

2011 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 educational programs. Some of the most

recognized programs are 4-H, Dining with Diabetes, Master Gardeners, Firefighter Training, Community Educational Outreach Service (formerly Extension Homemakers), 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 2011, our agriculture and natural resource programs tallied 79,628 direct contacts, including:

- Global Food Security and Hunger - 73,500
- Climate Change - 2,672
- Sustainable Energy - 3,456

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 2011, our 4-H youth development programs tallied 201,708 direct contacts with youth and adults. Of those contacts, 88,289 were non-duplicated youths.

- Citizenship and Leadership for Youth - 68,362
- Science, Technology, Engineering and Math - 69,077
- Healthy Living - 38,299
- Literacy - 6,231
- 4-H Leadership for Adults - 19,739

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 2011, family and health programs tallied 191,821 direct contacts including youth and adults.

- Childhood Obesity (Nutrition and Health) - 126,159
- Strengthening Families - 62,271
- Food Safety - 3,391

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 and tourism, and expand understanding of cultural and economic diversity. In addition, we are helping West Virginia individuals and communities prepare for and cope with disasters. In 2011, our community development programs tallied 42,068 direct contacts.

- Community Development - 39,023
- Workforce and Professional Development - 711
- Leadership Development - 2,334

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 \$13.1 million (36% of total budget). WVU Extension uses that \$13.1 million to leverage other funds, for a total annual operating budget of approximately \$36.3 million. We raise 37 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 14 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 about \$13.5 million in 2012.

A few facts: WVU Extension

- Date of founding: 1915
- Total direct client contacts, both youths and adults in 2011: 515,225
- Total direct and indirect client contacts, both youths and adults in 2011: 4,958,661
- Number of county agents: 2011: 111
- Number of state specialists: 2011: 70
- Number of youths in 4-H programs in 2011, including camps: 84,625
- Number of youths attending 4-H camps in 2011: 12,924
- Number of volunteers in 2011: 5,437 (4H); 1,200 (Master Gardener); 3,407 (Energy Express); 161 (Healthy Family/Healthy Children); 4,391 (CEOS) = 14,596 volunteers

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

1. 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 2012, the expertise and knowledge that the citizens of West Virginia need to make informed decisions about the oil and natural gas industry will be addressed through 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. Plans are being made to incorporate STEM activities into all of our youth programs including camps, clubs, youth agriculture and healthy lifestyle programs.

3. 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. Next year, we expect that faculty and staff will use the system to report and to develop their promotion and tenure files. 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.

4. 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 will continue to help farmers see their products as "food for customers" rather than as "crops for sale. The annual Extension-led Small Farm Conference that introduces farmers to new methods for meeting consumers' needs and for creating food pathways to greater profits will continue.

5. 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 be distributed nationally.

6. 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 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. In 2012, this program will become a collaborative initiative with our new partner: the Charleston Gazette. The new and unique website will be launched this spring. This new site, LiveWell West Virginia, aims to inform, inspire,

7. The 4-H program has addressed problems related to substance abuse in youth. We have participated in the Health Rocks program for several years. Now, we are planning to begin the PROSPER project which will bring evidence-based substance abuse programming to several counties.

8. Cyber-bullying prevention is being developed and will be funded by the WV legislature as a direct result of needs expressed by youth and adults in the state. We are using youth and adult focus groups to test the curriculum being developed.

Please note: If we did not report on any of the outputs or outcomes in the planned program section, it is because we did not collect data on them this year. At the time we wrote the Plan of Work for 2011, we chose to write the outcome measures in a very general way. Now two years, later, we are able to be more specific. The Plan of Work for 2013 will use some of the national indicators and will move to more specific indicators for all planned programs.

Total Actual Amount of professional FTEs/SYs for this State

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	163.0	0.0	0.0	0.0
Actual	172.0	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

2. Brief Explanation

Internal merit review was done in the following way:

1. Each Extension faculty member developed an individual plan and each program area team developed a plan of work. These plans are approved by the unit directors (agriculture and natural resources, 4-H youth development, families and health, and community workforce education and development).

2. Each unit director reviewed the data collected throughout the reporting system and approved a program summary, written by the program team leaders and other specialists with assistance from the evaluation specialist. That summative report was used to report to NIFA/USDA.

3. Administrative reviews are done periodically. Plans have begun for an administrative review of Extension administrators this fall. A committee has met and a protocol has been written in which it states that all administrators in WVU Extension will be reviewed by Extension staff and faculty. The protocol is currently under review by the WVU Provost's Office.

External merit review

1. All Extension specialists and county agents are appointed as faculty at West Virginia University. As such, they undergo the same faculty reviews as other university faculty and are promoted under the same protocol. In December of each year, every Extension faculty members submits a faculty file which contains productivity charts and accomplishment narratives related to teaching, service, and research. Depending on the years of service and whether the person is applying for promotion, the files are evaluated by their peers in their unit, their program unit director, an Extension-wide committee, and the WVU Provost (for promotion years only).

2. West Virginia University conducted a survey of 800 voters to better understand attitudes towards WVU and touch points between the university and the public. They were asked if they were aware of a number of WVU services including medical care, health care, Extension health education programs, Extension farming programs, 4-H extension program, Mine, fire and other safety programs, rural medical care programs, breast care screen, wellness initiatives including CARDIAC, Environmental protection programs, academic summer camps, Extension gardening, dental care, and Energy Express. Of the Extension programs, 67% had heard of Extension health program, 61% had heard of Extension farming programs, 58% had heard of 4-H Extension programs, 46% had heard of Extension gardening programs, and 40% had heard of Energy Express. Respondents who used a service, also rated whether they thought WVU was doing a good job. For most Extension program, 70% or better thought we were doing a good or excellent job. 4-H programs rank the highest among those who know someone who has used it and among those who say it has a positive performance.

III. Stakeholder Input

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

- Use of media to announce public meetings and listening sessions
- Survey of traditional stakeholder groups
- Survey of traditional stakeholder individuals

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 conducted a survey of the needs of the Community Education Outreach Service (CEOS) clubs. The women in these clubs are an important stakeholder group for Extension. There are approximately 5,000 members in the state. The purpose of the survey was to understand the current status of the CEOS program in the counties and the perceptions of the CEOS Extension advisors. The results will contribute to a larger study of the role of the WVU Extension Service and the needs that are met by membership in service/leadership/learning groups such as the WVCEOS.

This year, we have used 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
- Open Listening Sessions
- Needs Assessments

Brief explanation.

1. Advisory Committees- 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, and the Extension agent/s.

2. Listening Sessions- Members of our staff also attend regular meetings of associations connected with Extension such as the Farm Bureau, professional associations such as cattlemen, oil and gas, poultry, etc. WVU-ES agents are fully involved in the CEOS (Community Education Outreach Service) formerly our Extension homemaker group. At these meetings, WVU-ES staff members take note of the needs expressed by members. 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.

3. Program Teams- 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.

4. Needs Assessments- Assessment data is processed at the state level for most programs and is a regular part of program protocol.

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
- Survey specifically with non-traditional individuals

Brief explanation.

Meeting with traditional Stakeholder groups

For about half of the year, the Associate Provost for Extension and Outreach, David Miller, served a dual role as representative of the University President to the WV legislature. Mr. Miller regularly met with legislators and other officials to discuss the work of Extension and how the State of WV can support Extension through state appropriations. Last summer, Mr. Miller retired from Extension, but he still serves as a liaison to the WV Legislator and we are assured still speaks on Extension's behalf when he has the opportunity.

Survey of traditional Stakeholder groups

Because of changes in administration this year, we did not have the opportunity to conduct the survey we had developed which we intended to administer to our stakeholder groups. We still plan to conduct the survey that 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 are 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?

As mentioned early, this year we conducted a survey of CEOS Extension advisors to assess needs and make strategic plans for the future. Each of our unit directors has identified stakeholders who have interest in the work of WVU-ES. 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.

Survey of non-traditional Stakeholder groups

West Virginia University conducted a survey of 800 voters to better understand attitudes

towards WVU and touch points between the university and the public. They were asked if they were aware of a number of WVU services including medical care, health care, Extension health education programs, Extension farming programs, 4-H extension program, Mine, fire and other safety programs, rural medical care programs, breast care screen, wellness initiatives including CARDIAC, Environmental protection programs, academic summer camps, Extension gardening, dental care, and Energy Express. Of the Extension programs, 67% had heard of Extension health program, 61% had heard of Extension farming programs, 58% had heard of 4-H Extension programs, 46% had heard of Extension gardening programs, and 40% had heard of Energy Express. Respondents who used a service, also rated whether they thought WVU was doing a good job. For most Extension program, 70% or better thought we were doing a good or excellent job. 4-H programs rank the highest among those who know someone who has used it and among those who say it has a positive performance.

3. A statement of how the input will be considered

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

Brief explanation.

In the Budget Process - WVU-ES carefully considers the needs of stakeholders when making additions or subtractions to the budget. In the past, a priority has been placed upon expanding and enhancing the role of Extension at the county level. This continues to be a priority.

To Identify Emerging Issues and Redirect Extension Programs

1. The growth and development of the Marcellus shale in West Virginia creates both opportunities and concerns. In 2012, the expertise and knowledge that the citizens of West Virginia need to make informed decisions about the oil and natural gas industry will be addressed through educational programs.
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.
3. The WVU Extension Service's Small Farm Center is showing farmers how to retain more of the money West Virginians spend on food each year. Extension educators will continue to help farmers see their products as "food for customers" rather than as "crops for sale."
4. The statistics for West Virginia's ATV-related deaths and injuries are alarming - and WVU Extension has a program that is tackling the problem. The curriculum, the first national 4-H youth curriculum for ATV safety, will be distributed nationally.
5. The "Wild, Wonderful Wellness Challenge" 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. This program will become a collaborative initiative with our new partner: the Charleston Gazette. The new and unique website will be launched this spring.
6. The 4-H program has addressed problems related to substance abuse in youth. We have participated in the Health Rocks program for several years. Now, we are planning to begin the PROSPER project which will bring evidence-based substance abuse programming to several counties.

7. Cyber-bullying prevention is being developed and will be funded by the WV legislature as a direct result of needs expressed by youth and adults in the state. We are using youth and adult focus groups to test the curriculum being developed.

In the Action Plans and To Set Priorities- Each of the four Extension units met this year to develop strategic plans. Most have considered the new National indicators in their planning. University and Extension administrators have been studying ways to make the Extension service more of an integral part of the University. A thorough review of how outreach is conducted by other land-grant universities has been conducted by WVU administrators. Although plans have not been finalized, there is a trend to centralizing outreach efforts under a new vice president.

In the Staff Hiring Process - In response to stakeholder requests, we have added a new specialist position in Community Rural Tourism. He or she will collaborate with other Community, Economic, and Workforce Development faculty and staff to provide teaching, research, and service in community vitality, with emphasis on all aspects of rural tourism development in West Virginia. He or she will develop working relationships with West Virginia Division of Tourism, Convention and Visitors Bureaus, and other associations and partners in the state and region.

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 features 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. We have added interactive learning tools such as the Wild Wonderful Wellness Challenge.

2. We have learned that the Marcellus Shale natural gas industry developers and citizens want more information and guidance about how to respond. They particularly want to know more about leasing and contracts. In 2012, WVU-ES plans to hold two conferences on the subject including "Harnessing Energy for Successful Community Development: Facilitating Responsible Growth During Economic Recovery" on October 4 & 5.

3. We learned that we have a great opportunity to expand tourism in West Virginia and will hire a rural community tourism specialist this year.

IV. Expenditure Summary

1. Total Actual Formula dollars Allocated (prepopulated from C-REEMS)			
Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
4068096	0	0	0

2. Totaled Actual dollars from Planned Programs Inputs				
Extension			Research	
	Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
Actual Formula	4068096	0	0	0
Actual Matching	8071455	0	0	0
Actual All Other	0	0	0	0
Total Actual Expended	12139551	0	0	0

3. Amount of Above Actual Formula Dollars Expended which comes from Carryover funds from previous				
Carryover	0	0	0	0

V. Planned Program Table of Content

S. No.	PROGRAM NAME
1	Childhood Obesity
2	Youth Development
3	Workforce and Community Development
4	Global Food Security and Hunger
5	Strengthening Families
6	Climate Change
7	Food Safety
8	Sustainable Energy

V(A). Planned Program (Summary)

Program # 1

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	10%			
806	Youth Development	10%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	16.0	0.0	0.0	0.0
Actual Paid Professional	17.0	0.0	0.0	0.0
Actual Volunteer	0.0	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
460000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
750240	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

In 2011, the childhood obesity planned program at West Virginia University Extension worked towards increasing the capacity of youth, adults, and families to make informed, science-based decisions which prevent chronic disease and maintain healthy weight status through physical activity and intake of nutrient-dense foods.

There were 1288 reported activities for 2011 in the Childhood Obesity and Healthy Lifestyle planned program this year. These activities can be grouped in the following categories:

Nutrition, Food Selection, and Preparation - There were 816 educational activities, 9,534 adult direct contacts, 199,031 adult indirect contacts, 110,206 youth direct contacts, and 2,128 youth indirect contacts reported in 2011 that address issues related to nutrition and healthy eating. The largest program in this category is the Family Nutrition Program for both low-income adults and youths. The program teaches food and nutrition by using the USDA's MyPyramid. Other activities in this category include nutrition classes, food preparation classes, and classes on food selection/shopping resources and techniques. WVU Extension educators produced 11 Extension educational publications. They also made 4 presentations at professional conferences.

