**Status: Accepted** 

## Date Accepted: 08/07/2015

## I. Report Overview

## 1. Executive Summary

As a land-grant university, West Virginia University was created to help West Virginians improve their lives. To do that, WVU relies on the West Virginia University 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 Extension Service 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 almost 80,000 young West Virginians (one in every five) are developing life skills and becoming leaders in their schools and communities. Being a unique collaboration of federal, state, and local governments, private and nonprofit sectors, volunteers, and national land-grant universities, we are a sought-after partner by many state and local agencies for our expertise, community connections, and track record of practical, 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. Needs are also identified 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 leaders; firefighters and other first responders; employers focused on safe workplaces; and worker advocates.

WVU Extension agents are also WVU faculty members, having a masters 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 the university's 15 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 sustain all WVU Extension programs are also derived from multi-state 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 18,000 well-trained volunteers also help design, deliver, evaluate, and improve Extension programs each year. Employees of numerous longtime program partners, such as Regional Education Service Agencies (RESA) of the West Virginia Department of Education, West Virginia Department of Agriculture, county school professionals, West Virginia Department of Health and Human Resources, and WVU Health Sciences, help in this regard as well. Many identify with WVU Extension through our

educational programs. Some of the most recognized programs are 4-H, Dining with Diabetes, Extension Master Gardeners, Firefighter Training, Community Educational Outreach Service (CEOS), 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.

WVU Extension Service offers planned programs in four areas:

<u>Agriculture and Natural Resources:</u> 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. As the trusted local source for answers to home and garden questions, Extension is committed to ensuring a safe food supply and working with rural landowners to develop alternative enterprises. In 2014, our agriculture and natural resource programs tallied 146,953 direct contacts, including:

- Global Food Security and Hunger 136,210
- Climate Change 8357
- Sustainable Energy 2386
- Food Safety 4901

<u>4-H Youth Development:</u> Professionals and programs provide educational, fun, and safe opportunities for young people to make friends, learn, and grow. Positive youth development is achieved by weaving essential elements into 4-H programs that promote independence, generosity, and mastery of new skills. The three primary educational areas of emphasis are healthy lifestyles; science, technology, engineering, and math (STEM); and developing good citizenship skills. Our literacy programs strengthen children's reading skills and promote the benefits of adults and children reading together. In 2014, our 4-H youth development programs tallied 260,572 direct contacts with youths and adults. Please note that healthy living initiatives for youths are reported in the Families and Health section. In addition to healthy living, 4-H activities are grouped under the following subcategories.

- Citizenship and Leadership for Youths 94,693
- Science, Technology, Engineering, and Math (STEM) 105,867
- Literacy 4,811
- Youth Agriculture 55,201

<u>Families and Health:</u> Extension faculty and paraprofessionals help families thrive by providing researchbased 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. Food safety initiatives for Families and Health are reported in the Agriculture and Natural Resource section. Through education, we encourage healthy lifestyle choices and physical activity. Our family resource management programs help young people and adults understand successful ways to save, spend, and manage resources. We provide extensive training in relationship education. 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 2014, family and health programs tallied 124,274 direct contacts, including youths and adults.

- Childhood Obesity (Nutrition and Health) 108,837
- Strengthening Families 15,437

<u>Community Economic and Workforce Development:</u> 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, 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 2014, our community development programs tallied 86,700 direct contacts. Activities in this program area are grouped into three subcategories including:

- Community Development 9,491
- Workforce and Professional Development 60,557
- Leadership Development 13,575
- Diversity 3,077

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

<u>Contacts</u>: The number of contacts is not the most important measure of success. In the pages to follow, we will describe the outcomes of our work through descriptions of changes to learning, actions, and conditions. It is important, however, to attract citizens of West Virginia to our programs so that they can change in important ways. Therefore please note that, during 2014, we have greatly increased the number of direct and indirect contacts. Last year, we recorded 449,651 direct contacts. This year, we recorded 624,111 direct contacts, an increase of 38.8 percent.

