational programs are carried out in each commodity area. This includes commodity area conferences, dinner meetings, county meetings, demonstrations, workshops, field days, pasture walks, twilight tours, publications, and site visits. The West Virginia Master Gardener Program operates in 44 of West Virginia's 55 counties. Trainees are given core training in botany, propagation, soil science, plant pathology, entomology, communication skills and pest management as well as horticulture techniques.

#### **Results**

\* Horticulture commercial participants (8 producers) were motivated to help themselves during the time of drought and followed through on recommendations from Extension agents.

\* Horticulture participants were motivated to try grafting queens and intend to experiment with this later in the spring.

\* Horticulture participants indicated that they intend to implement the use of alternative gardening systems and season extension practices recommended by agents.

\*Livestock participants indicated that they will look into a testing program for BVD PI issues within the groups of cattle that they market.

#### **4. Associated Knowledge Areas**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 215 - Biological Control of Pests Affecting Plants
- 216 - Integrated Pest Management Systems
- 303 - Genetic Improvement of Animals
- 307 - Animal Management Systems
- 308 - Improved Animal Products (Before Harvest)
- 311 - Animal Diseases
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics

#### **Outcome #3**

##### **1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of agriculture production and marketing participants who improved their skill level.

##### **2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 4000                | 6500   |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

There is need to address issues facing development of aquaculture. The beef industry in WV is characterized by small farms which provide critical supplemental income. WV Feeder Cattle Marketing Pools have served as a launching point for innovations in beef cattle production and marketing. WV has many small farms which are suitable for diversification with fruits and vegetables and provide an opportunity to increase net farm income, improve community health, and increase economic sustainability.

**What has been done**

Educational programs are carried out in each commodity area. This includes commodity area conferences, dinner meetings, county meetings, demonstrations, workshops, field days, pasture walks, twilight tours, publications, and site visits. The West Virginia Master Gardener Program operates in 44 of West Virginia's 55 counties. Trainees are given core training in botany, propagation, soil science, plant pathology, entomology, communication skills and pest management as well as horticulture techniques.

**Results**

- \* Aquaculture participants gained skills related to increasing the use of aquaculture products in the recreational industry, preparing fish, managing ponds and streams, and using grass carp to control aquatic vegetation.
- \* Horticulture participants gained skills in using new productions systems such as the high tunnel, home gardening diagnostic techniques, starting a farmers' market, marketing to compete in the locally grown foods system, and preparing honeybees for winter
- \* Livestock participants gained skills in selecting low cost approaches to managing cattle herds, improving nutrient cycling and pasture productivity, and leadership related to working with local stockyards to handle the financial transactions.

**4. Associated Knowledge Areas**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants

- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 215 - Biological Control of Pests Affecting Plants
- 216 - Integrated Pest Management Systems
- 303 - Genetic Improvement of Animals
- 307 - Animal Management Systems
- 308 - Improved Animal Products (Before Harvest)
- 311 - Animal Diseases
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics

**Outcome #4**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of agriculture production and marketing participants who adopt a skill

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 1800                | 1960   |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

There is need to address issues facing development of aquaculture. The beef industry in WV is characterized by small farms which provide critical supplemental income. WV Feeder Cattle Marketing Pools have served as a launching point for innovations in beef cattle production and marketing. WV has many small farms which are suitable for diversification with fruits and vegetables and provide an opportunity to increase net farm income, improve community health, and increase economic sustainability.

**What has been done**

Educational programs are carried out in each commodity area. This includes commodity area

conferences, dinner meetings, county meetings, demonstrations, workshops, field days, pasture walks, twilight tours, publications, and site visits. The West Virginia Master Gardener Program operates in 44 of West Virginia's 55 counties. Trainees are given core training in botany, propagation, soil science, plant pathology, entomology, communication skills and pest management as well as horticulture techniques.

### **Results**

- \* Participants applied lime and fertilizers to get the most benefit and used rotated hay feeding sites.
- \* One new producer implemented new plasticulture and irrigations systems and is planning on adding a high tunnel in 2011.
- \* Livestock participants acted on the USDA-NRCS cost-share program.
- \* Livestock participants culled open cows and thinned their herds, marketed animals to coincide with diminished forage resources, and adopted vaccine regimen for their cattle.
- \* Pool members shared sources and prices for feed, minerals, bunk feeders, vaccines, and dewormers.
- \* Producers used radio-frequency identification (RFID) ear tags and electronic/computer technology.

### **4. Associated Knowledge Areas**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 215 - Biological Control of Pests Affecting Plants
- 216 - Integrated Pest Management Systems
- 303 - Genetic Improvement of Animals
- 307 - Animal Management Systems
- 308 - Improved Animal Products (Before Harvest)
- 311 - Animal Diseases
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics

### **Outcome #5**

#### **1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of groups or organizations that collaborated with agriculture production and marketing initiatives

#### **2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 170                 | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 215 - Biological Control of Pests Affecting Plants
- 216 - Integrated Pest Management Systems
- 303 - Genetic Improvement of Animals
- 307 - Animal Management Systems
- 308 - Improved Animal Products (Before Harvest)
- 311 - Animal Diseases
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics

**Outcome #6**

**1. Outcome Measures**

Not Reporting on this Outcome Measure

Number of new initiatives in agriculture production and marketing that were implemented this year.

**2. Associated Institution Types**

1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 4                   | 3      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

\* Aquaculture enhances and conserves wild animals in public waters. It has expanded into the private sector as a form of agriculture.

\* West Virginia Feeder Cattle Marketing Pools have successfully used Radio Frequency Identification (RFID) tags.

\* West Virginia is characterized by small farms. Expanded farmers' markets and other venues for selling farm products are needed in WV

**What has been done**

\* Official USDA RFID tags were allocated to producers and utilized successfully in pool operation and data verification.

\* WVU-ES has worked to develop the aquaculture industry in WV.

\* WVU-ES is working to expand farmers' markets throughout the state. This involves both our agriculture and community development units.

**Results**

\* Fish from our facility at Dogwood lake have been used in cooking demonstrations at culinary institutes at Guyses Run Fishing Park.

\* New vendors with farmers' markets were approved by the WV Dept of Aging to redeem senior vouchers and WIC coupons for their produce at the farmers' market in 2010.

\* RFID technology allowed producers to participate in a process verification program which allows them to comply with a potential National Animal Identification System. The database application streamlined all activities from tag allocation to pay settlements into one application.

#### 4. Associated Knowledge Areas

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 215 - Biological Control of Pests Affecting Plants
- 216 - Integrated Pest Management Systems
- 303 - Genetic Improvement of Animals
- 307 - Animal Management Systems
- 308 - Improved Animal Products (Before Harvest)
- 311 - Animal Diseases
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics

#### Outcome #7

##### 1. Outcome Measures

- Not Reporting on this Outcome Measure

Amount of money raised by agriculture production and marketing participants to support initiatives

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

##### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 21000               | 435881 |

##### 3c. Qualitative Outcome or Impact Statement

###### Issue (Who cares and Why)

West Virginia Feeder Cattle Marketing Pools have traditionally served as a launching point for innovations in beef cattle production and marketing.

###### What has been done

Extension personnel provide technical assistance and advice, deliver educational programming and extend organizational support to the pools throughout the entire process. Calf pool cattle were offered for sale on two WV and one VA board sales. The targeted buyer is the farmer/feedlot operator and order buyers that represent farmer/feeders. These buyers are seeking source verified, weaned and preconditioned calves and are willing to pay a premium above current sale barn prices for cattle that meet their specifications.

#### **Results**

- \* 155 producers participated in the calf pools and marketed an average of 38 calves. These calves returned an average of \$2,812 more per producer relative to graded sale prices.
- \* The extra management time invested by producers to wean, vaccinate and booster their calves was rewarded with \$435,881. The average added value for pooled calves in 2010 was \$73.71.
- \* Heifers were one pound heavier than in 2009. Comparable cattle in graded sales during fall 2010 averaged 568 and 536 pounds for steers and heifers. Producers marketing in the pools are selling an extra 59 pounds of steer calf and 45 pounds of heifer calf.
- \* When increases in value are combined on a per head basis, along with an estimated savings in marketing charges, the total value added is \$136 per head.

#### **4. Associated Knowledge Areas**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 215 - Biological Control of Pests Affecting Plants
- 216 - Integrated Pest Management Systems
- 303 - Genetic Improvement of Animals
- 307 - Animal Management Systems
- 308 - Improved Animal Products (Before Harvest)
- 311 - Animal Diseases
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics

#### **Outcome #8**

##### **1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of agriculture production and marketing participants who improved their lives

##### **2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 6700                | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 215 - Biological Control of Pests Affecting Plants
- 216 - Integrated Pest Management Systems
- 303 - Genetic Improvement of Animals
- 307 - Animal Management Systems
- 308 - Improved Animal Products (Before Harvest)
- 311 - Animal Diseases
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics

**Outcome #9**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of grass carp permitted by WV DNR because of changes in attitudes toward the environment.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 7000                | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 215 - Biological Control of Pests Affecting Plants
- 216 - Integrated Pest Management Systems
- 303 - Genetic Improvement of Animals
- 307 - Animal Management Systems
- 308 - Improved Animal Products (Before Harvest)
- 311 - Animal Diseases
- 603 - Market Economics

- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics

### **Outcome #10**

#### **1. Outcome Measures**

- Not Reporting on this Outcome Measure  
Number of operations selling live trout and/or eggs.

#### **2. Associated Institution Types**

- 1862 Extension

#### **3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

#### **3b. Quantitative Outcome**

| <b>Year</b> | <b>Quantitative Target</b> | <b>Actual</b> |
|-------------|----------------------------|---------------|
| 2010        | 29                         | 5             |

#### **3c. Qualitative Outcome or Impact Statement**

##### **Issue (Who cares and Why)**

Aquaculture is a tool of the natural resource manager for enhancing and conserving wild animals in public waters. It has expanded into the private sector as a form of agriculture.

##### **What has been done**

WVU-ES engaged WV aquaculture producers and identified specific issues of concern. They reviewed WV regulations, statutes, and regulatory/statutory schemes for aquaculture in other states. This has provided guidance regarding how WV policy might be modified. New venues for WV aquaculture products have been explore and implemented.

##### **Results**

- \* Two WV vendors now sell and distribute grass carp throughout the state.
- \* Two WV fish producers are working to market fish through farm supply stores.
- \* Grass carp has become a key product that helps local fish producers penetrate markets previously dominated vendors from other states.
- \* A small number of upscale restaurants in Morgantown are purchasing locally grown fish in the round directly from the producer and processing them for their own use.

#### **4. Associated Knowledge Areas**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 215 - Biological Control of Pests Affecting Plants
- 216 - Integrated Pest Management Systems
- 303 - Genetic Improvement of Animals
- 307 - Animal Management Systems
- 308 - Improved Animal Products (Before Harvest)
- 311 - Animal Diseases
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics

**Outcome #11**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Value of farm-raised trout sold in WV

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 1500000             | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

#### 4. Associated Knowledge Areas

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 215 - Biological Control of Pests Affecting Plants
- 216 - Integrated Pest Management Systems
- 303 - Genetic Improvement of Animals
- 307 - Animal Management Systems
- 308 - Improved Animal Products (Before Harvest)
- 311 - Animal Diseases
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics

#### Outcome #12

##### 1. Outcome Measures

- Not Reporting on this Outcome Measure

Number of changes in the physical environment due to agriculture production and marketing efforts

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

##### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 300                 | 0      |

##### 3c. Qualitative Outcome or Impact Statement

###### Issue (Who cares and Why)

\* Aquaculture is a tool of the natural resource manager for enhancing and conserving wild animals in public waters. It has expanded into the private sector as a form of agriculture.