Healthy Lifestyles Skills and Practice- There were 176 educational activities, 2,800 adult direct contacts, 126,444 adult indirect contacts, and 36 youth direct contacts reported in 2011 that address healthy living issues. Healthy living is also a 4-H and youth development content area, so many of the youth contacts are reported in that section. The largest programs in this category include the Health Motivator Program, the Wild Wonderful Wellness Health Challenge, Active for Life, and the WV Early Childhood Obesity Prevention Program (a collaborative program with two school systems and WVU's Davis College, School of Medicine, and Regional Research Institute). WVU Extension educators produced one research-based article on healthy living that was published in a peer-reviewed journal this year, as well as six educational publications. They also made five presentations at professional conferences.

Chronic Diseases and Associated Risk Factors- There were 116 educational activities, 3,349 adult direct contacts, 27,300 adult indirect contacts, and 10,000 youth indirect contacts reported in 2011 that address health risks and chronic disease prevention. Two initiatives, Dining with Diabetes, a cooking school for persons with diabetes and their caregivers and the Diabetes Symposium, a national professional conference enhance the capacity of Extension educators and healthcare partners to impart diabetes education. The Dining with Diabetes curriculum was disseminated to 24 individuals who will deliver the program to others. Other initiatives address heart disease prevention such as Women's Heart Health and the CARDIAC program. Additional programs target the special needs of older adults such as the prevention of bone loss and falls. In 2011, WVU Extension educators produced three Extension educational publications. They also made five presentations at professional conferences.

2. Brief description of the target audience

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

3. How was eXtension used?

eXtension was not used in this program

V(E). Planned Program (Outputs)

1. Standard output measures

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	15891	352775	110286	25052

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

Patent Applications Submitted

Year: 2011

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2011	Extension	Research	Total
Actual	20	1	21

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of educational activities

Year	Actual
2011	1288

Output #2

Output Measure

- Number of educational materials created or updated

Year	Actual
2011	23

Output #3

Output Measure

- Number of educational materials distributed

Year	Actual
2011	252316

Output #4

Output Measure

- Number of professional presentations

Year	Actual
2011	14

Output #5

Output Measure

- Number of outside organizations collaborating within this program area

Year	Actual
2011	95

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 improve or increase skills
3	Number of participants who change their attitudes or opinions
4	Number of participants who are motivated to change their behavior
5	Number of participants who change a behavior or use a new skill
6	Number of participants who train others
7	Amount of money raised by participants to support the program
8	Number of groups or organizations that change their procedures and/or policies
9	Number of new groups or organizations that are established or enhanced
10	Number of physical or social effects, such as disease, pollution, or crime that are reduced or eliminated
11	Number of economic improvements

Outcome #1

1. Outcome Measures

Number of participants who increase their knowledge

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	44894

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Research has shown a correlation between lower socioeconomic status and overweight/obesity and all of the risks associated with being overweight and obese. West Virginia ranks very high in obesity rates and all of the chronic health risks associated with it. The Youth Risk Behavior Surveillance Summary indicated that 13 percent of US teenagers were obese, but 14.7 percent of WV teens were obese. Another 17 percent of teens are overweight. In West Virginia, diabetes is reaching epidemic levels.

What has been done

WVU Extension is engaged in many programs that provide knowledge and skill enhancement related to understanding how to maintain a healthy body and lifestyle. This includes our Family Nutrition Program for youth and adults, exercise and physical activity programs, chronic disease prevention programs such as Dining with Diabetes, and heart health programs.

Results

17,295 adults and youth increased their knowledge of the essentials of human nutrition using the My Pyramid and My Plate methods. 24,374 adults increased their knowledge of how to live in a healthy way including the role of exercise and physical activity in their lives. 3,225 adults increased their knowledge of heart disease and prevention and how to live with diabetes.

4. Associated Knowledge Areas

KA Code	Knowledge Area
702	Requirements and Function of Nutrients and Other Food Components
703	Nutrition Education and Behavior
806	Youth Development

Outcome #2

1. Outcome Measures

Number of participants who improve or increase skills

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	21652

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

In addition to knowledge, adults and youths need to learn skills to assist them in living healthy lifestyles. These skills include how to select and prepare healthy foods, understand their important health test results, communicate with their health providers about ways to improve their health, and access health resources in their communities.

What has been done

All of our childhood obesity and healthy lifestyle initiatives incorporate skill enhancement in the programming. For example, FNP participants learn to compare unit prices to find the best deal, read ingredient lists to find whole grains, and compare food labels to find healthy choices. Dining with Diabetes participants learn to control portions as they prepare meals. Participants in our physical activity initiatives learn how to properly do exercise so as to decrease risk of injury and increase benefits.

Results

16,792 increased their skills related to nutrition and food selection; 213 in physical activity and exercise, and 2,320 in chronic disease prevention. Some of the skills that were enhanced include food selection, reading and interpreting food labels, exercise techniques, preparing meals for diabetics, and communicating with health providers about personal health data.

4. Associated Knowledge Areas

KA Code	Knowledge Area
702	Requirements and Function of Nutrients and Other Food Components
703	Nutrition Education and Behavior
724	Healthy Lifestyle

806 Youth Development

Outcome #3

1. Outcome Measures

Number of participants who change their attitudes or opinions

Not Reporting on this Outcome Measure

Outcome #4

1. Outcome Measures

Number of participants who are motivated to change their behavior

Not Reporting on this Outcome Measure

Outcome #5

1. Outcome Measures

Number of participants who change a behavior or use a new skill

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	1208

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Health and nutrition programs in West Virginia not only provide information to participants but they also train them to change a behavior that will lead to a healthier lifestyle. These programs contain evaluation practices that measure whether or not the participants are changing their behaviors. Related behaviors include food choices, shopping practices, and food safety practices.

What has been done

The Adult Family Nutrition Program reaches over 1,000 low-income adults and teaches food and nutrition by using the USDA's MyPyramid. It also teaches proper food storage, preparation, and handling techniques and enhances food consumer behaviors. Other nutrition programs in Extension reach youths and middle income individuals. In all, these programs reach almost 10,000 people in WV.

Results

Based on a 24-hour recall, 97.7 percent of adult participants in the Family Nutrition Program indicated an increase in eating food from a variety of food groups. 82% of participants showed improvement in one or more food resource management practices (i.e. plans meals, compares prices, does not run out of food or uses grocery lists); 88% of participants showed improvement in one or more nutrition practices (i.e. plans meals, makes healthy food choices, prepares foods without adding salt, reads nutrition labels or has children eat breakfast); and 65% of participants showed improvement in one or more of the food safety practices (i.e. thawing and storing foods properly).

4. Associated Knowledge Areas

KA Code	Knowledge Area
702	Requirements and Function of Nutrients and Other Food Components
703	Nutrition Education and Behavior

Outcome #6

1. Outcome Measures

Number of participants who train others

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	544

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Volunteers assist Extension faculty and staff to provide nutrition and healthy lifestyle information to members of their communities. In West Virginia, we rely on three major sources of volunteers: Community Educational Outreach Service (CEOS) volunteers, 4-H leaders, and Energy Express volunteers. Each has the opportunity to train different segments of our population.

What has been done

Members of CEOS clubs in WV receive training on a number of topics related to healthy living, citizenship, leadership, and family life. The curricula are designed to include a leader's guide and a participant handout. There are almost 5000 CEOS members in WV, primarily older women, and some of these members train others in their community after they have first been trained by Extension faculty.

Results

471 CEOS leaders have trained other CEOS members on topics related to healthy lifestyles. 43 participants were able to teach and disseminate the international foods program themselves.

4. Associated Knowledge Areas

KA Code	Knowledge Area
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
806	Youth Development

Outcome #7

1. Outcome Measures

Amount of money raised by participants to support the program

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	62251

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

State funds do not always cover the costs of community-based programs. Community members become committed to the work of Extension in local areas by helping to generate new funds.

What has been done

Faculty members assisted county offices and coalitions in raising funds for community projects. This money came from small grants and fund-raising events.

Results

\$7,800 for teaching activities and \$54,451 for service activities related to health and nutrition.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
724	Healthy Lifestyle
801	Individual and Family Resource Management
802	Human Development and Family Well-Being

Outcome #8

1. Outcome Measures

Number of groups or organizations that change their procedures and/or policies

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	12

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

There are environmental and behavioral factors that act as barriers to 1) consumption of a high quality diet and 2) attainment of recommended physical activity levels amongst families with pre-K/HeadStart children. A community-based research project is ongoing in WV in Kanawha and Monongalia counties.

What has been done

18 community members were trained at 4 Nutrition Environment Measurement Survey (NEMS) trainings for community organizations in Monongalia & Kanawha counties in WV. Community members were trained in how to conduct NEMS surveys. Focus groups on physical activity and nutrition environments and behaviors were held with parents of pre-K children and school

personnel that work with pre-K children. Key informant interviews were also held.

Results

975 community food establishment audits have been completed and a few food establishments are changing policies and procedures to address issues discovered in the audits.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #9

1. Outcome Measures

Number of new groups or organizations that are established or enhanced

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	141

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Making lifestyle changes to improve health is challenging, especially when several behavior changes are needed. Walking is a simple activity that does not require major commitment or expensive equipment. The Wild Wonderful Walking program has proven to be successful in getting individuals to add exercise to their daily activities while promoting friendship and social connections.

What has been done

In 2011, the West Virginia University Extension Service produced the Wild Wonderful Walking Groups Kit. During the year, Extension faculty worked together to promote community walking groups and disseminated Wild Wonderful Walking Group Kits throughout the state and in two other states.

Results

Walking groups in 36 counties and 2 states have been established. In all, 141 Wild Wonderful Walking Groups have been formed throughout the state of WV and new members are being

added.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle

Outcome #10

1. Outcome Measures

Number of physical or social effects, such as disease, pollution, or crime that are reduced or eliminated

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Diabetes continues to be the 6th leading cause of death in the USA and is the leading cause of death in West Virginia adults. Hence, there is a critical need to reach those individuals with diabetes who are not accessing health care in a knowledgeable, optimal manner.

What has been done

Dining with Diabetes classes are taught by WVU Extension Educators and health care professionals and include a curriculum-based lesson, demonstration of recipes, food tasting, exercise component, and discussion. The Dining with Diabetes program trained 1,026 persons 2011. Each participated in a six-week cooking school and received skill training on controlling their disease. Evaluations showed that participants increased daily exercise, intake of various vegetables, number of times they check their blood sugar, and use of food labels.

Results

Based on a pilot study, we are able to predict that if approximately half of the Dining with Diabetes participants lowered one of the three indicators for risk (A1c, systolic pressure or diastolic pressure) they would greatly reduce their risk for complications of diabetes. Because the average health care cost of complications of diabetes is \$10,683, this is a savings of \$2,585,286 per year in West Virginia. This year, 700 participants showed a decrease in A1C numbers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
724	Healthy Lifestyle

Outcome #11

1. Outcome Measures

Number of economic improvements

Not Reporting on this Outcome Measure

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Appropriations changes
- Competing Programmatic Challenges

Brief Explanation

Changes in the funding of the Family Nutrition Program and in the Dining with Diabetes program has resulted in a re-examining of priorities and future activities.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

A brief summary of findings from the July 2011 survey of WVUES employees who participated in the Wild Wonderful Wellness program includes:

- Eighty employees responded (18.09%) and 62% of respondents had visit
- 61% of respondents agreed or strongly agreed with the statement:
" My health habits/practices have improved because of the WWW Challenge."
- 70% of respondents agreed or strongly agreed with the statement:
" I am motivated to live a healthier lifestyle because of the WWW Challenge."
- 69% of respondents stated agreed or strongly agreed with the statement:
" I have gained new knowledge about my health due to the WWW Challenge."

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 773 participants from ages 14 to 91 completed all survey questions. A comparison of means was conducted with paired samples. A t-test of significance showed was $p < .000$ for all questions. Results appear to demonstrate that women gain significant knowledge in each of the target areas. The greatest increase in self-reported gain is in the awareness of community resources. This is important because, if

given support and resources, women may be more proactive in taking responsibility for their personal health. Participants and Extension agents have occasionally related anecdotal stories about participants discovering and seeking treatment for life-threatening problems as a result of an Extension Love Your Heart Talks program.

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 2

1. Name of the Planned Program

Youth Development

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
806	Youth Development	100%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	34.0	0.0	0.0	0.0
Actual Paid Professional	59.0	0.0	0.0	0.0
Actual Volunteer	290.0	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
840000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
3108160	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 youth development program addresses four programmatic areas: 1) citizenship and global education; 2) literacy education, 3) science, technology, engineering and math (STEM), and 4) healthy lifestyles. The goals of the program are: 1) develop youths into responsible leaders of their state, country,

and world, 2) improve reading skills in youth and engaging adults in teaching children to read, 3) create in youth an appreciation for STEM and equip them for a technologically advanced society, 4) increase the capacity of youth to maintain a healthy lifestyle.