<u>Funding:</u> State funding for WVU Extension Service is currently about \$18 million (36% of total budget). WVU Extension uses that \$18 million to leverage other funds, for a total annual operating budget of approximately \$50 million. We raise 44% of our total budget through competitive grants, fees, volunteer organizations, individual, foundation, and corporate gifts for a total of about \$22 million. County partners (largely county commissions and boards of education) contribute approximately 10% of our total budget at \$5 million. The remaining 10% of the budget consists of federal (U.S. Department of Agriculture) funds, primarily 3(b)(c) and EFNEP for about \$5 million. Grants and fees have increased from about \$2 million in 1995 to about \$15 million in 2014-15.

A few facts about WVU Extension:

- Date of founding: 1915
- Total direct client contacts in 2014 (youths and adults): 624,111
- Total direct and indirect client contacts in 2014 (youths and adults): 1,982,674
- Number of county agents in 2014: 115
- Number of state specialists in 2014: 64
- Number of non-duplicated youths in 4-H programs in 2014 (including camps): 79,077
- Number of youths attending 4-H camps in 2014: 20,758

• Number of volunteers in 2014: 9,457 (4-H); 2,500 (Extension Master Gardener); 3,024 (Energy Express); 3,525 (CEOS) = 18,506

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

Voor: 2014	Extension		Research	
Year: 2014	1862	1890	1862	1890
Plan	177.0	0.0	0.0	0.0
Actual	173.0	0.0	0.0	0.0

## II. Merit Review Process

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

• Internal University Panel

## 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). This year, for the first time, the individual plans of work (called Faculty Assignment Document or FAD) were created in our new reporting system. Faculty based their plans on objectives designed to meet the goals of WVU's planned programs.

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. All administrators in WVU Extension were reviewed by Extension staff and faculty last year and have been counseled with regard to evaluations.

## 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 member 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, the Dean and Director of Extension, and the WVU Provost (for promotion years only).

2. In 2011, 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. Evaluations done by individual programmatic teams often serve as merit reviews for WVU Extension. For example, one team of agents and specialists who conduct canning education, conducted an evaluation which concluded that WV citizens do not generally look toward WVU Extension for canning advice and information. The results of that study will be published in the Journal of Extension. The results will also be used to inform the food preservation teams about program changes and outreach.

4. Programs at WVU Extension, as well as individual Extension educators, continue to win awards for their excellent programming. WVU Extension programs are recognized by regional and national organized as providers of quality educational opportunities. This year, WVU Extension professionals won the following awards:

- From the National Association of Extension 4-H Agents
  - Achievement in Service Award Becca Fint-Clark, Denis Scott
  - · Distinguished Service Award Craig Presar
  - Meritorious Service Award Zona Hutson
  - Communicator Awards
    - Educational Package (Individual) Regional Winner Jennifer Murray
    - Periodical (Individual) Becca Fint-Clark
    - Promotional Package (Team) Regional Winner WV 4-H Promotional Package
    - Video Program Regional Winner Reading Partners Training Video
- Specialty Awards
  - Beyond Youth Leadership Award Regional Winner WV 4-H Civic Engagement Forum
  - Excellence in Camping Award National Winner WVU Extension 4-H STEM Team
  - Excellence in Geospatial Programs Award National Winner Mobile Geocache Course

• From the National Association of Community Development Extension Professionals - Northeast Region:

- Excellence in Community Development Award Tourism First Impressions Program
- From the Association of County Agricultural Agents:
  - Distinguished Service Award Georgey Plaugher
  - Achievement Award Northeastern Region
  - Excellence in Farm and Ranch Health and Safety Award Dave Workman
  - Communication Awards John Porter
    - Personal Column, National Finalist
    - Computer Generated Graphics, Regional Award
    - Program Promotional Piece, Regional Winner
    - Published Photo and Caption, Regional Award
- From the National Extension Association of Family and Consumer Sciences:

Family Health and Wellness Award - Stress Less with Mindfulness - 2<sup>nd</sup> Place National Winner, 1<sup>st</sup>
 Place Regional Winner

• From the National Institute of Food and Agriculture:

National Early Career Achievement - Jane Riffe -- Family Life and Human Development State
Specialists

• From the Extension Education Evaluation Topic Interest Group of the American Evaluation Association - Allison Nichols - Sustained Excellence in Evaluation Award

## III. Stakeholder Input

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

- Use of media to announce public meetings and listening sessions
- Targeted invitation to traditional stakeholder groups
- Targeted invitation to non-traditional stakeholder groups
- Targeted invitation to traditional stakeholder individuals
- Targeted invitation to non-traditional stakeholder individuals
- Targeted invitation to selected individuals from general public
- Survey of traditional stakeholder 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 and how they are able to use what they have learned in their everyday lives. 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. Faculty members are expected to report on program outcomes in their annual reports. In order to receive ratings of excellent, evaluations must measure changes in learning, action, and conditions.