\* High tunnels are solar greenhouses which are passively-vented and do not use fossil fuels for heating or cooling. In addition to extending the growing season, high tunnels also protect the

crop from many insects and diseases.

#### **What has been done**

Educational programs are carried out in each commodity area. This includes commodity area conferences, dinner meetings, county meetings, demonstrations, workshops, field days, pasture walks, twilight tours, publications, and site visits. The West Virginia Master Gardener Program operates in 44 of West Virginia's 55 counties. Trainees are given core training in botany, propagation, soil science, plant pathology, entomology, communication skills and pest management as well as horticulture techniques.

#### **Results**

- \* Jackson's Mill Pond, 2 WVU ponds at Reedsville and the Animal Science Farm in Morgantown are managed as demonstrations for aquatic weed control using various methods.
- \* An old minewater treatment plant near Colfax, WV has developed into a community fishing park. Fish there are purchased from WV vendors.
- \* This year we stocked a catfish hybrid (Channel x Blue) and found they performed well. The striped bass have grown to a harvestable size of about 2 lb. with a marginal feed conversion of 1.6.
- \* One farmers' market vendor added a new high tunnel unit to their produce operation allowing them to have produce for the market significantly later than in previous years.

#### **4. Associated Knowledge Areas**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 215 - Biological Control of Pests Affecting Plants
- 216 - Integrated Pest Management Systems
- 303 - Genetic Improvement of Animals
- 307 - Animal Management Systems
- 308 - Improved Animal Products (Before Harvest)
- 311 - Animal Diseases
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics

#### **Outcome #13**

##### **1. Outcome Measures**

- Not Reporting on this Outcome Measure

Changes in the social environment related to global food security and hunger educational programs

##### **2. Associated Institution Types**

1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | {No Data Entered}   | 5      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

\* Aquaculture is a tool of the natural resource manager for enhancing and conserving wild animals in public waters. It has expanded into the private sector as a form of agriculture.

\* West Virginia Feeder Cattle Marketing Pools have traditionally served as a launching point for innovations in beef cattle production and marketing.

**What has been done**

Extension personnel provide technical assistance and advice, deliver educational programming and extend organizational support to the calf pools throughout the entire process. WVU-ES engaged WV aquaculture producers and identified specific issues of concern. New venues for WV aquaculture products have been explore and implemented.

**Results**

\* DNR no longer requires grass carp permits for pond owners who purchase grass carp from WV vendors who have obtained a fish import permit. Landowners have greater access to this useful tool.

\* A multi-use pond design permits greater water management options to integrate with a variety of agricultural enterprises.

\* By pooling their purchases and taking bids, pool farmers obtained a competitive price and Southern States offered to carry the accounts for 120 days without any additional fees.

\* A trout fishing package was developed at Pipestem State Park. This experience has been featured in an episode of "Fly Rod Chronicles?."

\* A live fish list has been developed to help people looking for fish to find WV vendors who can meet their needs.

**4. Associated Knowledge Areas**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants

- 215 - Biological Control of Pests Affecting Plants
- 216 - Integrated Pest Management Systems
- 303 - Genetic Improvement of Animals
- 307 - Animal Management Systems
- 308 - Improved Animal Products (Before Harvest)
- 311 - Animal Diseases
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 607 - Consumer Economics

#### **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.)
- Other ()

##### **Brief Explanation**

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

##### **(OPTIONAL SECTION)**

##### **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.

- Comparison between locales where the program operates and sites without program intervention
- Other ()

## Evaluation Results

1. Trout, catfish, and striped bass produced at Dogwood Lake and processed at the WVU meats lab were offered for sale at the Morgantown Farmers Market. Customers were surveyed to obtain feedback. Customer satisfaction was monitored with surveys based on their experience with the product. They described a willingness to pay a premium for fish that was consistently the freshest available. Product volume was good. Vacuum packaged smoked trout was especially popular in the summer market.

2. To calculate the economic advantage of selling preconditioned calves through a calf pool each calf in the pools was assigned to a 100 pound weight class (ex: 300-399, 400-499 etc.). This mimics the manner in which the calf would have been offered for sale in a typical graded sale. The actual value of the calf in the pool was then compared to its estimated value in the graded sales using the corresponding average price per pound. If the pooled cattle would have been sold through the typical graded sales the gross sale amount would have been \$3,601,118. These data indicate that the extra management time invested by producers to wean, vaccinate and booster their calves for pooled marketing was rewarded with \$435,881. The average added value for pooled calves in 2010 was \$73.71. Across the 2007 through 2010 marketing seasons, the per head price advantage of pool participation has ranged from \$49 to \$73.

Only one pool marketing 167 unweaned calves (silver program) was included in the 2010 evaluation. In this very limited sample, weaned (gold program) steers were 58 pounds heavier than their silver counterparts and received a marketing advantage of twenty five dollars per head. Silver heifers were sixty pounds lighter than Gold heifers and received thirty four dollars per head less marketing advantage than weaned heifers. Many producers have questioned the value of weaning calves, feeling that weaning is not significantly profitable. When making the decision whether or not to wean calves, producers must also consider additional factors such as increased weight gain post weaning, marketing of cull cows at an earlier time, increased ability to stockpile fall forage and the ease of gathering calves at take-up time.

## Key Items of Evaluation

**V(A). Planned Program (Summary)**

**Program # 12**

**1. Name of the Planned Program**

Literacy

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

| KA Code | Knowledge Area                          | %1862 Extension | %1890 Extension | %1862 Research | %1890 Research |
|---------|-----------------------------------------|-----------------|-----------------|----------------|----------------|
| 704     | Nutrition and Hunger in the Population  | 20%             |                 |                |                |
| 802     | Human Development and Family Well-Being | 40%             |                 |                |                |
| 806     | Youth Development                       | 40%             |                 |                |                |
|         | <b>Total</b>                            | 100%            |                 |                |                |

Add knowledge area

**V(C). Planned Program (Inputs)**

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

| Year: 2010 | 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    |
| 375000              | 0              | 0              | 0              |
| 1862 Matching       | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 420000              | 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**

Energy Express: The Energy Express model, developed in 1994, is research-based and has remained intact for the past 16 years. The program adheres to the principle of continuous improvement and site reports, site visits, training evaluations and program evaluations are used to determine areas for improvement. The goals of the Energy Express program is: 1) to promote the school success of children living in low-income communities by providing summer learning experiences, and 2) to promote an ethic of service among college students and community members. Specific objectives include: 1) children participating in Energy Express will maintain or increase reading achievement as indicated by pre-post measures on a standardized test using a stratified random sample; 2) children participating in Energy Express will be provided 58% of their daily nutritional requirements as determined by the USDA approved menus and site monitoring visits, and 3) mentors and volunteer coordinators will increase in personal efficacy as measured by mentor and volunteer coordinator surveys developed by Energy Express. Energy Express's audience is children entering first through sixth grades with a priority to reach children who are eligible for free and reduced price school meals and Title I services. College students and community members serving as AmeriCorps Members are the secondary audience.

Family Storyteller is a train-the-trainer program consisting of six weekly two-and-one-half hour workshops. Participants receive a weekly take-home book and home activities to build on learned skills. Food is provided to participants at each workshop. Two follow-up books sent to participants along with suggested activities.

Reading Partners is a train-the-trainers program where trainees teach participants to read with their children.

Literacy Team: The WVU Extension Literacy Team was established in 1999 to promote children's literacy development. The team provides support to Energy Express, the nation's largest summer AmeriCorps program and the nation's only statewide summer learning program, focused on promoting the school success of children living in rural low-income communities. Team members have also guided and piloted the development of Family Storyteller and Reading Partners. It also provides important professional support. The youth literacy team allows members, normally

**2. Brief description of the target audience**

Low-income children entering first through sixth grades. Low-literacy and/or low-income parents and caregivers of preschool children. Parents and caregivers of all children 3 to 8.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

| 2010          | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|---------------|------------------------|--------------------------|-----------------------|-------------------------|
| <b>Plan</b>   | 2280                   | 3000                     | 4500                  | 400                     |
| <b>Actual</b> | 4590                   | 44838                    | 3142                  | 20619                   |

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

**Patent Applications Submitted**

Year: 2010  
 Plan: 0  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

| 2010   | Extension | Research | Total |
|--------|-----------|----------|-------|
| Plan   | 0         | 1        |       |
| Actual | 0         | 0        | 0     |

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of literacy training activities.

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 160    | 80     |

**Output #2**

**Output Measure**

- Number of educational materials in literacy created or updated.

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 7      | 0      |

**Output #3**

**Output Measure**

- Number of educational materials in literacy distributed.

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 1500   | 21160  |

**Output #4**

**Output Measure**

- Number of new outside organizations or groups participating in literacy initiatives.

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 250    | 160    |

**Output #5**

**Output Measure**

- Number of new grants and contracts supporting literacy initiatives.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 4             | 3             |

**Output #6**

**Output Measure**

- Number of observational visits to Energy Express sites

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 41            | 0             |

**Output #7**

**Output Measure**

- Number of meals served.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b>     | <b>Actual</b> |
|-------------|-------------------|---------------|
| 2010        | {No Data Entered} | 133494        |

**Output #8**

**Output Measure**

- Number of volunteers participating in the program

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b>     | <b>Actual</b> |
|-------------|-------------------|---------------|
| 2010        | {No Data Entered} | 3395          |

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME                                                                        |
|--------|-------------------------------------------------------------------------------------|
| 1      | Number of participants who increase their knowledge in literacy.                    |
| 2      | Number of participants who changed their attitudes or opinions related to literacy. |
| 3      | Number of participants who improved their skill level in literacy.                  |
| 4      | Number of participants who changed a habit or procedure related to literacy.        |

**Add Cross-cutting Outcome/Impact Statement or Unintended or Previously Unknown Outcome Measure**

**Outcome #1**

**1. Outcome Measures**

Not Reporting on this Outcome Measure

Number of participants who increase their knowledge in literacy.

**2. Associated Institution Types**

1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 800                 | 566    |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

For the Energy Express program to be successful, staff which includes site coordinators, volunteer coordinators, and mentors must be trained to deliver a consistent program in all 80 sites. They must not only be trained in the implementation of the site, but also in principles of literacy education.

**What has been done**

All Energy Express site supervisors and AmeriCorps members (mentors and volunteer coordinators) attend a three-day training in June at West Virginia Wesleyan College in Buckhannon, WV. Major program components are covered to reinforce any training that site coordinators do with their staff on site.

**Results**

Because of their involvement in Energy Express, mentors and volunteer coordinators (566 individuals) increased in knowledge of children's learning and personal efficacy, as measured by mentor and volunteer coordinator surveys developed by Energy Express.