Citizenship and Global Education- Within the Citizenship and Global Education program there were 1,921 educational activities, 424 adult direct contacts, 53,878 adult indirect contacts, 67,938 youth direct contacts, and 1,309,232 youth indirect contacts reported in 2011. Activities include clubs, camps, after-school programs, newsletters, social media interactions, and special educational programs such as charting, career counseling, leadership skill development, global and cultural presentations, and trips to other countries. WVU Extension Service faculty members have produced 17 Extension publications on topics related to citizenship and global education. There was one peer-reviewed research publication on camping evaluation.

Literacy Education- Within the Literacy Education program area there were 90 local programs. The largest program in this category is the Energy Express Program that promotes school success of children living in low-income communities by providing summer learning experiences and an ethic of service among college students and community members. This year the literacy education program area had 1,898 direct contacts with adults and 5,333 direct contacts with youth.

Science, Technology, Engineering and Math- Within the STEM program area, there were 1,293 educational activities reported, including topics related to the environment, energy, forestry, agriculture, animals, technology and engineering, the biological sciences, and the physical sciences. There were 970 direct contacts with adults, 100,000 indirect contacts with adults, and 68,107 direct contacts with youth. This year, WVU Extension Service faculty members have produced 7 Extension publications on STEM topics.

Healthy Lifestyles- Within the Healthy Lifestyle program area, there were 1,281 educational activities including the Health Rocks program, the Germ Stops Here program, and the Dental Health program. There were 299 direct contacts with adults, 38, indirect contacts with adults, and 22,157 direct contacts with youth in this program area. WVU-ES faculty members have produced one curricula piece this year: the Health H Pocket Guide, and have published one article in a peer-reviewed journal.

Adult leadership Development for Youth Activities- WVU Extension faculty members train adults to work with youth in West Virginia. These programs train club leaders, camp counselors and staff, Energy Express mentors, and 4-H agent trainings. In 2011, there were 69 educational activities reported, 19,678 direct adult contacts, 19,000 indirect adult contacts, 61 direct youth contacts, and 19 indirect youth contacts.

2. Brief description of the target audience

Youth 9 to 21. Adult volunteers who work directly with youth.

3. How was eXtension used?

eXtension was not used in this program

V(E). Planned Program (Outputs)

1. Standard output measures

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	32545	246078	142214	3131679

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

Year: 2011
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2011	Extension	Research	Total
Actual	23	1	24

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of educational activities

Year	Actual
2011	4645

Output #2

Output Measure

- Number of educational materials created or updated

Year	Actual
2011	0

Output #3

Output Measure

- Number of outside organizations collaborating within this program area
 Not reporting on this Output for this Annual Report

Output #4

Output Measure

- Number of educational materials created or updated

Year	Actual
2011	0

Output #5

Output Measure

- Number of professional presentations

Year	Actual
2011	2

Output #6

Output Measure

- Number of educational materials created

Year	Actual
2011	25

Output #7

Output Measure

- Number of educational materials distributed

Year	Actual
2011	110878

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 improve or increase skills
3	Number of participants who change their attitudes or opinions
4	Number of participants who are motivated to change their behavior
5	Number of participants who change a behavior or use a new skill
6	Number of participants who train others
7	Number of groups or organizations that change their procedures and/or policies
8	Amount of money raised by participants to support the program
9	Number of new groups or organizations that are established or enhanced
10	Number of physical or social effects, such as disease, pollution, or crime that are reduced or eliminated
11	Number of economic improvements
12	Number of environmental improvements

Outcome #1

1. Outcome Measures

Number of participants who increase their knowledge

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	68637

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

West Virginia needs a workforce ready to tackle a sophisticated, highly technical, science-driven, global economy. National studies have demonstrated the value of research and technology, product development, and business development on a state's economy.

What has been done

The West Virginia 4-H State-Wide Science, Technology, Engineering & Math (STEM) Initiative combines new and existing STEM curricula, 4-H's hands-on, experiential learning models, and a tested program delivery system to provide club, after-school, and camping-based STEM programming. There were 299 reported activities in the STEM program area.

Results

68,637 youth gained knowledge in STEM related topics including: wind and other types of energy, crop production, water quality, animal care, the environment, and the scientific method.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #2

1. Outcome Measures

Number of participants who improve or increase skills

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	25496

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

It is part of the mission of WVU-ES to develop citizens, both youth and adults, to assume leadership roles in their communities and make existing and emerging leaders more effective.

What has been done

Many 4-H programs are designed to equip young people with career-ready skills. Others train youth to act as leaders by training them to conduct meetings, motivate others, manage budgets, and evaluate activities. Still others train youth to become knowledgeable about community issues such as the environment, diversity understanding, and health issues and then take a stand based on their conclusions.

Results

14,646 youths and adults gained leadership and general citizenship skills.

967 youths and adults gained skills in caring for the environment, including water and animal care.

2,819 adults gained skills in protecting children from sexual abuse and harassment.

4,719 youths and adults gained skills in living a healthy lifestyle including germ protection, dental care, and healthy eating.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #3

1. Outcome Measures

Number of participants who change their attitudes or opinions

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	5556

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Since its inception, the WVU-ES youth development planned program has placed emphasis on the importance of young people being engaged, well-informed citizens. This includes seeking understanding of issues and being willing to change opinions based on facts gathered from reliable sources.

What has been done

WVU-ES programs include research-based information gathered from academic and scientific literature, experts from the university family, and speakers vetted through National 4-H. As a result, our youths have indicated that they have changed their opinions and have acted upon new convictions.

Results

425 youth have changed their opinion about their own life course including advanced education and careers.

1,872 youth have changed their opinions about protecting the environment, alternate fuels, and operating ATVs and other vehicles in safe ways.

3,147 youth have changed their opinions and attitudes toward issues related to a healthy lifestyle including avoiding addiction, protecting friends from cyber bullying, eating in a healthy way, and protecting their health through exercise and good hygiene.

112 adults changed their attitudes about protecting the rights of people who are different than themselves.

4. Associated Knowledge Areas

KA Code	Knowledge Area
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806 Youth Development

Outcome #4

1. Outcome Measures

Number of participants who are motivated to change their behavior

Not Reporting on this Outcome Measure

Outcome #5

1. Outcome Measures

Number of participants who change a behavior or use a new skill

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	5438

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

As Extension educators work at the community level, they rely heavily on the support and work of 4-H leaders, camp counselors, Energy Express mentors and site coordinators, and other adults and older teens who volunteer to carry out Extension programs.

What has been done

This year, as in all years, WVU Extension educators conducted training sessions for those who work with our youth. This year more than 1,000 trainings occurred, and over 5,000 adults and teens received training in leadership, budgeting, working with youth, promoting diversity, and the essential elements of youth development.

Results

This year, 5,438 adults successfully implemented and carried out the duties related to leading 4-H clubs, camps, Energy Express sites, and afterschool programs resulting in increased knowledge, skills, attitudes and behaviors of WV youth.

4. Associated Knowledge Areas

KA Code **Knowledge Area**
806 Youth Development

Outcome #6

1. Outcome Measures

Number of participants who train others

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	496

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Young adults in colleges and universities in West Virginia and in several other states have served low-resource children through our Energy Express Program. When college students come to the program, they don't necessarily have the skills they need so they must be trained. This is particularly important because low-income children are vulnerable during the summer months and two-thirds of the achievement gap between low-income and middle-income children can now be traced to the summer break.

What has been done

Each year, mentors and site coordinators undergo rigorous training before they are placed in the counties to work in the Energy Express sites. This includes a week-long training with sessions in planning and implementing activities, engaging children in learning, discipline, etc. To measure whether staff were successful, a stratified random sample of about 700 children was used to gather pre/post measures on three subtests of the Woodcock Johnson Test of Reading Achievement.

Results

The success of the pedagogic training for Energy Express mentors resulted in seventy-two percent of the children who participated 15 days or more in Energy Express maintaining or increasing in reading scores. Extrapolating from the gain scores, it is possible to describe that the "average" child made a gain of about five months in reading skills during the six weeks of the program.

4. Associated Knowledge Areas

KA Code **Knowledge Area**
806 Youth Development

Outcome #7

1. Outcome Measures

Number of groups or organizations that change their procedures and/or policies

Not Reporting on this Outcome Measure

Outcome #8

1. Outcome Measures

Amount of money raised by participants to support the program

Not Reporting on this Outcome Measure

Outcome #9

1. Outcome Measures

Number of new groups or organizations that are established or enhanced

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Through WVU Extension Service international programs faculty, staff, and youths, have had opportunities to learn in other countries from their citizens and to encourage youth development workers in Guanajuato Mexico to implement the 4-H program that promotes positive youth development.

What has been done

A team of WVU-ES agents and specialists traveled to Mexico to deliver a 4-H informational program in high schools in Mexico. Participants gained team building skills and learned to work together to promote 4-H programs.

Results

There has been an improvement in the capacity of the University of Guanajuato high school system to integrate 4-H into the curricula.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #10

1. Outcome Measures

Number of physical or social effects, such as disease, pollution, or crime that are reduced or eliminated

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

In the state of West Virginia it is estimated that there will be around 8,399 DUI's, and 100 deaths due to intoxicated driving this year. Statistics also show that there will be 509 deaths related to alcohol abuse, 2,609 tobacco related deaths, and 101 deaths due to illicit drug use. It is believed that there are around 87,755 marijuana users, 14,380 cocaine addicts, and 814 heroin addicts living in West Virginia. It is also estimated that there are 38,429 people abusing prescription drugs. Abuse of OxyContin remains a problem for West Virginia.

What has been done

The past year was the fourth year of implementation of the Health Rocks!® program in West Virginia. 3,005 youth were involved in the Health Rocks!® program; 67% of the total number of participants received 10 hours of prevention education; Youth were involved through camps, 4-H clubs, and afterschool programs; 512 adult and youth leaders were trained to partner with youth in the delivery of programs.

Results

We believe that the rate of addiction will go down in West Virginia as a result of efforts from groups to educate and provide alternatives to recreational drug use. The results of the Health Rocks evaluation showed that nine out of ten youth participants were confident that they would be able to say "no" if other people such as peer friends offer them drugs, they would be able to choose healthy behaviors to deal with stress instead of turning to drugs or alcohol, and they would never use drugs.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #11

1. Outcome Measures

Number of economic improvements

Not Reporting on this Outcome Measure

Outcome #12

1. Outcome Measures

Number of environmental improvements

Not Reporting on this Outcome Measure

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Appropriations changes
- Competing Public priorities
- Competing Programmatic Challenges

Brief Explanation

West Virginia is a state of increasing poverty, decreasing populations, and decreasing school-age population. Now Latino populations are entering the eastern panhandle of WV. Program resources are a constant challenge. Programs such as Energy Express that relies on AmeriCorps funds is always vulnerable because of changing priorities/administrations.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

For Health Rocks:

- Nine out of ten youth participants know that people who smoke or do drugs can have serious physical health, cognitive, and relational consequences, for example, die from lung cancer, lose memory, and/or ruin relationship with family and friends.
- Nine out of ten youth participants have long-term goals of life, it is important for them to have a healthy lifestyle, to manage stress in a positive way, and to help a friend stop using drugs, and it is not worth taking the risk to try cigarettes, alcohol, or other drugs
- Nine out of ten youth participants were confident that they would be able to say "no" if other people such as peer friends offer them drugs, they would be able to choose healthy behaviors to deal with stress instead of turning to drugs or alcohol, and they would never use drugs. In addition, over 80% of youth participants were confident that they would be able to deal with stress by using the stress management skills, for example, they would be able to talk about it with someone they trust.
- Youth participants showed consistent increase in knowledge about smoking, drinking, and other drug use, positive attitude, skills in dealing with stress and decision making after training
- Health Rocks training helped youth learn skills in dealing with peer pressure and stress, and in making good decision. Youth participants reported the highest improvements in these specific skills.

Each summer, the WVU Extension 4-H program conducts an evaluation of its 4-H camps using three different assessment tools: one that measures whether campers gained life skills, one that measured whether camps are providing campers with the opportunity to be exposed to the essential elements of youth development, and one that measured satisfaction with the camping experience.

Between 3,000 and 4,000 youth respond to the camp assessments each year. Results on all questionnaires are positive. Means on all items are generally well above 3.00 on a 4-point scale indicating that the essential elements of youth development are found at camp and campers are gaining important life skills. Over the past five years we have discovered the following:

1. Girls answer more positively than boys on questions related to the three life skills developed at camp: accepting self and others, accomplishing goals, and taking responsibility.
2. Girls answer more positively than boys on questions related to camp context or the essential elements of youth development provided in camp settings: opportunity to build a relationship with a caring adult, emotionally safe and inclusive environment, opportunity for independent learning and mastery, and physically safe environment.
3. The number of years a person has been a 4-H member seems to positively impact their answers on the life skill questions particularly in the domains of accepting self and others, accomplishing goals, taking responsibilities.
4. The number of years a person has been going to 4-H camp seems to positively impact their answers on questions related to the ability of camps to provide opportunity for mastery and an emotionally safe and inclusive environment.
5. Participation in 4-H camps seems to enhance the development of life skills that membership in 4-H alone does not. This was especially true of accepting self and others, and in particular respecting others who have different ideas than my own.
6. Younger boys are less likely than older boys to feel that other campers like and

accept them. Perhaps, boys who do not feel liked, drop out of camp. If teens select activities based on whether or not they are accepted by the group or whether or not they find friends in the group, they will go where they feel accepted. Perhaps boys drop out of camp because they find acceptance in other summer activities. If that is true, we should consider activities for younger boys that build relationships and solidify friendships so that they will want to come back and see friends from prior years at camp.