Our WVU Extension website is viewed favorably. It is consistently updated with news and information about programs and issues of interest around the state. There is an opportunity for stakeholders to comment on Extension's programs available on the site.

Another indication of stakeholder participation is their willingness to give financially to Extension programming. Under the direction of our Director of Development, Brent Clark, Extension has benefited from an increase in financial giving over the last year.

# 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

## Brief explanation.

Each of our counties have county advisory committees that meet regularly and advise county faculty on issues and needs of that county. In addition, unit directors and other administrators meet from time to time with these groups. During hiring of county agents, county advisory committees have direct input into the hiring process. Administrators also meet regularly with major stakeholder groups such as the WV Farm Bureau and Community Education Outreach Service (CEOS) constituencies.

Very recently, we have begun a reorganization of our leadership. Under the direction of Steve

Bonnano who has just been appointed Dean and Director of WVU Extension, three new associate deans were appointed or will be appointed. One of the associate deans will focus on programming and research. Another, the associate dean for partnerships and initiatives, will lead our efforts to increase collaborations with state agencies and organizations. She will help bridge the gap with other WVU colleges and departments. She will also play a key role in WVU's Mountain State University initiative in Beckley. She will work with our agents and specialists to build and cultivate relationships on a local, county, state, and national level.

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

## Brief explanation.

## Meeting with traditional Stakeholder groups

Representatives of Extension, most especially the Interim Director, Steve Bonanno, meet with legislators and heads of stakeholder groups to learn how Extension can serve the state and meet the needs of stakeholders. We coordinate WVU Day at the Legislature each year.

Our Development Director, Brent Clark, worked to not only raise funds, but also to understand what alumni and stakeholder groups want Extension to do to extend outreach throughout the State.

Our new WVU President, Gordon Gee traveled the State last summer and toured Extension county offices. He met stakeholders of Extension as well as other outreach initiatives of the university. His feedback has helped Extension strengthen its programs.

## Survey of traditional Stakeholder groups

Most Extension activities conduct surveys of participants in order to understand their needs with regard to Extension programming. Those surveys are studied by teams of agents and specialist in each program area to determine how to improve programming and/or create new programs. The Evaluation Specialist, Allison Nichols, works with those teams to create appropriate evaluation protocols.

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

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

• To Set Priorities

## Brief explanation.

## In the Budget Process

WVUES administrators carefully consider 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.

The administrative team members interact with several constituent groups on the state level and participate in professional associations, boards, etc. County-based faculty interact on the local, and sometimes state levels, as well. County Extension Service Committee, mandated by WV State Code, and applies ONLY to WVU Extension, specifies the committee's function to provide program advice.

## Identified Emerging Issues and Redirected Extension Programs

The following are emerging issues in West Virginia:

1. Energy, particularly changing sources of energy. Shale gas is making new millionaires and decreasing the cost of energy but also decreasing the price of coal. Loss of coal jobs and severance taxes deepens the poverty in already distressed counties.

2. Low workforce participation among eligible adults. Since our unemployment rate is reasonable compared to the nation as a whole that low workforce participation has different implications. One of those is a high rate of substance abuse.

3. High rates of obesity and chronic diseases that result from poor nutrition and lack of exercise.

WVU is addressing these issues in the following ways:

1. The growth and development of the Marcellus shale in West Virginia creates both opportunities and concerns. In 2014, the expertise and knowledge that the citizens of West Virginia need to make informed decisions about the oil and natural gas industry have been addressed through many educational programs.

2. Science, Technology, Engineering, and Math (STEM) programming has been developed and promoted within our 4-H and Youth Development program this year, which is one way we are addressing the employment rate. We hope to prepare well-trained workers in the STEM fields.

3. Our Community Education, and Workforce Development unit has increased its emphasis on tourism, an expanding industry in the state and has expanded the First Impressions program to include tourism. These new tourism businesses will open up jobs for our citizens.