**4. Associated Knowledge Areas**

- 704 - Nutrition and Hunger in the Population
- 802 - Human Development and Family Well-Being
- 806 - Youth Development

**Outcome #2**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants who changed their attitudes or opinions related to literacy.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure  
 Change in Action Outcome Measure  
 Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 650                 | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

- 704 - Nutrition and Hunger in the Population  
 802 - Human Development and Family Well-Being  
 806 - Youth Development

**Outcome #3**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants who improved their skill level in literacy.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 3020                | 1767   |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Forty percent of WV 4th graders experience difficulty in reading, and among the remaining 60%, only 40 percent are above a functional reading level. Children's school success is diminished if they cannot read well by the end of the third grade. Poor readers at the end of fourth grade comprise high percentage of school dropouts, juvenile delinquents and prison inmates (WVDE, 1999). Low-income children typically lose 3-4 months of academic skills by the time they return to school in the fall.

**What has been done**

The Energy Express summer program is six-weeks in length, and is held in 83 sites throughout West Virginia. As part of the program, a stratified random sample of children who attend at least 15 days are tested using the Woodcock Johnson Test.

**Results**

Significant increases in letter-word identification, reading fluency, passage comprehension and broad reading. Sixty five percent of children maintained or increased and the average child gained 3 months in broad reading achievement.

**4. Associated Knowledge Areas**

- 704 - Nutrition and Hunger in the Population
- 802 - Human Development and Family Well-Being
- 806 - Youth Development

**Outcome #4**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants who changed a habit or procedure related to literacy.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 250                 | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The Energy Express program depends on volunteers to carry out its program in 83 sites each summer. These volunteers include parents, grandparents, youth, and other community members.

**What has been done**

Energy Express state-level staff coordinated the volunteer contributions of 3385 volunteers this summer. Volunteers received training in working with children.

**Results**

Energy Express volunteers practiced new skills at Energy Express sites. 3885 family and community members volunteered contributing more than 58,821 hours for an average of 745 hours contributed by 43 volunteers at each site. The volunteers were divided between youth (1456) and adults (1929). Volunteers assisted with children's reading and writing; helped with the food service, managed the site office, and prepared materials for use with children. 42 percent of volunteer time was devoted to children's reading and writing.

**4. Associated Knowledge Areas**

- 704 - Nutrition and Hunger in the Population
- 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.)
- Other

### Brief Explanation

This year, Energy Express has experienced changes in personnel. It's creator and long-time director, Ruthellen Phillips retired and others have had to fill in. This has not affected the implementation of Energy Express, but certain adjustments have had to take place.

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

### (OPTIONAL SECTION)

#### 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.
- Comparison between locales where the program operates and sites without program intervention
- Other

### Evaluation Results

Energy Express conducts a statewide summative and formative evaluation. A stratified random sample of children were administered a standardized measurement, the Woodcock Johnson Test of Reading Achievement pre and post program. AmeriCorps Members were administered a pre-post survey, Energy Express Mentor Survey and Energy Express Volunteer Coordinator Survey, which were constructed by the evaluation team in 1996 and revised in 1999. The two principal components are personal efficacy ( $r = .93$ ) and community service ( $r = .82$ ). Local programs submitted child demographics as well as attendance, volunteer contribution, and meal data. The state office retained data on site staff.

Each year qualitative approaches include final site reports submitted by site teams and monitoring reports submitted by program staff and funding agencies. Evaluation is used to document that Energy Express is meeting its objectives and to determine areas for improvement and develop strategies for addressing the issues.

|                            |
|----------------------------|
| Woodcock-Johnson III       |
| z-scores                   |
| Subtest                    |
| Letter/word identification |
| -2.388**                   |
| Reading fluency            |
| -4.432***                  |
| Passage comprehension      |
| -4.811***                  |
| Broad reading composite    |
| -5.258***                  |

### Key Items of Evaluation

**V(A). Planned Program (Summary)**

**Program # 13**

**1. Name of the Planned Program**

Reaching the Underserved

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

| <b>KA Code</b> | <b>Knowledge Area</b>                                                                  | <b>%1862 Extension</b> | <b>%1890 Extension</b> | <b>%1862 Research</b> | <b>%1890 Research</b> |
|----------------|----------------------------------------------------------------------------------------|------------------------|------------------------|-----------------------|-----------------------|
| 607            | Consumer Economics                                                                     | 10%                    |                        |                       |                       |
| 801            | Individual and Family Resource Management                                              | 20%                    |                        |                       |                       |
| 802            | Human Development and Family Well-Being                                                | 20%                    |                        |                       |                       |
| 803            | Sociological and Technological Change Affecting Individuals, Families, and Communities | 20%                    |                        |                       |                       |
| 805            | Community Institutions, Health, and Social Services                                    | 20%                    |                        |                       |                       |
| 806            | Youth Development                                                                      | 10%                    |                        |                       |                       |
|                | <b>Total</b>                                                                           | 100%                   |                        |                       |                       |

**Add knowledge area**

**V(C). Planned Program (Inputs)**

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

| <b>Year: 2010</b> | <b>Extension</b> |             | <b>Research</b> |             |
|-------------------|------------------|-------------|-----------------|-------------|
|                   | <b>1862</b>      | <b>1890</b> | <b>1862</b>     | <b>1890</b> |
| Plan              | 7.0              | 0.0         | 0.0             | 0.0         |
| Actual            | 6.0              | 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    |
| 163825              | 0              | 0              | 0              |
| 1862 Matching       | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 233675              | 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

#### CYFAR

The program model for CYFAR seeks to support the growth and development of low-income youth at 9 after-school sites in WV. Program and curriculum content focus on preparing youth for the 21<sup>st</sup> century. These learning skills include communication, thinking, reasoning, global literacy, problem solving, innovation and creativity and science and technology.

#### Poverty Education

The curriculum is based on the work of Dr. Ruby Payne and several of her main publications, A Framework for Understanding Poverty, Putting the Pieces Together, Learning Structures and Understanding Learning, the How, the Why, the What. It includes the primary elements of her work: hidden rules, resources, language registers, family structure, relationship building, cognitive strategies, metacognition, mental models and other strategies that work with children and families in poverty. The six hour training covers the following topics: The 12 Key Points, Hidden Rules, Registers of Language, Resources, Creating Relationships and Discipline. Interactive and engaging activities were developed in order to compliment the statistics and the theories researched by Dr. Payne. A puzzle is used to acquaint participants with the hidden rules for each socio-economic This teaching initiative has expanded from a predominately WVU Extension Service program, to a statewide program. Since the beginning of this teaching initiative there have been major accomplishments each year that have enabled the expansion of this instruction. Below are the major highlights per year, with a narrative section for the current year.

### 2. Brief description of the target audience

County Extension agents, classified staff, and volunteers from the 4-H program, the Master Gardener program, and the CEOS program. External organizations such as teachers, administrators, social service personnel, other professional organizations. Youth and low-income adults in the community.

## V(E). Planned Program (Outputs)

### 1. Standard output measures

| 2010          | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|---------------|------------------------|--------------------------|-----------------------|-------------------------|
| <b>Plan</b>   | 550                    | 3000                     | 1800                  | 1600                    |
| <b>Actual</b> | 3344                   | 1559                     | 1627                  | 1827                    |

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

**Patent Applications Submitted**

Year: 2010  
 Plan: 0  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

| 2010          | Extension | Research | Total |
|---------------|-----------|----------|-------|
| <b>Plan</b>   | 0         | 0        |       |
| <b>Actual</b> | 0         | 0        | 0     |

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of training activities related to the Reaching the Underserved program.
- Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 125    | 33     |

**Output #2**

**Output Measure**

- Number of educational materials, related to the Reaching the Underserved program, created or updated.
- Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 40     | 0      |

**Output #3**

**Output Measure**

- Number of Reaching the Underserved educational materials distributed.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 2400          | 4107          |

**Output #4**

**Output Measure**

- Number of people receiving educational materials related to the Reaching the Underserved program.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 2400          | 0             |

**Output #5**

**Output Measure**

- Number of new counties participating in Reaching the Underserved initiatives this year.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 4             | 0             |

**Output #6**

**Output Measure**

- Number of outside organizations or groups participating in Reaching the Underserved initiatives.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 40            | 12            |

**Output #7**

**Output Measure**

- Number of volunteers participating in reaching the underserved initiatives.

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b>     | <b>Actual</b> |
|-------------|-------------------|---------------|
| 2010        | {No Data Entered} | 337           |

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME                                                                    |
|--------|---------------------------------------------------------------------------------|
| 1      | Number of Reaching the Underserved participants who increased their knowledge.  |
| 2      | Number of Reaching the Underserved participants who improved their skill level. |
| 3      | Number of Reaching the Underserved participants who adopt a skill.              |
| 4      | Changes to the social environment.                                              |

**Add Cross-cutting Outcome/Impact Statement or Unintended or Previously Unknown Outcome Measure**

**Outcome #1**

**1. Outcome Measures**

Not Reporting on this Outcome Measure

Number of Reaching the Underserved participants who increased their knowledge.

**2. Associated Institution Types**

1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 420                 | 4500   |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

West Virginia school personnel and WVU staff, faculty, and students need to improve their capacity to reach and serve at-risk, low-income children and their families. The national Center for Children in Poverty (NCCP) reported that in West Virginia 46% of children live in low-income families (national: 41%), defined as income below 200% of the federal poverty level; 22 percent of children live in poor families (national; 19%) defined as income below 100% of the federal poverty level.

**What has been done**

- \* 9 after-school CYFAR sites
- \* 3 trainings for CYFAR staff in the National Energy Education Development project (NEEDS) curriculum.
- \* 17 Ruby Pain training sessions
- \* Understanding Poverty and Entrepreneurship: Helping Our Students Succeed (Graduate Course C&I)

**Results**

Adult participants gained knowledge in understanding the following concepts: the 12 key points of poverty; the hidden rules of three economic classes; how family structure impacts poverty; the eight resources and determining which resources individuals are lacking; the difference between casual register and formal register in language; how discipline differs in poverty; the importance of relationships and strategies for "making deposits"? the definition of discipline and strategies.

#### 4. Associated Knowledge Areas

- 607 - Consumer Economics
- 801 - Individual and Family Resource Management
- 802 - Human Development and Family Well-Being
- 803 - Sociological and Technological Change Affecting Individuals, Families, and
- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development

#### Outcome #2

##### 1. Outcome Measures

- Not Reporting on this Outcome Measure

Number of Reaching the Underserved participants who improved their skill level.

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

##### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 550                 | 30     |

##### 3c. Qualitative Outcome or Impact Statement

###### Issue (Who cares and Why)

A serious need exists in West Virginia school and among WVU students and graduates for greater capacity to reach and serve at-risk, low-income children and their families.

###### What has been done

Understanding Poverty and Entrepreneurship: Helping Our Students Succeed (Graduate Course C&I)

###### Results

Students in the "Understanding Poverty and Entrepreneurship: Helping Our Students Succeed" graduate class created a plan/strategy for incorporating the content into their school classes.