Key Items of Evaluation

Even though we believed that the differences between boys and girls are probably due to development issues, we were interested in why these differences exist, so this year we conducted focus groups research among middle-school campers at selected camps. Our purpose was to understand the safety issues at camp and adjust our camping procedures to make camps as safe as possible for all campers. The results were:

1. No serious safety issues at camp were apparent: most campers feel safe.
2. Very few physical safety issues were brought up
3. Building friendship is important to feeling safe at camp.
4. Council circle is the most favorite part of camp and may be a model for safety.
5. Results indicate that boys do not feel less safe at camp than at other places. In fact, most interviewed feel safer at camp than at school. This is true with girls as well.
6. There were some differences between boys and girls in terms of safety

V(A). Planned Program (Summary)

Program # 3

1. Name of the Planned Program

Workforce and 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
608	Community Resource Planning and Development	50%			
723	Hazards to Human Health and Safety	20%			
803	Sociological and Technological Change Affecting Individuals, Families, and Communities	15%			
805	Community Institutions, Health, and Social Services	15%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	31.0	0.0	0.0	0.0
Actual Paid Professional	21.0	0.0	0.0	0.0
Actual Volunteer	226.0	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
640000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
929840	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

Workforce Development

WVU-ES conducts workshops and training opportunities for workers in a variety of settings in West Virginia. Topics cover a broad range and include ADA and Civil Rights Compliance, how to start non-profit organizations, grant writing, applying for farmer's market coupons, equine care, and cultural diversity. Included in this program area are workshops and training opportunities we provide to Extension educators who in turn train others in their community. It should be noted, however, that in previous years we have included our Fire Institute, Aircraft Crash Rescue firefighting program, Institute for Labor Studies and Research, Safety, and Health Extension in our report, but this year we have chosen not to include these initiatives because their funding comes directly from contracts unrelated to USDA funding.

In 2011, WVU Extension recorded 47 educational activities in the workforce development program area. There were 821 direct adult contacts, 18,199 indirect adult contacts, and 20 direct youth contacts. WVU faculty produced 2 Extension publications including fact sheets, curricula, and other printed materials and 2 articles in peer reviewed journals. These articles include A Snapshot of Organizational Climate and Best Practices for Extension Curricula Review both authored by Elaine Bowen, et.al. and published in the Journal of Extension.

Leadership Development

WVU Extension relies on volunteers to carry on programs in the community. Specific programs, such as 4-H train their own adult leaders and those efforts are reported under the youth development program area. Other groups who include volunteer training are our Community Education Outreach Service organization (CEOS), the Master Gardener program, Energy Express (reported under youth development). Topics include budgeting and planning for small organizations, public speaking, board responsibilities including serving as an officer, and communications. There were 143 educational activities reported, 2,416 direct adult contacts, 46,650 indirect adult contacts, and 178 direct youth contacts.

Community Development

WVU Extension implements a number of initiatives which have as its focus the development of local governments and community organizations. These initiatives include The First Impressions Program, Government Planning and Public Policy, Business Retention and Expansion, Community Development East, and the Power of 10. This program area also includes the beautification efforts (non-food production) of our Master Gardner program. These programs attract participants who are interested in initiating downtown revitalization programs to improve their community's capacity to attract and retain new business and make communities more desirable places to live and work. This year there were 187 educational activities in this program area, 35,233 direct contacts with adults, 14,464 indirect adult contacts, 3,388 direct youth contacts, and 300 indirect contacts with youth. Extension faculty produced three Extension publications and participated in six professional presentations.

2. Brief description of the target audience

Employers/owners of businesses, community/county boards and other leaders, volunteers, immigrants and migrant workers, disabled community members, and older adults

3. How was eXtension used?

One specialist serves on the Evaluation CoP and such contributed answers to FAQs and has reviewed other material.

V(E). Planned Program (Outputs)

1. Standard output measures

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	38526	79214	3988	300

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

Patent Applications Submitted

Year: 2011

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2011	Extension	Research	Total
Actual	9	2	11

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of educational activities

Year	Actual
2011	377

Output #2

Output Measure

- Number of educational materials created or updated

Year	Actual
2011	9

Output #3

Output Measure

- Number of educational materials distributed

Year	Actual
2011	79514

Output #4

Output Measure

- Number of professional presentations

Year	Actual
2011	6

Output #5

Output Measure

- Number of outside organizations collaborating within this program area

Year	Actual
2011	143

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Number of participants in workforce development programs who increase their knowledge.
2	Number of participants who improve or increase skills
3	Number of participants who change their attitudes or opinions
4	Number of participants who are motivated to change their behavior
5	Number of participants who change a behavior or use a new skill
6	Number of participants who train others
7	Amount of money raised by participants to support the program
8	Number of people certified or licensed to practice in the field
9	Number of groups or organizations that change their procedures and/or policies
10	Number of new groups or organizations that are established or enhanced
11	Number of physical or social effects, such as disease, pollution, or crime that are reduced or eliminated
12	Number of economic improvements

Outcome #1

1. Outcome Measures

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

3b. Quantitative Outcome

Year	Actual
2011	16816

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

New small businesses are forming in West Virginia and are requiring development activities for employees or new owners. Examples are businesses in aquaculture, green energies, and equine farms.

What has been done

Examples of educational activities that have been offered this year to support new businesses include: West Virginia GREEN-UP: A Twenty-First Century Partnership to Support Energy Sector, FUNDamentals of Nutrition, Body Condition, and Body Weight Estimate & What Every Horse Should Know, Training New Aquaculture Farm Employees, and Obtaining Farmers Market Coupons.

Results

16,816 employees and small business owners in West Virginia increased their knowledge of how to work efficiently within their industry and how to improve their business operations.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
723	Hazards to Human Health and Safety
803	Sociological and Technological Change Affecting Individuals, Families, and Communities

Outcome #2

1. Outcome Measures

Number of participants who improve or increase skills

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	1200

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

A key component of the WV Master Gardener training program is the formation of county Master Gardener (MG) volunteer associations. These local MG chapters compliment the state training program by providing an outlet for community service for the MG volunteers trained by the program. The MG chapters contribute many hours of valuable horticultural service to the beatification of local communities.

What has been done

Master Gardner 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. There are Master Gardener programs in 44 of West Virginia's 55 counties.

Results

1,200 local Master Gardeners gained horticulture and team participation skills that allowed them to conduct service projects in the community including renovating and designing new landscapes for public facilities such as senior centers, the Square Foot Gardening program which focuses on establishing pilot square foot garden sites in the local community, spring clinics, cleanups, and various local school and garden club presentations.

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

Outcome #3

1. Outcome Measures

Number of participants who change their attitudes or opinions

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	486

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The Global Education Team of the West Virginia University Extension Service (WVUES) seeks to aid West Virginians in becoming globally aware. It is imperative to see and understand that the United States (U.S.), West Virginia (WV), and its citizens are part of the global dimension and not separate from it.

What has been done

Extension educators have involved clientele in international programs. The International Four-H Youth Exchange (IFYE) program offers community presentations. In addition WVUES professionals and members of WV 4-H have supported outreach programs in Mexico and Chile. Extension professionals and 4-H members have traveled around the state of WV to present on these projects and cultures. Our CEOS groups have supported international students and have invited them into the communities to report on their experiences.

Results

486 adult community members have changed their perceptions of cultures that are different from their own. As a result they have expanded their ideas for improving their own communities and have encouraged youth to participate in international opportunities.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
805	Community Institutions, Health, and Social Services

Outcome #4

1. Outcome Measures

Number of participants who are motivated to change their behavior

Not Reporting on this Outcome Measure

Outcome #5

1. Outcome Measures

Number of participants who change a behavior or use a new skill

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	1631

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

At WVU-ES, community development initiatives include: the Community Development Institute East, First Impressions, Government, Planning, and Public Policy, and Business Retention and Expansion

Results

1,631 individuals from county city governments have created community development plans. These community members have made informed decisions about zoning, disaster preparedness, the legal aspects of planning, personnel policies, and entrepreneurial operations.

4. Associated Knowledge Areas

KA Code Knowledge Area

608 Community Resource Planning and Development
805 Community Institutions, Health, and Social Services

Outcome #6

1. Outcome Measures

Number of participants who train others

Not Reporting on this Outcome Measure

Outcome #7

1. Outcome Measures

Amount of money raised by participants to support the program

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	79252

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

West Virginia University Extension has maintained its community focus. As a result, county groups have continued to fund a portion of the budget needed to support local activities

What has been done

Many counties added equine events to their county fair schedule which resulted in additional funds. Other counties raised funds to support construction projects such as a multi-purpose facility at a county 4-H grounds. Annual special events such as the Ox Roast bring in much needed funds. Recycling projects such as the one in Greenbrier County brings in thousands of dollars by collecting thousands of pounds of recycling material and processing it through the recycling center.

Results

\$79,252 was reported as having been raised in communities to assist in community development. This is probably a low estimate of the amount of money that was actually raised.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
805	Community Institutions, Health, and Social Services

Outcome #8

1. Outcome Measures

Number of people certified or licensed to practice in the field

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	8

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Professional Community and Economic Developers identify community problems, set goals, cooperate with other entities working in the same area, stimulate community interaction, and bring groups together to support economic development, human resource development, and quality of life improvements.

What has been done

The Community Development Institute (CDI) East is part of an effort to train Professional Community and Economic Developers. It features three, week-long sessions that build upon one another. In 2011, the institute was held in Bridgeport, WV from May 9-13. The Institute was planned and coordinated by Michael Dougherty, WVU-ES Community Development Specialist. In 2011, there were 28 attendees at CDI East.

Results

8 students, a record number, passed the Professional Community and Economic Developer exam.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development

Outcome #9

1. Outcome Measures

Number of groups or organizations that change their procedures and/or policies

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	10

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

Extension specialists and county agents work with local governments to develop comprehensive plans for community development.

Results

This year 14 counties or municipalities completed comprehensive plans: The include Mineral, Grant, Tucker, Lewis, Putnam, Monongalia, Hampshire, Morgan, and Braxton, and the cities of Madison, Winfield, Westover, Moundsville, and Nitro.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
723	Hazards to Human Health and Safety
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
805	Community Institutions, Health, and Social Services

Outcome #10

1. Outcome Measures

Number of new groups or organizations that are established or enhanced

Not Reporting on this Outcome Measure

Outcome #11

1. Outcome Measures

Number of physical or social effects, such as disease, pollution, or crime that are reduced or eliminated

Not Reporting on this Outcome Measure

Outcome #12

1. Outcome Measures

Number of economic improvements

Not Reporting on this Outcome Measure

V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

Competition for training funds and changes in regulations make it harder to complete classes. Changes in government regulations make it harder to reach national consensus standards. We must compete with RESA, which gets money to conduct free classes. Grants become harder to secure.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

The participants report that the Community Development Institute East training has a high educational value, is relevant in their current positions, and has a useful curriculum. The West Virginia Development Office (WVDO) mandated evaluation for recipients of Flex-

E-Grant-funded tuition waivers showed similar results as all of the indicators related to individual capacity showed improvement.

With respect to the institute operations, the evaluations were showed near universal highly favorable opinions. The average of the three classes for the organization of the institute was 9.42 (on a 10-point scale). This was the highest it had ever been. Similarly, the related indicators for registration process, value for fee paid, schedule of sessions, and quality of facilities, overall educational value, and usefulness in current position were high to very high (with the exception of scheduling issues in the first year class). Together, these make a powerful statement about the work I led that brought together this year's institute.

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 4

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	15%			
205	Plant Management Systems	10%			
213	Weeds Affecting Plants	5%			
216	Integrated Pest Management Systems	10%			
307	Animal Management Systems	15%			
308	Improved Animal Products (Before Harvest)	15%			
503	Quality Maintenance in Storing and Marketing Food Products	10%			
604	Marketing and Distribution Practices	10%			
607	Consumer Economics	10%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	49.0	0.0	0.0	0.0
Actual Paid Professional	14.0	0.0	0.0	0.0
Actual Volunteer	0.0	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
185000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
794600	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 Global Food Security and Hunger planned program worked to meet the following goals: 1) increase food supply and quality by improving and promoting animal health, marketing, use of pesticides, use of risk mitigation, and control of predation; 2) expand marketing opportunities for value-added products and develop food systems that support local consumers and local business creation and expansion; 3) enhance the agricultural knowledge so that citizens make informed decisions related to the production of food and fiber and build volunteer capacity related to agriculture within communities.

Livestock Production and Management- There were 79 educational activities reported in the livestock production and management program area, 2,126 direct adult contacts 201,300 indirect adult contacts, and 35,551 direct youth contacts. The major initiatives included: feeder cattle marketing program, livestock improvement, grassland management, and livestock judging. WVU Extension educators produced 6 Extension publications, presented at 4 professional meetings, and published 3 articles in peer-reviewed journals.

Horticulture- There were 186 educational activities reported in the horticulture (fruits and vegetables) program area, 34,318 direct adult contacts, 105,660 indirect adult contacts, and 1,672 direct youth contacts. The major initiatives included: homeowner and commercial horticulture, the Master Gardener Program and International Conference. WVU Extension educators produced 2 Extension publications and presented at 4 professional meetings.