4. We are placing an emphasis on our health living programs in both our family and health programs and 4-H programs. We will be adding an item to all evaluation forms to measure intentions to changes behaviors related to healthy living.

## In the Action Plans and To Set Priorities

Each of the four Extension units have developed 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. Extension outcome data has been added to the University's strategic planning website.

#### In hiring:

Three new positions have been hired. Each of these people will help us address emerging issues in WV.

Our new **associate dean for programming and research** will lead the promotion and tenure process and direct research projects.

Our new **associate dean for partnerships and initiatives** will work with our agents and specialists to build and cultivate relationships on a local, county, state, and national level. This position will also serve in an area of critical importance for the University - recruitment. We are an organization that can make a unique and critical impact in getting kids to college. T

Our new **associate dean for administration and finance** will improve WVUES's function and structure to make it more efficient.

## Brief Explanation of what you learned from your Stakeholders

1. We have learned that the Marcellus Shale natural gas industry develops in West Virginia, developers and citizens want more information and guidance about how to respond. They particularly want to know more about leasing and contracts.

2. We learned that we have a great opportunity to expand tourism in West Virginia. We have learned that we need to work together with West Virginia State University Extension to reach out to all populations in West Virginia.

## **IV. Expenditure Summary**

1. Total Actual Formula dollars Allocated (prepopulated from C-REEMS)					
Exter	nsion	Research			
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen		
4224325	0	0	0		

	Extens	sion	Research	
	Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
Actual Formula	4124270	0	0	C
Actual Matching	8763232	0	0	C
Actual All Other	0	0	0	C
Total Actual Expended	12887502	0	0	C

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)

## <u>Program # 1</u>

## 1. Name of the Planned Program

Childhood Obesity

☑ Reporting on this Program

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

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
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

Noor: 2014	Exter	nsion	Research		
Year: 2014	1862	1890	1862	1890	
Plan	17.0	0.0	0.0	0.0	
Actual Paid	16.0	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)

Exte	nsion	Res	earch
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
425000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
777788	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 2014, 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 391 reported activities for 2014 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** - The largest program in this category is the Family Nutrition Program for both low-come adults and youths. The program teaches food and nutrition by using the USDA's My Plate. Other activities in this category include nutrition classes, food preparation classes, and classes on food selection/shopping resources and techniques.

**Healthy Lifestyles Skills and Practice**- The largest programs in this category include the Health Motivator Program, the Summer Steps program, Choose to Change Project, Family Nutrition Program Dental Tips for Parents, Love Your Heart, Health Rocks, and ATV Safety. The Choose to Change Project is a collaborative program with two school systems and WVU's Davis College, School of Medicine, and Regional Research Institute).

**Chronic Diseases and Associated Risk Factors**- 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 and prevention initiatives. Other initiatives address heart disease prevention such as Women's Heart Health and the CARDIAC program: Coronary Artery Risk Detection in Appalachian Communities. It is in the CARDIAC program where we have reached 14,239 youths. Additional programs target the special needs of older adults such as the prevention of bone loss and falls.

## 2. Brief description of the target audience

Primary target audiences include: low-income West Virginia adults and youth, West Virginians who have diabetes and their caregivers, healthy older adults, healthcare 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

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	31545	63925	77292	326124

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

Year:	2014
Actual:	0

## **Patents listed**

## 3. Publications (Standard General Output Measure)

## Number of Peer Reviewed Publications

2014	Extension	Research	Total
Actual	19	4	74

## V(F). State Defined Outputs

## **Output Target**

## <u>Output #1</u>

## **Output Measure**

• Number of educational activities

Year	Actual
2014	391

## Output #2

## **Output Measure**

• Number of educational materials created or updated

Year	Actual
2014	11

## Output #3

## **Output Measure**

• Number of educational materials distributed

Year	Actual
2014	390599

## Output #4

## **Output Measure**

Number of professional presentations

Year	Actual
2014	74

## V(G). State Defined Outcomes

## V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Number of youth who gained knowledge about eating more healthy foods.
2	Number of participants who change a behavior or use a new skill
3	Number of participants who train others
4	Number of delivery systems/access points that change their procedures and/or policies with regard to expanding or improving their offering healthy foods or healthy activities
5	Number of participants who advance to higher knowledge and skill level in healthy lifestyle professional areas
6	Number of adults that gained knowledge about eating more healthy foods.
7	Number of participants that gained knowledge of how to access and produce healthy foods.
8	Number of organizations at the local level who collaborate to promote health and nutrition
9	Number of youth who received healthy meals.