#### 4. Associated Knowledge Areas

- 607 - Consumer Economics
- 801 - Individual and Family Resource Management
- 802 - Human Development and Family Well-Being
- 803 - Sociological and Technological Change Affecting Individuals, Families, and
- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development

### **Outcome #3**

#### **1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of Reaching the Underserved participants who adopt a skill.

#### **2. Associated Institution Types**

- 1862 Extension

#### **3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

#### **3b. Quantitative Outcome**

| <b>Year</b> | <b>Quantitative Target</b> | <b>Actual</b> |
|-------------|----------------------------|---------------|
| 2010        | 510                        | 100           |

#### **3c. Qualitative Outcome or Impact Statement**

##### **Issue (Who cares and Why)**

Youth are encouraged to use the skills they learn in the 4-H program in their everyday lives. By doing this they gain mastery of the subject matter as well as other lifeskills. In this situation, youth demonstrated teaching skills.

##### **What has been done**

Older 4-H campers were taught the poverty simulation lessons at camp, and then, in the same county, re-taught the lessons to younger campers.

##### **Results**

Older 4-H members gained skills in teaching and reinforced knowledge about issues related to living in poverty as they re-taught poverty simulation lessons to younger 4-H members.

Younger 4-H members shared what they learned with peers at camp.

#### **4. Associated Knowledge Areas**

- 607 - Consumer Economics
- 801 - Individual and Family Resource Management
- 802 - Human Development and Family Well-Being
- 803 - Sociological and Technological Change Affecting Individuals, Families, and
- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development

**Outcome #4**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure  
Changes to the social environment.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | {No Data Entered}   | 372    |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

In low-income communities, schools and social agencies struggle to make connections with adults, especially schools with parents. Parents are often hesitant to participate in school activities because they had negative experiences when they were students. CYFAR has helped to make connections between schools and community organizations with parents and other family members.

**What has been done**

The CYFAR program has held family programs at schools.  
The CYFAR program has shown family members that their children are benefiting from involvement in the program.  
The CYFAR program has invited family members to volunteer.

**Results**

\* CYFAR has created a united effort between schools, after-school sites, 21st Century Learning Centers, United Way and other groups to offer fragile families quality after-school programs.

\* Through CYFAR, parents of low-income children have increased access to schools and educational resources. Parents were invited to a photo gallery viewing at the school. For some parents, this was their first visit to school.

#### 4. Associated Knowledge Areas

- 607 - Consumer Economics
- 801 - Individual and Family Resource Management
- 802 - Human Development and Family Well-Being
- 803 - Sociological and Technological Change Affecting Individuals, Families, and
- 805 - Community Institutions, Health, and Social Services
- 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.)
- Other (lack of funding)

##### Brief Explanation

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

##### (OPTIONAL SECTION)

##### 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.
- Comparison between locales where the program operates and sites without program intervention
- Other

**Evaluation Results**

The West Virginia University Extension Service collects and analyzes the evaluations from all sessions of more than three hours in duration and has done so for the last five years. The results are listed below. A post-pre evaluation tool is used. It asks participants to evaluate their level of knowledge prior to the workshop and at the close of the training on specific elements. It also asks participants to assess the presenters in the following ways: the presenters were well prepared, the sessions kept my interest and the handouts were useful. Participants are also asked if they would recommend the workshop to others and if the training would be helpful to them. Consistently the workshops have received high ratings. The evaluation tool has the participants to rate the various categories using a mean scale of one to five. The following is a summation of the evaluations. The following questions are rated on a scale of 1 to 5, with 1 being the lowest (not at all) and 5 being the highest (definitely).

This training will be helpful in my service.....4.72  
 The presenters were well prepared..... 4.90  
 The sessions kept my interest.....4.64  
 The handouts are useful..... 4.69  
**I would recommend this training to others 4.75**

Each of the following questions asks you to think about what you understood before this training and then what you understand now. Be sure to give each question two ratings. One (1) indicates no understanding, and five (5) means you have a full understanding.

**Question**  
**Mean Before**  
**Mean**  
**After**

|                                                                                               |  |
|-----------------------------------------------------------------------------------------------|--|
| Understanding the 12 key points of poverty                                                    |  |
| 2.42                                                                                          |  |
| 4.55                                                                                          |  |
| Understanding the hidden rules of three economic classes.                                     |  |
| 2.46                                                                                          |  |
| 4.54                                                                                          |  |
| Understanding how family structure impacts poverty.                                           |  |
| 3.43                                                                                          |  |
| 4.82                                                                                          |  |
| Understanding of the eight resources and determining which resources individuals are lacking. |  |
| 2.37                                                                                          |  |

- 4.44 Understanding the difference between casual register and formal register in language.
- 2.82
- 4.52 Understanding of how discipline differs in poverty.
- 2.95
- 4.38 Understanding of the importance of relationships and strategies for "making deposits."
- 2.67
- 4.57 Understanding the definition of discipline and the strategies that were presented.
- 2.69
- 4.27

**Key Items of Evaluation**

**V(A). Planned Program (Summary)**

**Program # 14**

**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 |
|---------|-------------------------------------------|-----------------|-----------------|----------------|----------------|
| 801     | Individual and Family Resource Management | 50%             |                 |                |                |
| 802     | Human Development and Family Well-Being   | 50%             |                 |                |                |
|         | <b>Total</b>                              | 100%            |                 |                |                |

Add knowledge area

**V(C). Planned Program (Inputs)**

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

| Year: 2010 | Extension |      | Research |      |
|------------|-----------|------|----------|------|
|            | 1862      | 1890 | 1862     | 1890 |
| Plan       | 16.0      | 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    |
| 350000              | 0              | 0              | 0              |
| 1862 Matching       | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 785000              | 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**

Strong Families Eat Together is an educational campaign to improve quality family mealtime experiences and to increase the time families spend eating together. The project includes: media articles, an instructional curriculum, take-home educational tools, and a research component. The take home educational tools are the Family Meal Tracker- - a dry-erase refrigerator magnet to record the frequency of meals eaten together and the occurrence of positive family mealtime behaviors and the Family Conversation Starters - a spiral-bound book with 95 different topics to spark family conversation at mealtimes.

WVU ES delivers Family Finance programs that enable families, adults, and communities to build on their strengths, manage their resources, and expand their future capabilities in the area of financial management. The Financial Freedom program trains instructors at Hazelton Federal Prison in Preston County, WV. These instructors are prison staff members and inmates. The goal of the program is to ensure basic financial literacy for inmates facing re-entry into society and to reduce the recidivism rate. Other programs include Marriage Cents, Future Millionaires' Club, Net Worth Camp, and Basic Estate Planning.

Child Care Providers Training programs include the Apprenticeship for Child Care Development Specialist Program sponsored by the U.S. Department of Labor and implemented in West Virginia through the River Valley Child Development Center in Huntington. The objectives are to educate childcare providers on the process of basic child development including social/emotional, cognitive, and physical development. Course also includes information on responsibilities of being professional, standards and regulations of early childhood education and the teacher responsibilities in designing activities that promote successful development.

The Relatives as Parents Program at WVU-ES provides educational resources for people raising a grandchild or other relative's child. One of our most important resources for distributing educational material on kincare has been the RAPP listserv that has a membership of more than 80 individuals. The RAPP collaborative group includes WVU Extension, Mission WV, DHHR, and Legal Aid of WV. The RAPP representative at WVU-ES continues to distribute our popular booklets: a legal guide for kincaregivers and questions and answers from WV kin-caregivers. She also provides workshop upon request.

WVU-ES does not have a formal aging program but some faculty members are involved in small outreach efforts related to the needs of the WV older population. An example of this is the participation of one specialist in the eXtension Family Caregiving Community of Practice as their evaluator and contributor to the website. Two of our nutrition and health program, the Health Motivator and Taking Charge, also focus on older adults in WV.

The WV Healthy Children Health Families initiative seeks to improve the well-being of children and families by supporting marriages, strengthening services to families already receiving help from other DHHS programs, and supporting the development of community-wide initiatives involving many types of organizations interested in addressing healthy relationships and marriages. The HFHC program development and delivery strategy is based on creating, training, and supporting grassroots coalitions to provide locally relevant educational programs in the three grant focus areas listed above. Additionally, the coalitions provide family activities and social marketing about the importance of healthy relationships for child outcomes.

## **2. Brief description of the target audience**

West Virginia parents  
Childcare providers in WV  
Older adults in WV  
Kin caregivers in WV

School teachers  
 WV citizens in significant relationships  
 Extension agents  
 Social service personnel

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

| 2010          | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|---------------|------------------------|--------------------------|-----------------------|-------------------------|
| <b>Plan</b>   | 1500                   | 7000                     | 1100                  | 3000                    |
| <b>Actual</b> | 93200                  | 683695                   | 9410                  | 67714                   |

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

**Patent Applications Submitted**

Year: 2010  
 Plan: 0  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

| 2010          | Extension | Research | Total |
|---------------|-----------|----------|-------|
| <b>Plan</b>   | 0         | 1        |       |
| <b>Actual</b> | 2         | 1        | 3     |

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of training activities
- Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 500    | 552    |

**Output #2**

**Output Measure**

- Number of educational materials created or updated.

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 90     | 180    |

**Output #3**

**Output Measure**

- Number of educational materials distributed.

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 2500   | 25320  |

**Output #4**

**Output Measure**

- Number of new counties participating in initiatives.

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 6      | 0      |

**Output #5**

**Output Measure**

- Number of outside organizations or groups participating in initiatives this year.

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 60     | 133    |

**Output #6**

**Output Measure**

- Number of grants and contracts supporting initiatives in this program area.

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 10     | 24     |

**Output #7**

**Output Measure**

- Number of professional presentations

Not reporting on this Output for this Annual Report

| Year | Target            | Actual |
|------|-------------------|--------|
| 2010 | {No Data Entered} | 5      |

**Output #8**

**Output Measure**

- Number of volunteers working with strengthening family initiatives

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b>     | <b>Actual</b> |
|-------------|-------------------|---------------|
| 2010        | {No Data Entered} | 243           |

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME                                                                                    |
|--------|-------------------------------------------------------------------------------------------------|
| 1      | Number of participants who increased their knowledge.                                           |
| 2      | Number of participants who improved their skill level.                                          |
| 3      | Nmber of participants who increased their motivation to adopt a skill or accomplish an activity |
| 4      | Number of participants who adopt a skill.                                                       |
| 5      | Number of groups or organizations that collaborate with strengthening familiy iniatives.        |

**Add Cross-cutting Outcome/Impact Statement or Unintended or Previously Unknown Outcome Measure**

**Outcome #1**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure  
Number of participants who increased their knowledge.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 1500                | 90000  |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

WVU-ES is concerned about the rate of child abuse, divorce, and other indicators of family turmoil in the state. In WV only 8% of all childcare centers are nationally accredited and 36 WV counties have 0-4 licensed child care centers which is required by law in the state of WV. A large percentage of WV citizens lack the basic skills in financial management needed to maintain stable households.

**What has been done**

WVU-ES programs enable citizens to manage their resources and expand their financial management capabilities including Financial Freedom, Marriage Cents, Future Millionaires? Club, Net Worth Camp, and Basic Estate Planning. Faculty teach in the Apprenticeship for Child Care Development Specialist Program, sponsored by the U.S. Department of Labor. The WV Healthy Families Healthy Children initiative improves the wellbeing of families by supporting marriages, strengthening services to families, and supporting the community-wide initiatives.