Aquaculture- There were 44 educational activities reported in the aquaculture program area, 1568 direct adult contacts, 8,200 indirect adult contacts, and 115 direct youth contacts. The major initiatives included: pond management, aquatic animal health, aquatic weed control, and fish at the market. WVU Extension educators produced one Extension publication.

Pest Management- There were 15 educational activities reported in the pest management program area, 892 direct adult contacts and 25,000 indirect adult contacts. The major initiatives included: Integrated Pest Management, the White Tailed Deer Damage Program, and Weed Control Management. There were 2 Extension educational products including "Protecting Pollinators: WVUES Pesticide Applicators Recertification" video.

Sustainable Agriculture: Agriculture Business/Small Farm Management- There were 108 educational activities reported in the sustainable agriculture program area, 5,904 direct adult contacts, 24,880 indirect adult contacts, 738 direct youth contacts, and 525 indirect youth contacts. The major initiatives included: West Virginia Small Farms Conference, Small Farms Website, Empowering Women through Locally Grown Foods Systems, Farmer's Market Voucher training, and the Youth Farm Safety program. WVU Extension educators presented at 6 professional meetings.

Nutrient Management- There were 20 educational activities reported in the nutrient management

program area, 1209 direct adult contacts. The major initiatives included fertilizer use and selection, soil sampling, and composting. WVU Extension educators presented at 2 professional meetings.

2. Brief description of the target audience

The target audience is beef and dairy producers, large and small growers of horticultural products, regional livestock producers, market managers, homeowners, shepherds, pesticide applicators, certified nutrient managers, youth livestock exhibitors, volunteers, Extension agents, and Extension specialists.

3. How was eXtension used?

One specialist has been active on the horticulture/Master Gardener CoP.

V(E). Planned Program (Outputs)

1. Standard output measures

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	46017	365040	38076	525

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

Patent Applications Submitted

Year: 2011

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2011	Extension	Research	Total
Actual	12	3	15

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of educational activities

Year	Actual
2011	453

Output #2

Output Measure

- Number of educational materials created or updated

Year	Actual
2011	250

Output #3

Output Measure

- Number of educational materials distributed

Year	Actual
2011	365040

Output #4

Output Measure

- Number of outside organizations collaborating within this program area
Not reporting on this Output for this Annual Report

Output #5

Output Measure

- Number of professional presentations

Year	Actual
2011	25

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 change their attitudes or opinions
3	Number of participants who improve or increase skills
4	Number of participants who are motivated to change their behavior
5	Number of participants who change a behavior or use a new skill
6	Amount of money raised by participants to support the program
7	Number of participants who train others
8	Number of people certified or licensed to practice in the field
9	Number of groups or organizations that change their procedures and/or policies
10	Number of new groups or organizations that are established or enhanced
11	Number of physical or social effects, such as disease, pollution, or crime that are reduced or eliminated
12	Number of economic improvements
13	Number of environmental improvements

Outcome #1

1. Outcome Measures

Number of participants who increase their knowledge

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	32122

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

County Master Gardener (MG) volunteer associations provide an outlet for community horticultural service and extend the WVUES impact in the state

What has been done

Trainees from 44 county MG associations are given core training in botany, propagation, soil science, plant pathology, entomology, communication skills and pest management. Specific gardening topics such as pruning, composting, vegetable and herb culture, tree and small fruit culture, allow Master Gardeners to diversify their horticultural knowledge. The International Master Gardener Conference was held in WV this year with 1,000 in attendance.

Results

32,122 direct adult contacts gained knowledge in botany, propagation, soil science, plant pathology, entomology, communication skills and pest management. Specific gardening topics such as pruning, composting, vegetable and herb culture, tree and small fruit culture

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
205	Plant Management Systems
213	Weeds Affecting Plants

Outcome #2

1. Outcome Measures

Number of participants who change their attitudes or opinions

Not Reporting on this Outcome Measure

Outcome #3

1. Outcome Measures

Number of participants who improve or increase skills

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	4678

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 family understand the impact their management practices have on several parameters including environment, family, and profit. If successful, the farm manager will inquire about what opportunities exist to help him/her change his management, and to help him to reach his goals.

What has been done

This year, WVU-ES faculty implemented and participated in the following educational initiatives aimed at improving agriculture business in WV: Winter Risk Management Series, WV Small Farm Conference, Borrower training, Farm to School Conference, Local Food Dine Around, Youth Safe Family program. In addition, county agents held local events such as farmer dinner meetings, farmer market voucher training, and seminars on small farm opportunities.

Results

Farming business contacts improved skills in basic business planning and feasibility analysis for small farms and marketing techniques.

Small farmer (and family member) contacts improved skills related to reducing drowning, fall protection, and firearms hazards/risks on their farms.

4. Associated Knowledge Areas

KA Code	Knowledge Area
607	Consumer Economics

Outcome #4

1. Outcome Measures

Number of participants who are motivated to change their behavior

Not Reporting on this Outcome Measure

Outcome #5

1. Outcome Measures

Number of participants who change a behavior or use a new skill

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	220

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

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.

What has been done

The WV BQA program conducted Level I and II trainings for producers at two of the stockyards. Training was conducted at WVU and Potomac State College for students and all the farm workers on campus and the experiment stations. Two NCBA Stockman and Stewardship sessions were conducted and attended by the farm crews, students, local producers and the WVDA Division of Animal Health, and Livestock Marketing. Other BQA programs were part of the West Virginia

University Extension winter education series and the WV cattlemen's Short Course.

Results

The West Virginia Quality Assurance Feeder Calf Sale sold approximately 5,500 head of calves produced and assembled by 220 BQA certified producers in September and October. The sale each year offers a marketing outlet for source and aged verified, health managed and genetically superior calves. The producers have benefited from returns \$5 to \$10/cwt premium over similar sale barn cattle.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems
503	Quality Maintenance in Storing and Marketing Food Products
604	Marketing and Distribution Practices
607	Consumer Economics

Outcome #6

1. Outcome Measures

Amount of money raised by participants to support the program

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	98477

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The number of rural residents has decreased to under 1.5% of America's population. 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.

What has been done

1,875 educational agricultural education programs were offered including public school

programming for 4-H and other youth/adult audiences. These included educational programs in such subject matter as Beef, Dairy, Sheep, Swine, Land and Soil Evaluation, Ethics, Goats, General Livestock, Horse Camps, Vo-Ag Days, Ag in the Classroom, Value Added Products, Quality Assurance, Horticulture, Livestock Showing and Fitting, and Farm Safety.

Results

\$3,599,874 was generated from 4-H and FFA livestock sale proceeds, and \$98,477 was 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

KA Code	Knowledge Area
307	Animal Management Systems
604	Marketing and Distribution Practices
607	Consumer Economics

Outcome #7

1. Outcome Measures

Number of participants who train others

Not Reporting on this Outcome Measure

Outcome #8

1. Outcome Measures

Number of people certified or licensed to practice in the field

Not Reporting on this Outcome Measure

Outcome #9

1. Outcome Measures

Number of groups or organizations that change their procedures and/or policies

Not Reporting on this Outcome Measure

Outcome #10

1. Outcome Measures

Number of new groups or organizations that are established or enhanced

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

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 as a form of agriculture. The legal/ institutional framework in West Virginia has not accommodated this change adequately. DNR is the primary permitting agency for fish farmers rather than the WV Department of Agriculture. No agency is an advocate for aquaculture. There is need to develop policies which address issues and problems facing development of the aquaculture industry in WV.

What has been done

We have reviewed WV regulations, statutes, and regulatory/statutory schemes for aquaculture in other states. This has provided guidance regarding how WV policy might be modified. With the passage of the Aquaculture Development Act, the Aquaculture Advisory Board was created. This event creates a mechanism whereby representatives from industry and state agencies meet to discuss issues and policy. As landowners seek to initiate aquaculture enterprises and contact the Extension Service, additional issues are identified and engaged.

Results

The Aquaculture Forum in 2011 featured the Aquaculture Advisory Board and provided feedback on some proposed aquaculture policies. An Aquaculture Advisory Board was created to provide recommendations for aquaculture development to the WV Department of Agriculture. It is developing a policy framework that will be proposed to the legislature in fall, 2012. A landowner in Pocahontas County, who wishes to produce trout, succeeded in getting permission from the state to access flow from the stream crossing his property. He worked with the Pocahontas County Extension agent, and Extension specialists in aquaculture and engineering from Morgantown.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems
503	Quality Maintenance in Storing and Marketing Food Products
604	Marketing and Distribution Practices
607	Consumer Economics

Outcome #11

1. Outcome Measures

Number of physical or social effects, such as disease, pollution, or crime that are reduced or eliminated

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The long-term objective in West Virginia is to increase the supply and capacity of locally-grown produce in the state. In the next 20 years approximately 50% of all current farmers will be retired. Extension may not be able to control the growth of local food production exclusively, but there is a need for information and facilitation in order to make local food production happen at a faster pace. This is the role of WVU Extension.

What has been done

The Season Extension Professional Development Project funded by SARE (Sustainable Agriculture Research and Education) has a primary objective of increasing the knowledge and skill level of members of the WVU Horticulture Team and innovative WV grower-educators related to season extension of specialty crops. Five workshops and tours were conducted in 2011. Twenty presentations were made to diverse audiences across the state and grower-educators hosted two workshops and numerous discussions with people interested in season extension technology.

Results

As a result of Extension efforts there is now a new generation of growers in West Virginia who will soon take the place of our current food producers. This will contribute to the ability of the US to remain an important exporter of food to other countries.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
604	Marketing and Distribution Practices

Outcome #12

1. Outcome Measures

Number of economic improvements

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Smaller farmers have difficulty marketing products because they lack the critical mass required for many marketing strategies. Graded feeder cattle sales have been a traditional means of achieving critical mass. However graded sales only solve some problems. Calves are sold on the average, eliminating the opportunity for an individual to earn extra income from better management. Additionally, there have been increases in the number of cattle exhibiting health problems. Calf pools offer producers an opportunity to obtain greater rewards for their effort.

What has been done

The 2011 marketing program put more emphasis on the "All Natural" feeder calf market as a means to add additional value to the calves that follow the natural protocol. This year four pools offered steers and heifers that qualified for the program.

Results

Selling through a calf pool allows the producer to add value to his/her calves relative to other marketing options. If the pooled cattle would have been sold through the typical graded sales the gross sale amount would have been \$3,275,869. These data indicate that the extra management time invested by producers to wean, vaccinate and booster their calves for pooled marketing was rewarded with \$174,082. The average added value for pooled calves in 2011 was \$41.11. Calves marketed through a pool, returns more net dollars per head to the producer and strengthens the local economy. While strong feeder cattle prices in graded sales reduced the

simple price advantage during 2011, these recorded sale prices simultaneously caused additional weight gains to be worth more to the producer. The net effect was that the overall value added in 2011 is similar to recent years (\$118 in 2011) as compared to \$115 - \$136 from 2007-2010). The natural meat market continues to grow and new players are entering the market. Most recently Meyers Natural Meats has shown an interest in WV feeder cattle.

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems
604	Marketing and Distribution Practices
607	Consumer Economics

Outcome #13

1. Outcome Measures

Number of environmental improvements

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

High and low tunnels are appropriate scale technology for WV farms. 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. Input costs per plant are significantly less with a high tunnel, since less pesticides and water are applied. Integrating high tunnel specialty crop production with livestock production is the model West Virginia farm.

What has been done

Five high tunnels are being used for research projects. These structures serve as sites for both research and teaching projects involving season extension of vegetable and fruit crops. In 2011, ten research projects were initiated in the high tunnels evaluating cropping systems, cultivars, water catchment, cover crops, low tunnels and stand establishment for production of several

warm and cool season vegetable and small fruit crops. A water catchment system for high tunnel irrigation was initiated at two sites in West Virginia (Harrison County and Fayette County).

Results

This project will demonstrate that high tunnels can be a closed loop system for inputs and significantly reduce the need for off-site irrigation water. In 2011, the high tunnel water catchment system reduced irrigation requirements from off-site water sources by 30%. Research projects evaluating high tunnels, low tunnels and plasticulture inputs will document the benefits of season extension technology in bridging the gap between growing seasons in West Virginia.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
205	Plant Management Systems
607	Consumer Economics

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Appropriations changes
- Competing Public priorities
- Competing Programmatic Challenges

Brief Explanation

The BQA program continues to reach new producers each year but maybe not in the number experienced initially. However the programs are well attended for continuing education and updates. We are finding a number attend but elect not to become certified, In WV only the Quality Assured Feeder Cattle Marketing Program and the two Performance Tested Bull Sales require that participating producer be BQA certified.

V(I). Planned Program (Evaluation Studies)

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 46 counties.

An evaluation study was undertaken during the 2010-2011 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 2010-2011 areas are as follows: Animal Sciences (77%) an increase of 1%; Plant Sciences (64%), an increase of 11%; Mechanical Sciences (67%), an increase of 6%; and Natural Resources (61%), an increase of

4% from the 2009-2010 4-H year; in addition, the overall project completion rate was 75%, an increase of 3% from 2009-2010.