#### Outcome #1

## 1. Outcome Measures

Number of youth who gained knowledge about eating more healthy foods.

## 2. Associated Institution Types

• 1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

## 3b. Quantitative Outcome

2014 16429

## 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

In West Virginia, youths need to learn skills to assist them in living healthy lifestyles. These skills lead to changes in behavior related to selecting and preparing healthy foods, shopping for the healthiest choices and best prices, choosing physical activities, and improving food safety behaviors.

## What has been done

The Family Nutrition Program (SNAPed and EFNEP) in West Virginia enrolls 16,429 youths in its programs which include classroom, afterschool, and camping activities for youth.

## Results

83.5% of children and youth improve their abilities to choose foods according to Federal Dietary Recommendations or gain knowledge.

37.0% of children and youth gained knowledge on using safe food handling practices.

31.5% of children and youth improve their physical activity practices or gain knowledge.

## 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 #2

## 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
Year	Actual

2014 19

## 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Childhood obesity has reached epidemic proportions in the United States and current prevalence rates in West Virginia far exceed national norms. To address this problem, a ?systems perspective? is the approach strongly recommended by the Institute of Medicine?s Committee on Accelerating Progress in Obesity Prevention (Institute of Medicine, 2012)

## What has been done

The Choose to Change project broadened community engagement through community minigrants to 19 organizations that had an interest in improving physical activity or nutrition for families with young children. Each project was assigned a mentor. In 2014 we also entered into a collaborative agreement with the CDC to address childhood obesity by changing the early childcare and education environment to improve food and physical activity choices. The Healthy West Virginia Children project operates in three rural counties.

## Results

A total of 19 organizations which were awarded grants ranging from \$500 to \$4,000. Each organization developed strategies for improving physical activity or nutrition opportunities for their organization and the audiences they serve. Mini-grants have led to some serendipitous collaboration. Organizations discovered others who wanted to work together on projects. WVUES was able to expand community for physical activity and nutrition education.

## 4. Associated Knowledge Areas

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

- 801 Individual and Family Resource Management
- 806 Youth Development

#### Outcome #3

#### 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
2014	167

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

#### Issue (Who cares and Why)

The Centers for Disease Control and Prevention experts describe chronic diseases and conditions as the public health challenge of the 21st century. Heart disease, the leading cause of death, costs an estimated \$475.3 billion each year in health care services, medications, and lost productivity. Chronic disease accounts for eight of the 10 leading causes of death in West Virginia. They are largely preventable and are attributed to three main risk factors: 1) poor nutrition; 2) cigarette smoking; and 3) physical inactivity.

#### What has been done

A grant from the Foundation of the National Institutes of Health of \$67,922 was awarded. Extension Agents conducted focus groups with community organizations to learn about strategies for reaching local residents. Thirteen trainings with 167 volunteers in 10 counties were conducted. Extension Agents continued to build local partnerships. Materials from reliable sources were assembled into a volunteer-friendly kit with take-home memorable heart health messages. The team created automated follow-up phone/text/email messages, which will sent out in 2015. From September 2013 through November 2014, more than 89 heart health activities were reported in 24 counties.

#### Results

167 trained volunteers showed important and statistically significant improvements in targeted knowledge, at least in the short term.

167 trained volunteers will train others in their communities.

Trained volunteers cited plans to make personal health improvements that are culturally appropriate for West Virginia women.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle

#### Outcome #4

#### 1. Outcome Measures

Number of delivery systems/access points that change their procedures and/or policies with regard to expanding or improving their offering healthy foods or healthy activities

#### 2. Associated Institution Types

• 1862 Extension

## 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

Year	Actual
2014	10

## 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Health experts recommend the reduction of sugar-sweetened beverages (SSBs) to prevent and/or manage a variety of health conditions and diseases. SSBs include sodas, sports drinks, fruit drinks, sweetened tea and coffee, and any other calorically sweetened beverages. In West Virginia, our citizens generally have less disposable income and higher incidences of chronic health conditions. For example, for many years, West Virginia has led the nation with 42.8% of adults over age 65 with no natural teeth. Therefore, there is a great need for a West Virginia campaign to reduce sugar consumption.