**Results**

- \* Childcare participants increased their knowledge of ethics for childcare providers, temperament types in children, trust-building with children, child relationships with adults.
- \* Case workers learned how to work with millennial-age youth
- \* Parents learned how to be more nurturing parents and the importance of families eating together.
- \* 432 HFHC participants said that after attending the HFHC program, they know something they didn't know before about one of the following: family finances, parenting, and/or adult relationships.
- \* Family finance participants increased their knowlege in financial responsibility and decision-

making, careers and income, financial planning and money management, credit and debt, saving and investment.

**4. Associated Knowledge Areas**

- 801 - Individual and Family Resource Management
- 802 - Human Development and Family Well-Being

**Outcome #2**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure  
Number of participants who improved their skill level.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 175                 | 1000   |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

WVU-ES is concerned about the rate of child abuse, divorce, and other indicators of family turmoil in the state. In WV only 8% of all childcare centers are nationally accredited and 36 WV counties have 0-4 licensed child care centers which is required by law in the state of WV. A large percentage of WV citizens lack the basic skills in financial management needed to maintain stable households.

**What has been done**

Faculty teach in the Apprenticeship for Child Care Development Specialist Program, sponsored by the U.S. Department of Labor. The WV Healthy Families Healthy Children initiative improves the wellbeing of families by supporting marriages, strengthening services to families, and supporting the community-wide initiatives. The Relatives as Parents Program maintain resources for grandparents and other relatives who are raising a child for a member of their family.

**Results**

- \* 417 HFHC participants said that they feel more confident about their ability to do one or more of the following: handle my finances, parent my children, and/or strengthen my relationship.
- \* 428 HFHC participants said that in the next six months, they planned to use skills they learned

in their relationship training to be more confident, more positive, more understanding their child's feelings, and better able to avoid the blame game.

\* Participants in the Apprenticeship program gained skills in creating a pro-social environment in childcare settings.

\* Parents in the HFHC learned various discipline techniques using positive and consistent strategies.

\* Kin-caregivers gained skills in accessing Extension resources.

#### 4. Associated Knowledge Areas

- 801 - Individual and Family Resource Management
- 802 - Human Development and Family Well-Being

### Outcome #3

#### 1. Outcome Measures

- Not Reporting on this Outcome Measure

Number of participants who increased their motivation to adopt a skill or accomplish an activity

#### 2. Associated Institution Types

- 1862 Extension

#### 3a. Outcome Type:

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 200                 | 428    |

#### 3c. Qualitative Outcome or Impact Statement

##### **Issue (Who cares and Why)**

WVU-ES is concerned about the rate of child abuse, divorce, and other indicators of family turmoil in the state.

##### **What has been done**

The Healthy Families Healthy Children initiative improves the wellbeing of families by supporting marriages, strengthening services to families, and supporting the community-wide initiatives. The Relatives as Parents Program maintain resources for grandparents and other relatives who are raising a child for a member of their family.

##### **Results**

\* 428 HFHC participants said that in the next six months, they planned to be more confident in their primary relationship, more positive in their relationship with their children, more

understanding their child's feelings, and better able to avoid the blame game with their spouse or partner.

#### 4. Associated Knowledge Areas

- 801 - Individual and Family Resource Management
- 802 - Human Development and Family Well-Being

### **Outcome #4**

#### 1. Outcome Measures

- Not Reporting on this Outcome Measure  
Number of participants who adopt a skill.

#### 2. Associated Institution Types

- 1862 Extension

#### 3a. Outcome Type:

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 204                 | 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

- 801 - Individual and Family Resource Management
- 802 - Human Development and Family Well-Being

**Outcome #5**

**1. Outcome Measures**

Not Reporting on this Outcome Measure

Number of groups or organizations that collaborate with strengthening family initiatives.

**2. Associated Institution Types**

1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 10                  | 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**

- 801 - Individual and Family Resource Management
- 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.)
- Other

### Brief Explanation

{No Data Entered}

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

### (OPTIONAL SECTION)

#### 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.
- Comparison between locales where the program operates and sites without program intervention
- Other

### Evaluation Results

{No Data Entered}

### Key Items of Evaluation

{No Data Entered}

**V(A). Planned Program (Summary)**

**Program # 15**

**1. Name of the Planned Program**

4-H Camping 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 |
|---------|-------------------|-----------------|-----------------|----------------|----------------|
| 806     | Youth Development | 100%            |                 |                |                |
|         | <b>Total</b>      | 100%            |                 |                |                |

Add knowledge area

**V(C). Planned Program (Inputs)**

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

| Year: 2010 | Extension |      | Research |      |
|------------|-----------|------|----------|------|
|            | 1862      | 1890 | 1862     | 1890 |
| Plan       | 14.0      | 0.0  | 0.0      | 0.0  |
| Actual     | 13.0      | 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    |
| 450000              | 0              | 0              | 0              |
| 1862 Matching       | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 385000              | 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

Activities include residential and day county camps and residential statewide camps. Approximately 13,000 youths ages 9 - 21 attend 4-H camps in West Virginia each summer. Counselors and other volunteers are trained at the Mountaineer Camping Institute. Camping curriculum materials, including a volunteer training notebook, are updated and disseminated to new volunteer trainees. Evaluations are

conducted specific to 4-H camping, and data are interpreted for camp improvement. Research projects designed to understand the role and benefit of camping experiences in the lives of youths are implemented, analyzed, and incorporated into programming.

**2. Brief description of the target audience**

Youths ages 9 to 21. Adult volunteers. College-age Extension Camping Instructors

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

| 2010          | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|---------------|------------------------|--------------------------|-----------------------|-------------------------|
| <b>Plan</b>   | 4000                   | 75000                    | 9500                  | 40000                   |
| <b>Actual</b> | 2048                   | 25398                    | 12699                 | 25398                   |

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

**Patent Applications Submitted**

Year: 2010  
 Plan: 0  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

| 2010          | Extension | Research | Total |
|---------------|-----------|----------|-------|
| <b>Plan</b>   | 0         | 1        |       |
| <b>Actual</b> | 1         | 0        | 1     |

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of training activities held.

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 350    | 117    |

**Output #2**

**Output Measure**

- Number of residential camps conducted (at least 4 days in duration).

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 90     | 81     |

**Output #3**

**Output Measure**

- Number of youth attending residential camps (at least 4 days in duration).

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 7500   | 1102   |

**Output #4**

**Output Measure**

- Number of day camps conducted

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 20     | 34     |

**Output #5**

**Output Measure**

- Number of youth attending day camps

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 1300   | 1677   |

**Output #6**

**Output Measure**

- Educational materials produced/updated

Not reporting on this Output for this Annual Report

| Year | Target | Actual |
|------|--------|--------|
| 2010 | 500    | 97     |

**Output #7**

**Output Measure**

- Number of partnering organizations

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 140           | 0             |

**Output #8**

**Output Measure**

- Grants supporting 4-H camping

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 65            | 12            |

**Output #9**

**Output Measure**

- Educational materials distributed

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b> | <b>Actual</b> |
|-------------|---------------|---------------|
| 2010        | 5000          | 13000         |

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME                                                                                                        |
|--------|---------------------------------------------------------------------------------------------------------------------|
| 1      | Number of participants who increase their knowledge.                                                                |
| 2      | Number of participants who changed their attitudes or opinions.                                                     |
| 3      | Number of participants who increased their motivation to adopt a skill or accomplish an activity                    |
| 4      | Number of participants who adopted a skill learned in the camping program                                           |
| 5      | Number of groups or organizations that collaborated with the camping program.                                       |
| 6      | Amount of money that counties have raised to support 4-H camping                                                    |
| 7      | Number of 4-H organizations that support camping that adopt philosophies associated with positive youth development |
| 8      | Number of campers who learn a new skill.                                                                            |

**Add Cross-cutting Outcome/Impact Statement or Unintended or Previously Unknown Outcome Measure**

**Outcome #1**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure  
Number of participants who increase their knowledge.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 7100                | 14742  |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

For WV youth, 4-H camp is their first opportunity to go away from home and interact with peers from all over the state, and from other states as well. In addition to gaining skill in STEM and other subject matter, they also develop life skills and make friends that last a lifetime.

**What has been done**

The comprehensive 4-H camping program at WVU-ES includes educational experiences for adult leaders, staff, counselors, and youth. Each year camp staff/leaders/counselors are trained in a week-long program at Jackson's Mill Conference Center. The emphasis at camp is age appropriate, camper-focused educational experiences in skill development, citizenship, global education, and STEM subjects.

**Results**

- \* Adults leaders increased their knowledge about camp rules and policies, ages and stages of campers, and learning objectives for the week.
- \* Camp staff developed a clear understanding of their role during camp, their behavior, and defined contribution for the camp week.
- \* Campers expanded their understanding of other cultures, using the internet safely, water conservation, bullying, and "the truth about tobacco."
- \* Counselors increased their knowledge about diversity in camps, appropriate behavior with campers, and hazing and bullying.

**4. Associated Knowledge Areas**

- 806 - Youth Development

**Outcome #2**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants who changed their attitudes or opinions.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure  
 Change in Action Outcome Measure  
 Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 5300                | 4300   |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Many camps are created to teach specific skills and to give campers an outdoor experience. 4-H camps do all of that too, but they also seek to build incorporate the essential elements of youth development: relationship with a caring adult, safe and inclusive environment, and mastery of skills.

**What has been done**

Many activities at camp are designed to allow campers and staff to grow emotionally and socially. Campers live in cabins where they build new relationships, they participate in activities where they must depend on each other, and they compete as tribes to win awards. Staff meet daily to review events and progress toward goals. They also learn to depend on each other to serve campers better.

**Results**

\* Campers reflected on what they learned in service activities and changed their attitudes regarding the place of service in their lives.

\* Campers adapted socially, make new friends, and many changed their attitudes toward those different from themselves.

Adult staff and counselors, initially just a group of individuals, ended the week as a team focused on serving youth in the best way possible.

**4. Associated Knowledge Areas**

- 806 - Youth Development

**Outcome #3**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants who increased their motivation to adopt a skill or accomplish an activity

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 4000                | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

- 806 - Youth Development

**Outcome #4**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants who adopted a skill learned in the camping program

**2. Associated Institution Types**

1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 4000                | 7000   |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Over 13,000 WV youths attend 4-H camp each year. It is important to assure them and their parents that our camps are safe and our counselors and staff are well-trained. Often WV youths are exposed to the principles of healthy lifestyles for the first time at camp. They learn how to select foods and to incorporate physical activity into their lifestyle.

**What has been done**

In recent years, the WV 4-H camping program has placed an emphasis on ensuring that camps and camp staff are certified in the standards set by the American Camping Association. Each year, camp counselors are asked to complete a series of training session to prepare them for summer camp.

WV 4-H camps have incorporated programming to prevent obesity and help campers live healthy lives. This year, some of the camps initiated a program to encourage healthy eating and increased physical activity.

**Results**

\* Camp counselors completed a total of eight hours of training: four hours face-to-face; and four hours additional training.

\* Campers adopted healthy lifestyle habits at camp including increased fruits and vegetables consumption, increased amount of daily physical activity. After camp, campers limited screen time to two hours a day.