Implementation of the Lamb Tail Docking Measurement Policy during the 2010-2011 year continued to have a program emphasis. Data was again collected to assess the effects of implementation of the policy, each county was asked to indicate the number of market lambs and breeding sheep exhibited and the number of market lambs and breeding sheep rejected because of tail dock length. A total of 910 market lambs were exhibited in the reporting counties with 2 (0.2%) being rejected. A total of 117 breeding sheep were exhibited statewide with 0 (0%) being rejected.

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 5

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%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	16.0	0.0	0.0	0.0
Actual Paid Professional	26.0	0.0	0.0	0.0
Actual Volunteer	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
409751	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
1383240	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

In 2011, the Strengthening Family planned program at West Virginia University Extension worked towards improving the financial wellbeing of WV families and building strong primary adult and child/parent relationships in WV families. The goals of the program include: 1) increasing knowledge and skills related to financial decision-making and family relationships; 2) ensuring the success of those who teach others about financial education and family relationships; 3) increasing collaborations between WVU-ES and community organization in order to strengthen families; 4) increasing the number of participants who are certified to provide childcare and offer family or financial training; and 5) increasing the amount of money raised as in-kind contribution to sustain program.

Financial Management - In 2011, there were 25 educational activities reported in the financial management program area, 590 direct adult contacts, 3,154 indirect adult contacts, and 573 direct youth contacts. The major initiatives within this program area were: Financial Fortress, Money Habitudes, Earned Income Tax Credit, and NetWorth Youth Financial Boot Camp Future Millionaires Club. WVU-ES educators produced two educational publications about family finance.

Parenting Education - In 2011, there were 165 educational activities reported in the parenting education program area, 17,308 direct adult contacts, 85,908 indirect adult contacts, and 14 direct youth contacts. The major initiatives within this program area were: Healthy Families/ Healthy Children program, the Strong Families Eat Together program, Parenting Piece by Piece, and Scream Free Parenting. WVU-ES educators produced five educational publications and presented at one national professional conference.

Adult Relationship Education- In 2011, there were 60 educational activities in the adult relationship program area, 38,866 direct adult contacts, 202,978 indirect adult contacts, 1,222 direct youth contacts, and 12,924 indirect youth contacts. The major initiatives within this program area were: Healthy Children/ Healthy Families Initiative, The Five Love Languages, ScreamFree Relationships, and How Not to Fall in Love with a Jerk. WVU-ES educators produced 15 educational publications, and presented at five professional conferences.

Aging/Gerontology Education- In 2011, there were 4 educational activities in the aging/gerontology program area, 522 direct adult contacts and 4,625 indirect adult contacts. The major initiatives within this program area were: Living Your Bucket List, Caring for Kin, the Relatives as Parents Program, and the eXtension Family Caregiving Community of Practice. WVU-ES educators produced 2 educational publications and presented at one professional conference.

2. Brief description of the target audience

West Virginia parents, high school students, childcare providers, older adults, kin caregivers, school teachers, prison inmates, WV citizens in significant relationships, Extension agents, and social service personnel.

3. How was eXtension used?

One specialist is the Evaluation Consultant on the Family Caregiving CoP has contributed Content and answered FAQs. She has made presentations about eXtension at two professional conferences.

V(E). Planned Program (Outputs)

1. Standard output measures

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	57291	299776	1809	12924

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

Year: 2011
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2011	Extension	Research	Total
Actual	25	0	25

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of educational activities

Year	Actual
2011	256

Output #2

Output Measure

- Number of educational materials created or updated.

Year	Actual
2011	25

Output #3

Output Measure

- Number of educational materials distributed.

Year	Actual
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2011 242700

Output #4

Output Measure

- Number of outside organizations collaborating within this program area

Year	Actual
2011	102

Output #5

Output Measure

- Number of professional presentations

Year	Actual
2011	6

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 improve or increase their skills.
3	Number of participants who are motivated to change their behavior
4	Number of participants who change a behavior or use a new skill
5	Number of participants who train others
6	Amount of money raised by participants to support the program
7	Number of people certified or license to practice in the field
8	Number of groups or organizations that change their procedures and/or policies
9	Number of new groups or organizations that are established or enhanced
10	Number of physical or social effects, such as disease, pollution, or crime that are reduced or eliminated
11	Number of economic improvements
12	Number of environmental improvements

Outcome #1

1. Outcome Measures

Number of participants who increased their knowledge.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	17136

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Parents of young children in WV need help with the many decisions they must make in parenting their children. These days, parents have many demands and often do not have time for extensive reading or attending parenting classes. Parenting education interventions must be designed to meet today's busy families.

What has been done

WVU-ES parenting initiatives included: Healthy Children Healthy Families program, a statewide coalition-based program to provide parenting and relationship education, the Strong Families Eat Together Program, an initiative that encourages families to communicate better during mealtimes, Parenting Piece by Piece, a program for low-resource, high risk parents, and Scream Free Parenting.

Results

Participants gained knowledge and skill in parenting including: 1) protecting children against sexual abuse, 2) establishing rules and routines for children, 3) the importance of eating together as a family, 4) how to access resources to meet the needs of the families and children, and 5) finding transitional housing for inmates and their families after they leave prison.

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being

Outcome #2

1. Outcome Measures

Number of participants who improve or increase their skills.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	3804

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Families in WV need help managing their money. Of particular concern is the need for reducing credit card debt and increasing the amount of money families save each year. Since WV has a high percentage of low-resource families, creative programming is needed.

What has been done

WVU Extension has been working on strategies to increase financial literacy among families in WV. These initiatives include: Financial Fortress, Money Habitudes, Earned Income Tax Credit, and NetWorth Youth Financial Boot Camp Future Millionaires Club.

Results

Family members gained skills in identifying types of spending habits, setting goals and creating budgets, and changing patterns of spending and saving. Additionally, WV citizens gained skills for applying for the Earned Income Tax Credit.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being

Outcome #3

1. Outcome Measures

Number of participants who are motivated to change their behavior

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	4906

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Unhealthy couple and parent-child relationships are associated with a broad range of poor emotional, social, and financial, and physical health outcomes for children and adults. The economic and social costs of unhealthy relationships and divorce to communities and states prompted the creation of the Healthy Marriage Initiative by the US Department of Health and Human Services (DHHS) in 2002.

What has been done

Healthy Families/Healthy Children now reaches 23 counties through county coalitions providing educational programs in three focus areas: healthy relationships, positive parenting, financial education. Four additional counties (Braxton, Clay, Lincoln, and Pendleton) are receiving funding during the 2011-12 grant cycle.

Results

4,006 participants (93% of the 5,275 returned questionnaires) in the Healthy Families/Healthy Children coalitions, agreed or somewhat agreed with the statement "I plan to use information I learned today?"

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being

Outcome #4

1. Outcome Measures

Number of participants who change a behavior or use a new skill

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	216

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Domestic violence or intimate partner violence is a pattern of coercive behaviors involving physical, emotional/psychological or sexual abuse or economic manipulation of an intimate partner in an attempt to establish and maintain power and control. When doing tasks such providing trainings, there are situations in which domestic violence is disclosed and it is important to know how to handle such disclosure. It is imperative that one is able to recognize when the domestic violence victim is in immediate danger.

What has been done

Extension Specialist, Jane Riffe, has disseminated an evidence-based program entitled Darkness to Light: Stewards of Children: Preventing and Reducing Child Sexual Abuse which has been presented to Extension faculty and 216 childcare providers, family court judges, and supreme court administrators. She has created a Domestic Violence Protocol with tips on disclosing domestic violence and responding to the disclosure of domestic violence.

Results

Childcare providers, family court judges, supreme court administrators and educators such as Extension agents and specialists have used the protocol to guide their decisions about disclosing and acting on reports of domestic violence.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being

Outcome #5

1. Outcome Measures

Number of participants who train others

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	503

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Passing on the benefits of Extension's educational programs and curricula depends on training individuals at the county level to effectively teach and implement programs.

What has been done

One organization that has effectively trained others has been the Community Education Outreach Education (CEOS) program. This organization of about 5,000 older women sponsors a conference each year for the purpose of training its members to teach educational programs in the counties. WVU-ES family and health faculty produce lesson plans and participant handouts to assist in the effort. Other programs have train-the trainer components, including: Talking About Money with the Grown-Ups in your Family, Getting Organized, and Caring for Kin.

Results

507 individuals in WV taught others people in their communities using curricula for which they received training by faculty members in the Strengthening Families section of WVU-ES Families and Health Unit.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being

Outcome #6

1. Outcome Measures

Amount of money raised by participants to support the program

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	144001

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Healthy Families/Healthy Children is a coalition-based project, building collaborations to strengthen families and relationships. Local community social service organizations, faith-based groups, educational groups, businesses, and health/medical agencies are members. County and dual county coalitions assess local needs and deliver workshops, classes, and family activities. Funding for the WV Department of Human Resources covers much of the costs, but additional in-kind funds are needed to support the program and to ensure buy-in from participants.

What has been done

WVU-ES has built a network of county-based coalitions to assess needs and plan and deliver locally relevant educational and family-strengthening activities. There are now 23 coalitions and members of these coalitions are encouraged to donate time, food, space, and operational supplies to extend the grant funding used for this program.

Results

\$80,559.00 was raised from donated volunteer hours (#of hrs x \$22/hr), \$6,779.07 was raised from donated food and refreshments, \$35,838.25 was raised from donated meeting space, and \$20,825 was raised from other in-kind donations such as supplies, computer services, etc.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being

Outcome #7

1. Outcome Measures

Number of people certified or license to practice in the field

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	27

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Some parents in WV have been mandated to attend parenting training due to their identification as physically or emotionally abusive and/or neglectful parents. Others have been required to attend parenting classes to improve their skills during and after divorce. WVU-ES would like to be one of the agencies selected to provide this training.

What has been done

Extension faculty trained childcare providers to implement and teach the Parenting Piece by Piece curriculum. The Parenting Piece by Piece curriculum was developed by Dr. Judith Myers-Walls at Purdue Extension in 2009. WVU-ES Extension faculty members plan to extend the reach of the curriculum into more West Virginia counties in future years.

Results

27 providers were certified in parenting education curriculum for high-risk low literacy parents.

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being

Outcome #8

1. Outcome Measures

Number of groups or organizations that change their procedures and/or policies

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

In West Virginia, there is a need for a comprehensive approach to promoting personal financial literacy. To address this need, the NetWorth Program was conceived as a partnership between WV State Treasurer, and the WV State Superintendent of Schools. With support from the West Virginia Legislature, and the West Virginia Auditor's Office, the program was launched with the formation of the NetWorth Community Task Force, comprised of more than 40 representatives from the education, business, and non-profit communities.

What has been done

A series of mini-camps were produced around the state. Extension took a lead role from the beginning. In the first year we had 74 students apply for the camp and 63 attended. All applicants were funded by scholarships from financial partners. This week-long summer program, titled "NetWorth Academy: Future Millionaire's Club", focuses on providing real-world personal finance skills to participating youth and follows the tradition of the WVU Extension Service's 4-H camping experience.

Results

A week-long camping experience was added to the NetWorth Program, a collaborative program of the WV State Treasurer's Office. After attending, youth were able to design a personal budget, had an understanding of consumer credit, debt, and savings, basic investment principles, and the essentials of financial markets and their regulatory structure.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being

Outcome #9

1. Outcome Measures

Number of new groups or organizations that are established or enhanced

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	4

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

WVU Extension Service has implemented and managed a large program known as the Healthy Families/Healthy Children Initiative (HF/HC) which has been funded by WV Department of Health and Human Services since 2005. This program has addressed family relationship issues, parenting, and financial management for low-resource citizens.

What has been done

Through 2010, Healthy Families/Healthy Children reached 19 counties through county coalitions 2010 and now reaches 23 counties. Faculty members and staff of the HFHC program work to establish strong coalitions by providing financial management and administrative support. A recent research project and article addresses the issues of formation and midlevel coalitions. This article has been submitted for review to a peer-reviewed journal.

Results

Four Healthy Family/Healthy Children coalitions were established in three counties (Braxton, Clay, Lincoln, and Pendleton) resulting in a total of 23 county coalitions. Each of these coalitions has a fiscal agent, a program coordinator, and coalition members.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being

Outcome #10

1. Outcome Measures

Number of physical or social effects, such as disease, pollution, or crime that are reduced or eliminated

Not Reporting on this Outcome Measure

Outcome #11

1. Outcome Measures

Number of economic improvements

Not Reporting on this Outcome Measure

Outcome #12

1. Outcome Measures

Number of environmental improvements

Not Reporting on this Outcome Measure

V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

Initiatives in this programmatic area are influence by changes in public policy, government regulations, and competing public priorities because they are so dependent on public monies from the WV Department of Human Resources. In addition, opportunities for programming are dependent on being chosen to deliver financial and parenting programming. The economy and population changes influence of target audiences, including new Latino populations in the eastern panhandle.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

The Healthy Families/Healthy Children program evaluates the following outcomes:

Of 5,275 participants completing workshop evaluation forms:

- 92% agree/somewhat agree "I know something that I didn't know before."
- 93% agree/somewhat agree "I plan to use information I learned today."
- 92% agree/somewhat agree "I feel more confident about my ability to handle issues."
- 76% indicated an intention to change behavior

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 6

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
102	Soil, Plant, Water, Nutrient Relationships	40%			
136	Conservation of Biological Diversity	40%			
403	Waste Disposal, Recycling, and Reuse	5%			
605	Natural Resource and Environmental Economics	15%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	2.0	0.0	0.0	0.0
Actual Paid Professional	3.0	0.0	0.0	0.0
Actual Volunteer	0.0	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
120000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
88320	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

Please note, the subject matter reported in this planned program was originally detailed in the sustainable energy planned program when we did the plan of work two years ago. Likewise, the subject matter reported in this report's sustainable energy planned program was once detailed in the climate change section. Therefore, the planned and actual output and outcome numbers may seem skewed.