#### What has been done

The "Rethink Your Drink" (RYD) team brainstormed venues for using campaign materials, such as camps, fairs and festivals, all WVUES health classes, and WVUES meetings. WVUES received funding from the USDA/WV Department of Health and Human Resources to fund RYD social marketing and summer camp activities. The 20-week campaign included: radio ads on five stations, billboards in 26 locations, and digital marketing displayed on specific websites. These efforts targeted low-income regions of the state. At least 18 counties participated, reaching more than 7,500. Social marketing strategies made additional impressions with billboards (20,280,260 estimate), radio (276,166 estimate), and digital marketing (1,021,078 estimate).

## Results

A "Rethink Your Drink" collaborative has been established with external partnerships, such as the WV Oral Health Coalition, WV Department of Health and Human Resources/Change the Future

WV, and health departments in seven WV counties. The campaign has created a 'buzz' within Extension, and also with the general public. Promoting water and reducing sugary drinks seems to be something on people's minds. Relating this to health behavior change theory, there has been a shift from pre-contemplation to contemplation or even preparation.

## 4. Associated Knowledge Areas

Knowledge Area
Nutrition Education and Behavior
Healthy Lifestyle
Individual and Family Resource Management

## Outcome #5

## 1. Outcome Measures

Number of participants who advance to higher knowledge and skill level in healthy lifestyle professional areas

Not Reporting on this Outcome Measure

## Outcome #6

## 1. Outcome Measures

Number of adults that gained knowledge about eating more healthy foods.

## 2. Associated Institution Types

• 1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

## 3b. Quantitative Outcome

Year A	ctual
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2014 1225

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

## Issue (Who cares and Why)

In West Virginia, adults need to learn skills to assist them in living healthy lifestyles. These skills lead to changes in behavior related to selecting and preparing healthy foods, shopping for the healthiest choices and best prices, choosing physical activities, and improving food safety behaviors.

## What has been done

The Family Nutrition Program (SNAPed and EFNEP) in West Virginia enrolls 1,225 adults in its programs which include training workshops for adults at community centers, public school, churches, elderly service centers, adult education and job training centers, health fairs, and the like.

## Results

58% increased their skill in using "nutrition facts" on food labels to make food choices
50% increased their skill in comparing prices before buying
50% increased their skill in planning meals ahead
47% increased their skill in shopping with a grocery list
49% increased their skill in thinking about healthy food choices
44% increased their skill in preparing foods without adding salt

## 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

## Outcome #7

## 1. Outcome Measures

Number of participants that gained knowledge of how to access and produce healthy foods.

## 2. Associated Institution Types

• 1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

## 3b. Quantitative Outcome

Year	Actual
2014	181

## 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

The Coronary Artery Risk Detection in Appalachian Communities (CARDIAC) Study (2012-2013 surveillance data) reported that 31% kindergarteners, 39% of second graders, and 47% of fifth graders in West Virginia are overweight or obese. While the role of genetics in obesity is important, it is not modifiable, therefore personal health behaviors and environmental factors are

key in obesity prevention.

#### What has been done

WVU, in collaboration with WV Head Start, Monongalia and Kanawha County Public Schools, and Choosy Kids, LLC was awarded a five-year obesity prevention AFRI grant from the USDA. Extension provided leadership for Family Fun Events for four months in 2014. Family Fun Events follow the Head Start framework for family education events. There are hands-on interactive activities, as well as a didactic parent education components based on learning objectives. All events include a healthy family style meal. Themes include: Choosy Families Eat Together, Choosy Families Play Together, Choosy Families Cook Together, and Healthy Summer Splash. Every family received a take-home bag of materials and a child's book.

## Results

84% of 40 parents will very likely to utilize activity-based family outings.
79% 40 parents will very likely set an example for my children by engaging in physical activity.
83% 40 parents will very likely minimize screen-time to no more than 2 hours per day.
91% 47 parents will very likely watch portion sizes for my preschool child.
87% 47 parents will very likely involve my child more in kitchen and mealtime activity.
63% 29 parents will very likely choose healthy foods for a family picnic.
63% 29 parents will very likely add more physical activities into their families' summer.
100% of 67 parents agreed that the Family Fun Event ideas will be put to use right away.
100% of 67 parents (of those who did not do this previously) planned to turn off TV and electronics during family mealtime.
400% of 2 parents agreed that he parent belond them gain ekills in making mealtimes pagitive.