**4. Associated Knowledge Areas**

806 - Youth Development

**Outcome #5**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of groups or organizations that collaborated with the camping program.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure  
 Change in Action Outcome Measure  
 Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 350                 | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

- 806 - Youth Development

**Outcome #6**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure

Amount of money that counties have raised to support 4-H camping

**2. Associated Institution Types**

1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 60000               | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

806 - Youth Development

**Outcome #7**

**1. Outcome Measures**

Not Reporting on this Outcome Measure

Number of 4-H organizations that support camping that adopt philosophies associated with positive youth development

**2. Associated Institution Types**

1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | 200                 | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

- 806 - Youth Development

**Outcome #8**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure  
Number of campers who learn a new skill.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | {No Data Entered}   | 10400  |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Good youth development activities should include lifeskill development. In addition to respecting and accepting others, working with others to accomplish a goal, self-responsibility and decision making, and conflict resolution, camp also helps youths master practical skills such as using the Internet, selecting and preparing foods, recycling, journalism and sports. Adult staff and counselors gain skill in camp maintenance and camp planning.

**What has been done**

Adult staff and counselors are trained each year in camp maintenance and planning. They have opportunities to practice those skills shortly after training. Educational skill training is incorporated into every camp experience. As a result campers gain confidence and mastery.

**Results**

\* Campers gained skills in food safety, using the Internet safely, selecting healthy healthy foods, participating in physical activities, environmental protection and climate control, journalism, scrapbooking, and working with leather to make belts and bracelets. This is a limited list of skills learned at camp.

\* Adults gained skills in raising funds, finding rentals & volunteers, camp maintenance, planning activities for camp, using evaluation data to improve camp, handling bullying, and developing youth using the essential elements of youth development.

#### 4. Associated Knowledge Areas

- 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.)
- Other (changes in 4-H program focus)

##### Brief Explanation

The WVU-ES camping program still enjoys full support by WVU Extension as well as state legislators.

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

##### (OPTIONAL SECTION)

##### 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.
- Comparison between locales where the program operates and sites without program intervention
- Other

## Evaluation Results

During the summer of 2010, WVU Extension conducted an evaluation of its 4-H camps using four different assessment tools: one that measured whether campers gained life skills, one that measured whether camps were providing campers with the opportunity to be exposed to the essential elements of youth development, and one that measured satisfaction with the camping experience, and one that was specifically geared to the state Alpha I, II, and Older Member camps.

### Lifeskill development

- \* 99% agreed or strongly agreed with questions about accepting self and others.
- \* 97% agreed or strongly agreed with questions about accomplishing goals.
- \* 97% agreed or strongly agreed with questions about taking responsibility.

Means on all items were well above 3.00 indicating that campers mostly agree with all of the life skill questions. Within each life skill, there was a significant difference based on gender (girls agreed more than boys) and age (the oldest the campers agreed more and the campers aged 13-14 agreed least) and on years in camp those who were at camp the greatest number of years agreed more strongly. As in other years, boys tend to answer all questions less positively, but the difference is between agree and strongly agree not between agree and disagree. There is no reason to think that boys are not gaining life skills at camp. These differences are probably due to development rates in boys and girls. It is interesting to note, however, that campers who are new to camp and the most veteran campers tend to score higher on life skill items than those in the middle groups. The same tends to be true of older and younger campers. Again, the reasons are probably related to developmental issues.

### Essential Elements

- Opportunity to Build a Relationship with a Caring Adult  
98% agreed with the questions.

There was a significant difference based on age (the older the camper was the more they agreed). Campers between the ages of 13-14 less strongly agreed with the statements. Differences between boys and girls and years at camp were not significant.

- Opportunity for Independent Learning and Mastery  
\* 97% agreed or strongly agreed with the questions about having an opportunity for independent learning and mastery. There were no significant differences based on gender,

age, or years in camp.

\* 86% agreed or strongly agreed with the questions about finding an emotionally safe and inclusive environment. About 14 percent disagreed. This is a higher percentage than for any of the other essential elements or life skills.

There was a significant difference based on gender (girls agreed more than boys) and age (the oldest campers agreed more and the campers aged 13-14 agreed least) and on years in camp those who were at camp the greatest number of years, agreed more strongly.

\* 96% agreed or strongly agreed with the questions about finding a physically safe environment. Four percent disagreed. There was no significant difference based on gender for physical safety. There were significant differences among campers based on age and years at camp. With regard to age, campers aged 13-14 agreed least, and on years in camp those who were at camp the greatest number of years agreed more strongly.

Results related to the essential elements of youth development at 2010 county camps show positive results. Means on all items were well above 3.00 indicating that the essential elements were found at camp. As in past years, on questions related to emotional safety, boys tend to answer questions less positively, but the difference is between agree and strongly agree not between agree and disagree. These differences are probably due to development rates in boys and girls. It is interesting to note, that campers who are new to camp and the most veteran campers tend to score higher on the essential elements than those in the 13-14 age group. The same tends to be true of older and younger campers. However, there are still significant differences between boys and girls on emotional safety items. Further research will be conducted this year at camp to understand this issue better.

#### Counselor Training Evaluation

For counselor training sessions, online evaluations were sent to email addresses collected at the beginning of each training sessions. This is the second year we have utilized this method and while the quantity of evaluations collected are not the total number of participants; however, we have seen improvement in the quality of the evaluations with allowing the participants more time to complete them.

#### **Key Items of Evaluation**

Recommendations from the camp evaluation.

- It is important for camp leaders to pay attention to the developmental needs of boys and girls.
- It is important to maintain the enthusiasm for camp experienced by new and younger campers and be sure that those who are less enthusiastic do not drop out of the program.
- Since almost two-thirds of the campers are girls, special efforts should be made to attract boys to 4-H camps. Information from the focus groups may help leaders understand why boys are less likely to return.
- Emotional safety is still a concern, especially for boys. Attention should be given to reducing bullying and other exclusive behavior. Mentoring and buddy programs may help to build friendships and create a comfortable environment.

**V(A). Planned Program (Summary)**

**Program # 16**

**1. Name of the Planned Program**

Climate Change

**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 | 30%             |                 |                |                |
| 131     | Alternative Uses of Land                          | 35%             |                 |                |                |
| 136     | Conservation of Biological Diversity              | 35%             |                 |                |                |
|         | <b>Total</b>                                      | 100%            |                 |                |                |

Add knowledge area

**V(C). Planned Program (Inputs)**

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

| Year: 2010 | Extension |      | Research |      |
|------------|-----------|------|----------|------|
|            | 1862      | 1890 | 1862     | 1890 |
| Actual     | 2.0       | 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    |
| 35000               | 0              | 0              | 0              |
| 1862 Matching       | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 81250               | 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**

At the federal level, The Energy Independence and Security Act of 2007 mandates that a total of 36 billion gallons of renewable biofuels be produced by the year 2022. Of those 36 billion gallons mandated in 2022, 16 billion gallons are slated to be produced from cellulosic feedstocks like Switchgrass or woody material. Although West Virginia has very little uncommitted agricultural land for the production of conventional corn based ethanol, the state could be a substantial supplier of cellulosic feedstock. Traditionally ethanol has been produced from the starch contained in grain crops such as corn, limiting the types of crops that can be used for ethanol production. Cellulose is the main component of plant cell walls and is one of the most abundant organic compounds on earth. As the process of breaking down cellulose into fermentable sugars becomes more readily available, this will greatly expand the different types of materials that can be used for ethanol production, including forestry and agricultural wastes and "energy crops" such as fast growing grasses and trees. West Virginia is well suited to supply forestry wastes for ethanol production and to grow certain energy crops such as switchgrass on marginally productive lands that are not otherwise being utilized for food production. The state also has tens of thousands of acres of reclaimed surface mine sites that have large uninterrupted blocks of lands and extensive road networks making them well suited for agricultural production of energy crops. West Virginia's temperate climate and 45-55 inches of annual rain are well suited for Switchgrass production. Switchgrass also has only moderate fertility needs making it well suited to a relatively broad range of growing conditions. Overcoming low fertility on mine sites is the primary factor in ensuring equivalent yields between undisturbed land and mined land. Yields can be expected to be approximately five tons per acre annually in a well established stand on moderately fertile soil.

**2. Brief description of the target audience**

Scientists, producers of energy crops, legislators, commercial enterprises

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

| 2010          | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|---------------|------------------------|--------------------------|-----------------------|-------------------------|
| <b>Plan</b>   | {NO DATA}              | {NO DATA}                | {NO DATA}             | {NO DATA}               |
| <b>Actual</b> | 75                     | 700                      | 5914                  | 0                       |

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

**Patent Applications Submitted**

Year: 2010  
 Plan:  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

| 2010 | Extension | Research | Total |
|------|-----------|----------|-------|
|------|-----------|----------|-------|

|               |   |   |   |
|---------------|---|---|---|
| <b>Actual</b> | 0 | 7 | 7 |
|---------------|---|---|---|

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of training or educational events

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b>     | <b>Actual</b> |
|-------------|-------------------|---------------|
| 2010        | {No Data Entered} | 9             |

**Output #2**

**Output Measure**

- Number of participants who increased their knowledge of climate change

Not reporting on this Output for this Annual Report

| <b>Year</b> | <b>Target</b>     | <b>Actual</b> |
|-------------|-------------------|---------------|
| 2010        | {No Data Entered} | 775           |

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME                                                                       |
|--------|------------------------------------------------------------------------------------|
| 1      | Participants who increased their knowledge of climate change                       |
| 2      | Changes in the physical environment                                                |
| 3      | Change in economic conditions                                                      |
| 4      | Enhancements to educational exposure of youth to issues related to climate change. |

**Add Cross-cutting Outcome/Impact Statement or Unintended or Previously Unknown Outcome Measure**

**Outcome #1**

**1. Outcome Measures**

Not Reporting on this Outcome Measure

Participants who increased their knowledge of climate change

**2. Associated Institution Types**

1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | {No Data Entered}   | 775    |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

In his 2008 State of the State message, Governor Joe Manchin III encouraged West Virginians to develop secure sources of transportation fuels that would lessen our dependence on foreign oil including utilizing wood waste, crop residues and other biomass sources for ethanol production.

**What has been done**

Training on carbon credit was presented in WV at a SWCS field day in Mineral county and incorporated into individual field soil organic matter analysis. He also presented this topic at our annual ANR program meeting. Additionally, he published related research in two professional journals.

Additionally, the specialist who has done research on switchgrass has published 8 articles in 5 articles in professional publications read by approximately 500 readers.

**Results**

Participants increased their knowledge of carbon credit and the potential credits farmers could earn from increasing soil organic matter.

Readers of journal increased their knowledge of how growing switchgrass in mine sites overcomes low fertility and ensures equivalent yields between undisturbed land and mined land.

**4. Associated Knowledge Areas**

123 - Management and Sustainability of Forest Resources

- 131 - Alternative Uses of Land
- 136 - Conservation of Biological Diversity

## **Outcome #2**

### **1. Outcome Measures**

- Not Reporting on this Outcome Measure

Changes in the physical environment

### **2. Associated Institution Types**

- 1862 Extension

### **3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

### **3b. Quantitative Outcome**

| <b>Year</b> | <b>Quantitative Target</b> | <b>Actual</b> |
|-------------|----------------------------|---------------|
| 2010        | {No Data Entered}          | 0             |

### **3c. Qualitative Outcome or Impact Statement**

#### **Issue (Who cares and Why)**

West Virginia is well suited to supply forestry wastes for ethanol production and to grow certain energy crops such as switchgrass on marginally productive lands that are not otherwise being utilized for food production. The state also has tens of thousands of acres of reclaimed surface mine sites that have large uninterrupted blocks of lands and extensive road networks making them well suited for agricultural production of energy crops.