In 2013, the climate change planned program at WVU-ES has worked towards improving efforts in bio-energy and related value added products and natural resource protection. The goals of this planned program are: 1) to help producers plan for and make decisions to adapt to changing environments and take advantage of economic opportunities offered by climate change mitigation technologies, 2) to design optimum establishment and management strategies for growing timber and crops as cellulosic feed stocks for bio-energy production and 3) to produce value-added bio-based industrial products, and 4) to increase the capacity of local communities and landowners in watershed management, nutrient management and sustainability, environmental management, and forest stewardship.

Alternative Uses of Land

In 2011, there were 9 educational activities reported in the alternative uses of land program area, 350 direct adult contacts and 30 direct youth contacts. The two major educational initiatives were West Virginia Surface Mine Drainage Task Force Symposiums and Land Judging and Home Site Youth Teams. Two research studies are also being conducted in reclaimed mine sites. Extension specialists have published 2 Extension publications, presented at 3 professional conferences, and published 10 research publications in peer-reviewed journals.

Nutrient Cycling

Nutrient cycling is an important contributor to the overall environmental quality of a system. Agricultural producers need to understand what practices best promote nutrient cycling within production systems in order to minimize the requirements for exogenous inputs, particularly nitrogen fertilizers. This work has focused on educating producers about strategies to promote nutrient cycling within an agricultural system while simultaneously enhancing soil conservation and decreasing nutrient losses commonly associated with erosion and off-farm discharge.

In 2011, there were 12 educational initiatives in the nutrient cycling program area and 284 direct adult contacts. Major initiatives and topics included CAFO Training, Invasive Weed Control Using Small Ruminants, and Co-Grazing Goats and Sheep with Cattle. Extension specialists published 2 Extension publications, presented at 3 professional conferences, and published 2 articles in peer-reviewed journals.

Waste Disposal, Recycling and Reuse and Water Conservation

Most of the environmental programs included in the WVU-ES youth program fall under the category of waste disposal, recycling and reuse, and water conservation. In 2011, there were 2,008 direct youth contacts in this program area.

2. Brief description of the target audience

Target audiences include private forestland owners, forestry professionals, researchers, youth in 4-H programs, youth in land-judging programs, and the general public.

3. How was eXtension used?

eXtension was not used in this program

V(E). Planned Program (Outputs)

1. Standard output measures

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	634	3000	3028	0

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

Patent Applications Submitted

Year: 2011
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2011	Extension	Research	Total
Actual	4	12	16

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of educational activities

Year	Actual
2011	41

Output #2

Output Measure

- Number of educational materials created or updated

Year	Actual
2011	4

Output #3

Output Measure

- Number of professional presentations

Year	Actual
2011	4

Output #4

Output Measure

- Number of outside organizations collaborating with this program area

Year	Actual
2011	10

Output #5

Output Measure

- Number of educational materials distributed

Year	Actual
2011	3000

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 improve or increase skills
3	Number of participants who change their attitudes or opinions
4	Number of participants who are motivated to change their behavior
5	Number of participants who change a behavior or use a new skill
6	Number of participants who train others
7	Amount of money raised by participants to support the program
8	Number of people certified or licensed to practice
9	Number of groups or organizations that change their procedures and/or policies
10	Number of new groups or organizations that are established or enhanced
11	Number of physical or social effects, such as disease, pollution, or crime, etc., reduced or eliminated
12	Number of economic improvements
13	Number of environmental improvements

Outcome #1

1. Outcome Measures

Number of participants who increase their knowledge

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	634

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. The state also has tens of thousands of acres of reclaimed surface mine sites which are well-suited for production of energy crops. Agricultural producers need to understand which practices best promote nutrient cycling within production systems in order to minimize the requirements for exogenous inputs, particularly nitrogen fertilizers.

What has been done

West Virginia Surface Mine Drainage Task Force Symposiums, CAFO Training, Invasive Weed Control Using Small Ruminants, and Co-Grazing Goats and Sheep with Cattle.

Results

Participants gained knowledge of West Virginia surface mine drainage and post-mining land use development, soil loss, non-target plants and herbicide injuries, weed control methods, and innovative cropping system to grow crops.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
136	Conservation of Biological Diversity
605	Natural Resource and Environmental Economics

Outcome #2

1. Outcome Measures

Number of participants who improve or increase skills

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	142

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

There is an innovative method to biologically control and eliminate invasive plant species found in West Virginia pastures and also to add sheep to improve profitability while improving nutrient cycling and pasture productivity. The system is reproducible throughout the region, nationally and even could be adopted in different areas of the world.

What has been done

1)Small Ruminant Short Course; 2) Invasive Weed Control Using Small Ruminants Poster, 3) Grazing to provide Eco-System Services on Appalachian Hill Lands, 4) Marshall County farm field day presentation on multispecies grazing, and 5) , Co-Grazing Goats and Sheep with Cattle, Cabell County Farm Bureau

Results

Participants gained skills in improving nutrient cycling and pasture productivity by adding small ruminants.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
136	Conservation of Biological Diversity

Outcome #3

1. Outcome Measures

Number of participants who change their attitudes or opinions

Not Reporting on this Outcome Measure

Outcome #4

1. Outcome Measures

Number of participants who are motivated to change their behavior

Not Reporting on this Outcome Measure

Outcome #5

1. Outcome Measures

Number of participants who change a behavior or use a new skill

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	25

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Land judging consists of measuring soil and land properties in the field, interpreting them, and then making management decisions based on measured, interpretative properties. The ultimate objective is land classification. Once that is done, intelligent decisions concern the lands use and management can be made.

What has been done

Over 4,000 middle school and high school student participate in land judging training in West Virginia, as well as more than 100 4-H participants who learned these principles at conservation camps. Twelve land judging contests were held in the state. Students who score well have the

opportunity of participating in the National Contest. The National Land Judging Contest was held in Oklahoma City, on May 2-8, 2011. Extension specialist helped train six teams (25 students) prepare for the competition.

Results

Barbour County 4-H placed 2nd in Land Judging and 1st in Home Site
Monroe County 4-H placed 5th in Land Judging and 9th in Home Site
Tyler County FFA placed 1st in Land Judging and 1st in Home Site
Taylor County FFA placed 28th in Land Judging and 21st in Home Site
Marion County FFA placed 19th in Land Judging and 15th in Home Site
Roane County FFA placed 67th in Land Judging and 29th in Home Site

4. Associated Knowledge Areas

KA Code	Knowledge Area
136	Conservation of Biological Diversity
605	Natural Resource and Environmental Economics

Outcome #6

1. Outcome Measures

Number of participants who train others

Not Reporting on this Outcome Measure

Outcome #7

1. Outcome Measures

Amount of money raised by participants to support the program

Not Reporting on this Outcome Measure

Outcome #8

1. Outcome Measures

Number of people certified or licensed to practice

Not Reporting on this Outcome Measure

Outcome #9

1. Outcome Measures

Number of groups or organizations that change their procedures and/or policies

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	14

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

There is an innovative method to biologically control and eliminate invasive plant species found in West Virginia pastures and also to add sheep to improve profitability while improving nutrient cycling and pasture productivity. The system is reproducible throughout the region, nationally and even could be adopted in different areas of the world.

What has been done

Small Ruminant Short Course: Conservation Innovation

Results

14 cattle farms added 330 sheep in order to improving nutrient cycling and pasture productivity.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
136	Conservation of Biological Diversity
605	Natural Resource and Environmental Economics

Outcome #10

1. Outcome Measures

Number of new groups or organizations that are established or enhanced

Not Reporting on this Outcome Measure

Outcome #11

1. Outcome Measures

Number of physical or social effects, such as disease, pollution, or crime, etc., reduced or eliminated

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Animal Feeding Operations (AFOs) are agricultural operations where animals are kept and raised in confined situations. AFOs congregate animals, feed, manure and urine, dead animals, and production operations on a small land area. Feed is brought to the animals rather than the animals grazing in pastures, fields, or on rangeland. In 2003, the EPA expanded the number of operations covered by CAFO regulations and included requirements to address the land application of manure from CAFOs. States were required to modify their programs and develop state technical standards.

What has been done

Extension specialist held CAFO training for Ag. agency staff, WV DEP inspectors and staff, Extension county faculty, Davis College faculty and EPA staff. It was the first structured nutrient management training for DEP staff. Technical Standards for WV CAFO Nutrient Management were published. This product will formalize the planning process in WV for nutrient management planners allowing for a more consistent product.

Results

Potentially reduced nitrate contamination of private wells; reduced eutrophication & pathogen

contamination of coastal & estuarine waters; reduced public water treatment; reduced livestock mortality from nitrate and pathogen contamination of livestock drinking water; reduced pathogen contamination of private & public underground sources of drinking water; reduced human & ecological risks from antibiotics, hormones, metals, salts; improved soil properties; and reduced cost of commercial fertilizers for non-CAFO operations.

4. Associated Knowledge Areas

KA Code	Knowledge Area
403	Waste Disposal, Recycling, and Reuse

Outcome #12

1. Outcome Measures

Number of economic improvements

Not Reporting on this Outcome Measure

Outcome #13

1. Outcome Measures

Number of environmental improvements

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

See outcome 11

What has been done

See outcome 11

Results

See outcome 11

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
136	Conservation of Biological Diversity
403	Waste Disposal, Recycling, and Reuse
605	Natural Resource and Environmental Economics

V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

Funds for these programs depend on public priorities. Changes in government regulations also have an effect on the content and implementation of programs. Local farmers are often impeded from participation if the economy limits the purchase of livestock, such as small ruminants.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

None

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 7

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
502	New and Improved Food Products	40%			
504	Home and Commercial Food Service	60%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	2.0	0.0	0.0	0.0
Actual Paid Professional	21.0	0.0	0.0	0.0
Actual Volunteer	0.0	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
770000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
777520	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

In 2011, the Food Safety planned program at West Virginia University Extension worked toward

reducing the incidence of food-borne illness by eliminating causes of microbial resistance to contaminants, educating consumers and food safety professionals, and developing safe food processing technologies.

Community Food Preparation

In 2011, there were 40 educational activities in the community food preparation program area, 388 direct adult contacts and 1445 direct youth contacts. The major initiatives included food preservation and canning workshops, Venison 101, and a popcorn science exhibition for youth. A "Survey of Canning Practices in West Virginia" was conducted by Wirt County Extension Educator, Patty Morrison.

Commercial Food Preparation

In 2011, there were 21 educational activities in the commercial food preparation program and 288 direct adult contacts. The major initiatives include food safety for food banks, ServSafe® Manager Food Safety Training, a food business workshop, a food defense workshop, and the Better Process Control School for Acidified Foods.

This year, Extension Specialist, Litha Sivanandan, conducted research to identify and develop food products using the isoelectric processing, a WVU-patented technology, and to offer its application through research, outreach, and educational opportunities in business plan, risks and liabilities, process and product technology transfer, product and process development, product/process safety, and product marketing/commercialization. An article was published in LWT - Food Science and Technology.

Beef Quality Assurance

In 2011, there were 6 educational activities in the commercial beef quality assurance program area and 1,270 direct adult contacts. The major initiatives included beef quality assurance certification, beef quality assurance training for students, beef quality assurance for WVU farm workers, NCBA stockman and stewardship sessions, WVU-ES winter education series, the WV cattlemen's short course for producers, and the West Virginia quality assurance feeder calf sale.

2. Brief description of the target audience

WV citizens who can or preserve foods, commercial food processors, beef producers, WVU Extension agents

3. How was eXtension used?

eXtension was not used in this program

V(E). Planned Program (Outputs)

1. Standard output measures

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	1985	0	1445	0

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

Patent Applications Submitted

Year: 2011

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2011	Extension	Research	Total
Actual	0	1	1

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of educational activities

Year	Actual
2011	67

Output #2

Output Measure

- Number of educational materials created or updated

Year	Actual
2011	0

Output #3

Output Measure

- Number of educational materials distributed

Year	Actual
2011	3391

Output #4

Output Measure

- Number of professional presentations

Year	Actual
2011	2

Output #5

Output Measure

- Number of outside organizations collaborating within this program area

Year	Actual
2011	14

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 improve or increase skills
3	Number of participants who change their attitudes or opinions
4	Number of participants who are motivated to change their behavior
5	Number of participants who change a behavior or use a new skill
6	Number of participants who train others
7	Amount of money raised by participants to support the program
8	Number of people certified or license to practice in the field
9	Number of groups or organizations that change their procedures and/or policies
10	Number of new groups or organizations that are established or enhanced
11	Number of physical or social effects, such as disease, pollution, or crime, that are reduced or eliminated
12	Number of economic improvements
13	Number of environmental improvements

Outcome #1

1. Outcome Measures

Number of participants who increase their knowledge

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	953

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

BQA training provides an opportunity for direct contact with producers and incorporates a method of "hands on teaching." The WV BQA certification program follows the guidelines established by the Mid-Atlantic BQA program where producers are required to participate in Level I and II classroom training program.