#### **What has been done**

West Virginia University researchers have recently received ?seed? money to conduct planting trials with several varieties of Switchgrass. Three recently reclaimed surface mines in Mineral, Boone, and Logan Counties have been selected for the first field trials. Ten, 1-ac blocks of Switchgrass will be planted on each site and growth and biomass production will be measured. After the third year, the aboveground material will be harvested and tested for cellulosic ethanol production. Soil samples will be analyzed for fertility and carbon sequestration. The experiment will continue for 5 to 8 years.

#### **Results**

At the end of two growing seasons, we found that switchgrass can indeed be successfully established on mine lands with planting techniques typically employed by mine operators. However, while established switchgrass plants are tolerant of marginal soils, the small size of switchgrass seed limits the amount of stored reserves available to the plant to become established. Accordingly, switchgrass establishment may take much longer on very marginal

soils. So far, mine soils reclaimed with biosolids completely out performed those soils that were mostly comprised of topsoil substitutes. This is easily attributed to the organic material's ability to supply a steady stream of nutrients and moisture to the switchgrass seedlings.

#### 4. Associated Knowledge Areas

- 123 - Management and Sustainability of Forest Resources
- 131 - Alternative Uses of Land
- 136 - Conservation of Biological Diversity

### Outcome #3

#### 1. Outcome Measures

- Not Reporting on this Outcome Measure
- Change in economic conditions

#### 2. Associated Institution Types

- 1862 Extension

#### 3a. Outcome Type:

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | {No Data Entered}   | 0      |

#### 3c. Qualitative Outcome or Impact Statement

##### Issue (Who cares and Why)

West Virginia's temperate climate and 45-55 inches of annual rain are well suited for Switchgrass production. Switchgrass also has only moderate fertility needs making it well suited to a relatively broad range of growing conditions. Overcoming low fertility on mine sites is the primary factor in ensuring equivalent yields between undisturbed land and mined land. Yields can be expected to be approximately five tons per acre annually in a well established stand on moderately fertile soil.

##### What has been done

West Virginia University researchers have recently received seed money to conduct planting trials with several varieties of switchgrass. Three recently reclaimed surface mines in Mineral, Boone, and Logan Counties have been selected for the first field trials. Ten, 1-ac blocks of switchgrass will be planted on each site and growth and biomass production will be measured. After the third year, the above ground material will be harvested and tested for cellulosic ethanol production. Soil samples will be analyzed for fertility and carbon sequestration. The experiment will continue for 5 to 8 years.

### Results

Switchgrass production may offer a unique opportunity for many West Virginians to create jobs, boost the economy, help conserve the environment and to reduce our country's dependence on foreign oil. In addition to ethanol production, Switchgrass can also provide a variety of other uses that may be beneficial to the environment. It can be used as a co-firing product in coal fired power stations to reduce emissions and its root mass has been shown to sequester large amounts atmospheric carbon dioxide. In the post mining land use setting, switchgrass production stands to return value to an otherwise underutilized land resource.

#### 4. Associated Knowledge Areas

- 123 - Management and Sustainability of Forest Resources
- 131 - Alternative Uses of Land
- 136 - Conservation of Biological Diversity

#### Outcome #4

##### 1. Outcome Measures

- Not Reporting on this Outcome Measure

Enhancements to educational exposure of youth to issues related to climate change.

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

##### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | {No Data Entered}   | 55     |

##### 3c. Qualitative Outcome or Impact Statement

###### Issue (Who cares and Why)

Youth benefit from learning about issues related to climate change. One important lesson involves the chemical reaction observed and the negative effects of too much carbon dioxide in our water supply as well as efforts to reduce the build-up of greenhouse gases in our water

###### What has been done

The experiment had the youth place a chemical in the that turned a glass of water green. The youth then placed a straw in the water and blew into the water which added carbon dioxide to the water, eventually turning the water clear again.

### Results

The National Experiment reinforced classroom educational efforts associated with greenhouse gases in our planet's water supply.

20 counties used the experiment in 4-H Clubs  
150 4-H Clubs incorporated the experiment  
18 counties used the experiment in After-School programs  
55 schools incorporated the experiment  
5,914 4-Hers/students were exposed to the experiment

#### 4. Associated Knowledge Areas

- 123 - Management and Sustainability of Forest Resources
- 131 - Alternative Uses of Land
- 136 - Conservation of Biological Diversity

#### 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.)
- Other (Other research needs to be conducted)

##### Brief Explanation

For ethanol production of Switchgrass to become viable however, we are still dependent on new and economically feasible processes to turn cellulose into sugars.

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

##### (OPTIONAL SECTION)

##### 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.
- Comparison between locales where the program operates and sites without program intervention
- Other

### **Evaluation Results**

- To examine these issues on mine lands, switchgrass was established on three different mines across the state of West Virginia. Three varieties of switchgrass were chosen and each variety was planted in 0.4 ha plots at each site. The objective of this study was to examine switchgrass establishment success and productivity, and to measure changes in soil chemical and physical properties.

### **Key Items of Evaluation**

**V(A). Planned Program (Summary)**

**Program # 17**

**1. Name of the Planned Program**

Sustainable Energy

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

| KA Code | Knowledge Area                                    | %1862 Extension | %1890 Extension | %1862 Research | %1890 Research |
|---------|---------------------------------------------------|-----------------|-----------------|----------------|----------------|
| 122     | Management and Control of Forest and Range Fires  | 25%             |                 |                |                |
| 123     | Management and Sustainability of Forest Resources | 25%             |                 |                |                |
| 124     | Urban Forestry                                    | 25%             |                 |                |                |
| 125     | Agroforestry                                      | 25%             |                 |                |                |
|         | <b>Total</b>                                      | 100%            |                 |                |                |

Add knowledge area

**V(C). Planned Program (Inputs)**

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

| Year: 2010 | Extension |      | Research |      |
|------------|-----------|------|----------|------|
|            | 1862      | 1890 | 1862     | 1890 |
| Actual     | 2.0       | 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    |
| 35000               | 0              | 0              | 0              |
| 1862 Matching       | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 81250               | 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**

Programs are designed to improve woodlot conditions and expand forest and non-timber product production and to increase knowledge and skill base for safe logging practices and promotion of a safe, efficient and profitable workplace.

Twelve million acres, or 79%, of West Virginia is forested. Over 80% of these forests are owned by 260,000 private individuals. Estimates are that only about 15% of these private forestland owners have been in contact with a forest resources professional. Given the crucial role that forests play in water quality issues and in the economic support of about \$4 billion they bring to the state, providing forestry education to these private landowners has the potential to facilitate sustainable forestry practices and improve the economic well-being of forestland owners. The Forestry Team is a group of Extension professionals working as a unit to develop programming in West Virginia to be used by individuals and organizations to improve their knowledge of forests and natural resources through education, demonstration, and research. Target audiences of Forestry Team projects include private forestland owners, forestry professionals, loggers, general public, and youth.

**2. Brief description of the target audience**

Foresters, government officials, consumers of wood products, commercial enterprises dealing with wood products

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

| 2010          | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|---------------|------------------------|--------------------------|-----------------------|-------------------------|
| <b>Plan</b>   | {NO DATA}              | {NO DATA}                | {NO DATA}             | {NO DATA}               |
| <b>Actual</b> | 1785                   | 18774                    | 340                   | 1000                    |

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

**Patent Applications Submitted**

Year: 2010  
 Plan:  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

| 2010          | Extension | Research | Total |
|---------------|-----------|----------|-------|
| <b>Actual</b> | 0         | 0        | 0     |

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of training activities

Not reporting on this Output for this Annual Report

| Year | Target            | Actual |
|------|-------------------|--------|
| 2010 | {No Data Entered} | 15     |

**Output #2**

**Output Measure**

- Number of educational materials created or updated

Not reporting on this Output for this Annual Report

| Year | Target            | Actual |
|------|-------------------|--------|
| 2010 | {No Data Entered} | 21     |

**Output #3**

**Output Measure**

- Number of people receiving educational materials

Not reporting on this Output for this Annual Report

| Year | Target            | Actual |
|------|-------------------|--------|
| 2010 | {No Data Entered} | 20774  |

**Output #4**

**Output Measure**

- Number of new grants and contracts

Not reporting on this Output for this Annual Report

| Year | Target            | Actual |
|------|-------------------|--------|
| 2010 | {No Data Entered} | 3      |

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME                                                                   |
|--------|--------------------------------------------------------------------------------|
| 1      | Number of participants who increased their knowledge                           |
| 2      | Number of participants who practiced new skills related to sustainable energy. |

**Add Cross-cutting Outcome/Impact Statement or Unintended or Previously Unknown Outcome Measure**

**Outcome #1**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure  
Number of participants who increased their knowledge

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | {No Data Entered}   | 1785   |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Twelve million acres, or 79%, of West Virginia is forested. Over 80% of these forests are owned by 260,000 private individuals. Estimates are that only about 15% of these private forestland owners have been in contact with a forest resources professional. Given the crucial role that forests play in water quality issues and in the economic support of about \$4 billion they bring to the state, providing forestry education to these private landowners has the potential to facilitate sustainable forestry practices and improve the economic well-being of forestland owners.

**What has been done**

Programs are designed to improve woodlot conditions and expand forest and non-timber product production and to increase knowledge and skill base for safe logging practices and promotion of a safe, efficient and profitable workplace.

**Results**

- \* Youth learned how to control nuisance wildlife and other wildlife issues in their woodlots.
- \* Participants gained knowledge of global forest resources.
- \* WVDOF loggers gained knowledge related to recertification requirements.
- \* Participants gained knowledge of timber management
- \* Participants gained knowledge of non-timber forest products.
- \* Participants gained knowledge of forestry, milling and biomass production.

**4. Associated Knowledge Areas**

- 122 - Management and Control of Forest and Range Fires

- 123 - Management and Sustainability of Forest Resources
- 124 - Urban Forestry
- 125 - Agroforestry

## **Outcome #2**

### **1. Outcome Measures**

- Not Reporting on this Outcome Measure

Number of participants who practiced new skills related to sustainable energy.

### **2. Associated Institution Types**

- 1862 Extension

### **3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

### **3b. Quantitative Outcome**

| <b>Year</b> | <b>Quantitative Target</b> | <b>Actual</b> |
|-------------|----------------------------|---------------|
| 2010        | {No Data Entered}          | 890           |

### **3c. Qualitative Outcome or Impact Statement**

#### **Issue (Who cares and Why)**

Twelve million acres, or 79%, of West Virginia is forested. Over 80% of these forests are owned by 260,000 private individuals. Estimates are that only about 15% of these private forestland owners have been in contact with a forest resources professional. Given the crucial role that forests play in water quality issues and in the economic support of about \$4 billion they bring to the state, providing forestry education to these private landowners has the potential to facilitate sustainable forestry practices and improve the economic well-being of forestland owners.

#### **What has been done**

The Forestry Team, a group of Extension professionals worked as a unit to develop programming in West Virginia to be used by individuals and organizations to improve their knowledge of forests and natural resources through education, demonstration, and research. Programs are designed to improve woodlot conditions and expand forest and non-timber product production and to increase knowledge and skill base for safe logging practices and promotion of a safe, efficient and profitable workplace.