What has been done

The major initiatives were beef quality assurance certification, beef quality assurance training for students, beef quality assurance for WVU farm workers, NCBA stockman and stewardship sessions, WVU-ES winter education series, the WV cattlemen's short course for producers, and the West Virginia quality assurance feeder calf sale.

Results

Participants gained knowledge and skill in maintaining animal welfare and the proper use of beef products.

4. Associated Knowledge Areas

KA Code	Knowledge Area
502	New and Improved Food Products
504	Home and Commercial Food Service

Outcome #2

1. Outcome Measures

Number of participants who improve or increase skills

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	388

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Using tested food processing procedures and recipes will help to prevent serious food-borne illnesses while preserving the quality of the food.

What has been done

The major initiatives included food preservation and canning workshops at the local and state level and Venison 101 a workshop designed to increase community participant skills related to preparing venison from the hunt to the table.

Results

Participants gained skills in butchering, cooking, preserving, and preparing venison. Participants gained skills in safe and proper method of pressure canning (dial gauge and weighted gauge).

4. Associated Knowledge Areas

KA Code	Knowledge Area
502	New and Improved Food Products
504	Home and Commercial Food Service

Outcome #3

1. Outcome Measures

Number of participants who change their attitudes or opinions

Not Reporting on this Outcome Measure

Outcome #4

1. Outcome Measures

Number of participants who are motivated to change their behavior

Not Reporting on this Outcome Measure

Outcome #5

1. Outcome Measures

Number of participants who change a behavior or use a new skill

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	220

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Beef and dairy cattle in West Virginia are maintained in a manner which results in a safe and wholesome beef product for the consumer. The Beef Quality Assurance certification program follows the guidelines established by the Mid-Atlantic BQA program. Recertification is required every two years.

What has been done

The WV BQA program conducted Level I and II trainings for 97 producers at two of the stockyards. Training was conducted at West Virginia University and Potomac State College for 34 students enrolled in the beef production classes. WVU requested that we train all the farm

workers on campus and the experiment stations. Two trainings were conducted for the University, one on campus and another at the Wardensville Research Station where more than 130 employees and producers participated.

Results

The West Virginia Quality Assurance Feeder Calf Sale sold approximately 5,500 head of calves produced and assembled by 220 BQA certified producers in September and October. The sale each year offers a marketing outlet for source and aged verified, health managed and genetically superior calves.

4. Associated Knowledge Areas

KA Code	Knowledge Area
502	New and Improved Food Products
504	Home and Commercial Food Service

Outcome #6

1. Outcome Measures

Number of participants who train others

Not Reporting on this Outcome Measure

Outcome #7

1. Outcome Measures

Amount of money raised by participants to support the program

Not Reporting on this Outcome Measure

Outcome #8

1. Outcome Measures

Number of people certified or license to practice in the field

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	140

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Preventing food borne illness and death remains a major public health challenge. Medical bills and loss of productivity add to the cost. The incidence of food borne illnesses could be greatly reduced with the adoption of established food safety practices in the production, transportation, storage, preparation and service of food. ServSafe Food Protection Manager Certification is accredited the by the American National Standards Institute (ANSI)-Conference for Food Protection.

What has been done

ServSafe® Manager Food Safety Training was held online and onsite. Extension Educators in Jefferson, Kanawha, Harrison, and Mercer counties taught classes required in the ServSafe Food Protection Manager curriculum. A total of 149 trainees gained or renewed nationally recognized food safety manager certification in 2011.

Results

140 ServSafe Managers passed the certification exam and attained ServSafe Manager certification. A number of trainees needed the certification prior to opening a food service establishment. Several took the class to increase their rate of pay. Most took the class to meet Jefferson County Health Department requirements.

4. Associated Knowledge Areas

KA Code	Knowledge Area
502	New and Improved Food Products
504	Home and Commercial Food Service

Outcome #9

1. Outcome Measures

Number of groups or organizations that change their procedures and/or policies

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

There is no course/curriculum in food business offered in West Virginia through WVU Extension or WVU College of Business and Economics.

What has been done

Extension Specialist Litha Sivanandan collaborated with land-grant universities: Pennsylvania State University (PSU) and University of Georgia (UGA) and with their published materials on food business and with the full partnership of WV Department of Agriculture, was able to offer the first Food Business Workshop in Morgantown.

Results

The Food Business workshop was added to the offerings of WVU Extension. This workshop provides training in business plan development, risks and liabilities, process and product technology transfer, product and process development, product/process safety, and product marketing/commercialization for food businesses. The Food Business Workshop is the first step to empowering an ongoing network of existing/prospective entrepreneurs and county faculty through skill-based training in West Virginia University's research-based food processing technologies, to develop value-added products, and to provide comprehensive assistance in starting and successfully operating food businesses West Virginia.

4. Associated Knowledge Areas

KA Code	Knowledge Area
502	New and Improved Food Products
504	Home and Commercial Food Service

Outcome #10

1. Outcome Measures

Number of new groups or organizations that are established or enhanced

Not Reporting on this Outcome Measure

Outcome #11

1. Outcome Measures

Number of physical or social effects, such as disease, pollution, or crime, that are reduced or eliminated

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Clostridium botulinum causes the deadly disease known as botulism. When this organism grows under conditions present in canned foods it can produce a neurotoxin that is one of the most potent poisons known. Before acidified products can be sold (even at farmers markets) the producer has to go to a school (offered by WVU-ES) and pass all the tests. He or she can then register with the FDA. Before any product can be produced and sold, a process authority has to approve the process and tell the producer what records to keep.

What has been done

Products first go to the WV Dept. Agriculture. They inspect the facility and verify the process flow diagram and do the nutritional analysis. Extension takes the product, tests it, and specifies 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. This service is provided free; if the producer goes out of state it can cost \$100 per food item. In 2011, WVU-ES approved 170 products.

Results

Those who purchased acidified products from vendors in WV were protected from food poisoning caused by Clostridium botulinum.

4. Associated Knowledge Areas

KA Code	Knowledge Area
502	New and Improved Food Products
504	Home and Commercial Food Service

Outcome #12

1. Outcome Measures

Number of economic improvements

Not Reporting on this Outcome Measure

Outcome #13

1. Outcome Measures

Number of environmental improvements

Not Reporting on this Outcome Measure

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Competing Programmatic Challenges

Brief Explanation

The BQA program continues to reach new producers each year but maybe not in the number experience initially. We are finding a number attend but elect not to become certified, In WV only the Quality Assured Feeder Cattle Marketing Program and the two Performance Tested Bull Sales require that participating producer be BQA certified. Several special marketing programs such as All Natural are beginning to draw new producers to learn about the best management practices that BQA offers. The programs like the Stockmanship and Stewardship, newsletters and handbooks are very supportive of the WV effort since the program is basically being run on a shoestring.

It is important to have the food safety certification in West Virginia. ServSafe® Manager Food Safety Training and Certification is a high level food safety education which covers almost all aspects of food safety in a food facility. There is a high demand by the food facilities for this training, but only a few certified instructors to teach classes.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

ServSafe® Food Safety Workshop:

- 100% responded the overall training as excellent or very good
- 100% rated the educational materials and contents as excellent or very good
- 100% rated the instructors as excellent or very good
- 100% responded that they will make respective changes due to their attendance in the

workshop

Venison 101 Workshop

- 80% responded the overall training as excellent or very good
 - 60% rated the educational materials and contents as excellent or very good
 - 80% rated the instructors as excellent or very good
 - 60% responded that they will make respective changes due to their attendance in the workshop
- Food Preservatin Workshop

- 92% responded the overall training as excellent or very good
- 100% rated the educational materials and contents as excellent or very good
- 100% rated the instructors as excellent or very good
- 7% responded that they will make respective changes due to their attendance in the workshop

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 8

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
123	Management and Sustainability of Forest Resources	60%			
124	Urban Forestry	10%			
125	Agroforestry	30%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	2.0	0.0	0.0	0.0
Actual Paid Professional	11.0	0.0	0.0	0.0
Actual Volunteer	0.0	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
643345	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
239535	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

In 2011, the Sustainable Energy planned program at West Virginia University Extension worked towards improving woodlot conditions and expanding forest and non-timber product production. It increased knowledge and skill of program participants in safe logging promotion of a safe, efficient and profitable workplace.

Timber Management

In 2011, there were 24 educational activities reported in the timber management program area, 747 direct adult contacts, 24,360 indirect adult contacts, and 825 direct youth contacts. The major initiatives in this program area included Green-up Logging, Stewardship Training, WV State Conservation Camp, and WVU Day at the Farm. Extension educators published 5 peer-reviewed, published technical reports, 9 Extension publications or websites and presented at 1 professional conference.

Forest Management Non-Timber

In 2011, there were 55 educational activities reported in the forest management/non timber program area, 1,637 direct adult contacts, 955 indirect adult contacts, and 27 direct youth contacts. The major initiatives in this program area included Mountain Roots, Shiitake Mushrooms, Walk in the Woods, Meet your Forester, Forest Insects, Winter Tree ID, Loblolly Pines, and State 4-H Forestry Judging Contest. An Extension specialist presented at 1 professional conference related to forestry management/non-timber.

4-H Energy Activities

In 2011, there were activities for youth related to forestry, range science, and wildlife and fisheries. In that category there were 784 direct youth contacts.

2. Brief description of the target audience

Targeted audiences include private forestland owners, forestry professionals, loggers, general public, and youth.

3. How was eXtension used?

eXtension was not used in this program

V(E). Planned Program (Outputs)

1. Standard output measures

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	2384	25415	2515	0

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

Patent Applications Submitted

Year: 2011

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2011	Extension	Research	Total
Actual	15	0	15

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of educational materials created or updated

Year	Actual
2011	9

Output #2

Output Measure

- Number of educational materials distributed

Year	Actual
2011	25415

Output #3

Output Measure

- Number of professional presentations

Year	Actual
2011	2

Output #4

Output Measure

- Number of outside organizations collaborating within this program area

Year	Actual
2011	3

Output #5

Output Measure

- Number of educational activities

2011 West Virginia University Extension Annual Report of Accomplishments and Results

Year	Actual
2011	80

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Number of groups or organizations that change their procedures and/or policies
2	Number of economic improvements
3	Number of environmental improvements
4	Number of participants who increased their knowledge
5	Number of participants who improve or increase skills
6	Number of individuals who change behavior or improve skills

Outcome #1

1. Outcome Measures

Number of groups or organizations that change their procedures and/or policies

Not Reporting on this Outcome Measure

Outcome #2

1. Outcome Measures

Number of economic improvements

Not Reporting on this Outcome Measure

Outcome #3

1. Outcome Measures

Number of environmental improvements

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	7

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Forest roads provide the most important means of accessing forests for timber harvesting, recreation, and hiking. Unfortunately, forest roads cause more erosion than any other aspect of logging. When sediment washes away from timber harvesting operations, it usually starts from erosion along poorly built forest roads.

What has been done

Forest Roads class participants implemented road layout and design and used theory about forest roads in order to minimize environmental impacts from forest operations

Results

Minimized environmental impacts from forest operations.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
124	Urban Forestry
125	Agroforestry

Outcome #4

1. Outcome Measures

Number of participants who increased their knowledge

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	200

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 resource professional. Providing forestry education to landowners has the potential to facilitate sustainable forestry practices and improve the economic well-being of forestland owners.

What has been done

WVU-ES conduct stewardship training and forest markets training for 200 landowner and professional forester participants.

Results

Landowners increased knowledge about wood markets and pricing. Interested landowners have reference information to get current market prices for stumpage. Professional foresters working around the state increased their knowledge about laws and regulations that apply to forest operations.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
124	Urban Forestry
125	Agroforestry

Outcome #5

1. Outcome Measures

Number of participants who improve or increase skills

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	163

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Research-based workforce development in the forestry industry is needed in West Virginia in order to prepare loggers to harvest trees while respecting the environment. Youth should be prepared for occupations available in the forestry industries of the state.

What has been done

WVU-ES educators train students at the WV State Conservation Camp and hold Green-up Logging training for individuals wanting to become certified loggers.

Results

38 participants were trained to become entry level loggers. These participants submitted paperwork to become certified as loggers by the State Division of Forestry. In addition, 125 students learned skills needed in the profession of forestry by practicing the applied use of basic and technologically advanced tools used in forestry profession.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources

124	Urban Forestry
125	Agroforestry

Outcome #6

1. Outcome Measures

Number of individuals who change behavior or improve skills

2. Associated Institution Types

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3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	170

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Laws, regulations, and policies direct Forest Service forest management and professional foresters about policies defining forest management. The policies are documented in agency manuals and handbooks.

What has been done

WVU-ES specialists have conducted stewardship training where professional foresters working around the state have updated information about the laws and regulations that apply to forest operations.

Results

Foresters and their clients have improved business practices and operations and have fewer issues with enforcement agencies.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
124	Urban Forestry
125	Agroforestry

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Appropriations changes
- Competing Programmatic Challenges

Brief Explanation

V(I). Planned Program (Evaluation Studies)

Evaluation Results

{No Data Entered}

Key Items of Evaluation

{No Data Entered}