#### **Results**

- \* Participants adopted and implemented software tools.
- \* Participants made changes to their harvesting and milling activities.

### **4. Associated Knowledge Areas**

- 122 - Management and Control of Forest and Range Fires
- 123 - Management and Sustainability of Forest Resources
- 124 - Urban Forestry
- 125 - Agroforestry

#### **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.)
- Other

##### **Brief Explanation**

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

##### **(OPTIONAL SECTION)**

##### **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.
- Comparison between locales where the program operates and sites without program intervention
- Other

## **Evaluation Results**

### **Key Items of Evaluation**

**V(A). Planned Program (Summary)**

**Program # 18**

**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 |
|---------|-----------------------------------------------|-----------------|-----------------|----------------|----------------|
| 501     | New and Improved Food Processing Technologies | 25%             |                 |                |                |
| 502     | New and Improved Food Products                | 50%             |                 |                |                |
| 504     | Home and Commercial Food Service              | 25%             |                 |                |                |
|         | <b>Total</b>                                  | 100%            |                 |                |                |

Add knowledge area

**V(C). Planned Program (Inputs)**

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

| Year: 2010 | Extension |      | Research |      |
|------------|-----------|------|----------|------|
|            | 1862      | 1890 | 1862     | 1890 |
| Actual     | 3.0       | 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    |
| 75000               | 0              | 0              | 0              |
| 1862 Matching       | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 135000              | 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**

Beef Quality Assurance (BQA) Program:The WV BQA certification program follows the guidelines established by the Mid-Atlantic BQA program where producers are required to participate in (1) a Level I class room training program and (2) a Level II chute side training session where they must demonstrate competence in handling and administering vaccines. Recertification is required every two years. WVU-ES delivers BQA programs to ensure that the beef and dairy cattle in West Virginia are maintained in a manner which will result in a safe and wholesome beef product for the consumer.

The Acidified Foods School- The Acidified Foods School is a subset of the Better Process Control School. The school is under the supervision of the FDA and an inspector is there to answer questions but WVU Extension and College of Agriculture faculty do all the teaching. The school is required for processors of shelf-stable acidified foods. Products that are considered acidified foods include pickles, pickled beets, salsa, pickled eggs, and pickled ramps. It also includes a lot of BBQ sauces, pumpkin butters, peppers in tomato sauce ETC. Before the product can be sold (even at farmers markets) the person has to go to a school and pass all the tests and register with the FDA. Before any product can be actually produced and sold, a process authority has to approve the process and tell them what records to keep. Extension provides that service for free - if they go out of state it cost about \$100 per food. The WVU Extension faculty member is the process authority, but we work with WV Agriculture.

Food Preservation - The goals and objectives of the food preservation program include: 1) to increase the number of people who use best practices for home food preservation, 2) to prevent food-borne illnesses by teaching appropriate home food preservation methods, and 3) increase access to affordable, nutritious foods by helping people to feel comfortable and confident in preserving their own food at home. Recent outbreaks of food-borne illnesses have underscored need for appropriate food handling to promote safety. Increasing food and transportation costs have prompted people to look for less expensive ways to feed their families. Others are motivated by a personal preference or the satisfaction that comes from producing and preserving their own food. However, incorrect food preservation methods can lead to a poor quality product or worse, an unsafe product. Venison 101 is a training offered by Extension.

#### Germ City/Germs Stop Here

According to the Centers for Disease Control and Prevention (CDC) hand washing is one of the "most important means of preventing the spread of infection." It is the first line of defense for infectious diseases including respiratory infection and gastrointestinal disorders among others. Germ City and the "Germs Stop Here!" program includes classroom presentations and follow-up programs about hand washing that have resulted in a significant decrease in absenteeism due to illness in the months following the original presentation.

ServSafe - Extension faculty participate in the training offered to food handlers in West Virginia to certify them for work in the food industry.

## **2. Brief description of the target audience**

WV citizens who can or preserve foods, commercial food processors, beef producers, WVU Extension agents

## **V(E). Planned Program (Outputs)**

### **1. Standard output measures**

| 2010          | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|---------------|------------------------|--------------------------|-----------------------|-------------------------|
| <b>Plan</b>   | {NO DATA}              | {NO DATA}                | {NO DATA}             | {NO DATA}               |
| <b>Actual</b> | 2564                   | 449                      | 1377                  | 350                     |

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

**Patent Applications Submitted**

Year: 2010  
 Plan:  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

| 2010          | Extension | Research | Total |
|---------------|-----------|----------|-------|
| <b>Actual</b> | 2         | 0        | 2     |

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of training activities

Not reporting on this Output for this Annual Report

| Year | Target            | Actual |
|------|-------------------|--------|
| 2010 | {No Data Entered} | 51     |

**Output #2**

**Output Measure**

- Number of educational materials updated or created

Not reporting on this Output for this Annual Report

| Year | Target            | Actual |
|------|-------------------|--------|
| 2010 | {No Data Entered} | 3      |

**Output #3**

**Output Measure**

- People receiving educational materials

Not reporting on this Output for this Annual Report

| Year | Target            | Actual |
|------|-------------------|--------|
| 2010 | {No Data Entered} | 4600   |

**Output #4**

**Output Measure**

- Number of outside organizations working with the program

Not reporting on this Output for this Annual Report

| Year | Target            | Actual |
|------|-------------------|--------|
| 2010 | {No Data Entered} | 18     |

**Output #5**

**Output Measure**

- Number of grants and contracts

Not reporting on this Output for this Annual Report

| Year | Target            | Actual |
|------|-------------------|--------|
| 2010 | {No Data Entered} | 1      |

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME                                             |
|--------|----------------------------------------------------------|
| 1      | Number of participants who increased their knowledge     |
| 2      | Number of participants who adopted or used a skill       |
| 3      | Changes in social and economic conditions in food safety |

**Add Cross-cutting Outcome/Impact Statement or Unintended or Previously Unknown Outcome Measure**

**Outcome #1**

**1. Outcome Measures**

- Not Reporting on this Outcome Measure  
Number of participants who increased their knowledge

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | {No Data Entered}   | 0      |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

The beef cattle industry every five years conducts quality audits as a means to address problems that affect product quality, food safety, and consumer demand. Processors of shelf-stable acidified foods and food handlers require training and certification. According to the Centers for Disease Control and Prevention (CDC) hand washing is one of the most important means of preventing the spread of infection.

**What has been done**

- \* WVU-ES delivered BQA programs to ensure ensure safe and wholesome beef products for the consumer.
- \* WVU-ES delivered ServSafe programs to ensure commercial food handlers prepare foods safely for the public.
- \* WVU-ES delivered Germ City programs to teach youth about food safety and hand-washing.
- \* WVU-ES delivered Venison 101 and other food preservation programs for the public.

**Results**

- \* Youth gained knowledge about how germs are spread, how to wash their hands and the importance of washing hands correctly and often.
- \* Participants gained knowledge of the proper way to perserve a variety of foods.
- \* Participants gained knowledge related to Beef Quality Assurance certification.
- \* Participants gained knowledge related to ServSafe Certification.

#### 4. Associated Knowledge Areas

- 501 - New and Improved Food Processing Technologies
- 502 - New and Improved Food Products
- 504 - Home and Commercial Food Service

#### Outcome #2

##### 1. Outcome Measures

- Not Reporting on this Outcome Measure

Number of participants who adopted or used a skill

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

##### 3b. Quantitative Outcome

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | {No Data Entered}   | 116    |

##### 3c. Qualitative Outcome or Impact Statement

###### Issue (Who cares and Why)

Processors of shelf-stable acidified foods and food handlers require training and certification.

###### What has been done

Extension faculty participate in the Acidified Foods School and ServSafe.

###### Results

\* In Jefferson County 25 of the 28 school cooks attained national food safety managers certification; 18 of the 21 service managers attained national food safety managers certification; and 53 of the 58 managers attained a national food safety managers certification which is required by the Jefferson County Health Dept. to open a food business.

\* In the Acidified Food School, all 20 participants passed the class and are registered with the United States Food and Drug Administration.

#### 4. Associated Knowledge Areas

- 501 - New and Improved Food Processing Technologies
- 502 - New and Improved Food Products
- 504 - Home and Commercial Food Service

### **Outcome #3**

#### **1. Outcome Measures**

- Not Reporting on this Outcome Measure  
Changes in social and economic conditions in food safety

#### **2. Associated Institution Types**

- 1862 Extension

#### **3a. Outcome Type:**

- Change in Knowledge Outcome Measure
- Change in Action Outcome Measure
- Change in Condition Outcome Measure

#### **3b. Quantitative Outcome**

| <b>Year</b> | <b>Quantitative Target</b> | <b>Actual</b> |
|-------------|----------------------------|---------------|
| 2010        | {No Data Entered}          | 1             |

#### **3c. Qualitative Outcome or Impact Statement**

##### **Issue (Who cares and Why)**

Before acidified products can be sold (even at farmers markets) the person has to go to a school and pass all the tests. They can then register with the FDA. Before any product can be actually produced and sold, a process authority has to approve the process and tell them what records to keep.

##### **What has been done**

Extension provides that service for free - if they go out of state it cost about \$100 per food. The WVU Extension faculty member is the process authority, but we work with WV Agriculture. The products have to first go to WV Ag, They inspect the facility and verify the process flow diagram and do the nutritional analysis. We then take the product, test it and specify the process to destroy spoilage organisms and pH for safety. The processor has to have our letter on file and use our information to get FDA approval so the product can be sold.

##### **Results**

The Acidified Food program approved processed 177 products during the last year. These tests, process approvals and letters were free to WV processors.

#### **4. Associated Knowledge Areas**

- 501 - New and Improved Food Processing Technologies
- 502 - New and Improved Food Products
- 504 - Home and Commercial Food Service

#### **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.)
- Other

##### **Brief Explanation**

The National BQA program and the state programs have recently been scrutinized by some of the membership of the National Cattlemen's Association. Some have questioned if future funding should be continued for the program. Discussions have been held at the annual state contact meetings about how to maintain funding and how to secure additional funding.

New quality issues will have to be continuously addressed as the five year beef audits have revealed. The challenge is to develop training materials that keep the beef producer informed and provide them with the tools to make production changes to insure a safe, quality beef product. The recent push has been to develop a National BQA training program in hopes of providing all producer an educational opportunity.

Communication to all producers is still going to be a major obstacle. Bidding for the part-time producers' time will not get easier in the future. Most producer are demanding that trainings be held locally and are showing they are less willing to attend meetings requiring lengthy travel.

Only a small percentage of producers are likely to attend meetings or become part of a membership effort. We are often caught "preaching to the choir" for many educational efforts. A great amount of emphasis has been dedicated to developing on-line curriculum and training.

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

##### **(OPTIONAL SECTION)**

##### **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.
- Comparison between locales where the program operates and sites without program intervention
- Other

### **Evaluation Results**

Students were evaluated by listing the times we should wash our hands and how to wash your hands, or for younger students, coloring a worksheet showing where they need to wash their hands. Students had to prove hand washing skills by entering Germ City without the glow germ lotion present on their hands.

### **Key Items of Evaluation**