100% 67 parents agreed the event helped them gain skills in making mealtimes positive,

## 4. Associated Knowledge Areas

- 703 Nutrition Education and Behavior
- 724 Healthy Lifestyle
- 801 Individual and Family Resource Management

## Outcome #8

## 1. Outcome Measures

Number of organizations at the local level who collaborate to promote health and nutrition

## 2. Associated Institution Types

• 1862 Extension

## 3a. Outcome Type:

Change in Action Outcome Measure

## 3b. Quantitative Outcome

Year	Actual
2014	7

## 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

Agencies and organizations lack awareness of services and programs offered outside of their county. Increasing communication among agencies within counties can foster collaboration and participation in services and programs. That, in turn, could go a long way to changing attitudes and raising levels of health-promoting behavior. The best resource we have to mobilize the community to adopt better health behaviors is the strength, diversity, and commitment of the local coalition members.

## What has been done

The agent in Fayette County put together a coalition that included Fayette County Family Resource Network Director, the County Health Department Administrator, the Senior Services Director, a Senior Services staff member, the County Commission Administrator, and Fayette Quality Health Center staff. They received the 2013 Appalachian Diabetes Control and Translation Project Planning Grant. After considering Fayette County's strengths and challenges in relation to diabetes prevention and control, the Living Well Work group developed an electronic resource directory of existing resource and services. They also collaborated on work site walking groups and "lunch and learns" sessions involving the Health Department, Courthouse staff, and County Extension Agent.

## Results

Agencies and individuals, who had not previously interacted, formed a collaborative group that designed a plan to address the health concerns of Fayette County. This effort got attention from the media and other Fayetteville offices and businesses have joined the effort. Member organizations have jointly implemented other activities including worksite wellness programs at the Fayette County Courthouse, Fayette County Health Department, Fayette County Libraries, and the New River Health Association. Workgroup members have also written four health related articles that were printed in community papers and posted online

## 4. Associated Knowledge Areas

## KA Code Knowledge Area

- 703 Nutrition Education and Behavior
- 724 Healthy Lifestyle

#### Outcome #9

## 1. Outcome Measures

Number of youth who received healthy meals.

## 2. Associated Institution Types

• 1862 Extension

## 3a. Outcome Type:

Change in Action Outcome Measure

## 3b. Quantitative Outcome

Year	Actual

2014 403

## 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Food security issues are a concern for all of West Virginia. According to WorkForce West Virginia, some counties, such as Wirt County have an unemployment rate of as much as 10 percent. The rate for West Virginia is 7.5 percent. Wirt County has 15.2% of the population living below the poverty level, which is actually a little better than the entire state which is 17.6%. According to the WV Kids Count data, in 2009 the 29.2 percent of children in Wirt County are below poverty level. During the past two years, every student in Wirt County has received free lunches.

## What has been done

In 2012, Community Resources of Wirt County, Family Resource Network, and Wirt County Extension wrote a grant to The Change the Future Program and received \$4815 to provide these children with needed food during school breaks. In 2014, they received \$2500 from the Sisters of St. Joseph Charitable Organization, \$4000 from the Parkersburg Area Community Foundation, and \$600 from a Methodist church. With these funds the group distributed bags of food for the Easter break, Thanksgiving break and the Christmas break. To find eligible families, they advertised in the newspaper and put flyers in the schools. Parents called in to the Extension Office to register.

## Results

403 children in Wirt County who received food during holiday breaks had needed nourishment they would not have had otherwise.

Three community groups worked together to fight the effects of poverty. Parents, the principal, and the county superintendent of schools expressed their appreciation for the work of the collaborative.

#### 4. Associated Knowledge Areas

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

## V(H). Planned Program (External Factors)

#### External factors which affected outcomes

- Economy
- Appropriations changes
- Competing Public priorities
- Competing Programmatic Challenges
- Other (Personnel issues)

## **Brief Explanation**

Cuts in state appropriations. Lack of personnel at times due to personal health and family issues.

## V(I). Planned Program (Evaluation Studies)

#### **Evaluation Results**

The WVUES Family Nutrition Program uses the evaluation protocols provided by EFNEP. The results this year are:

For adults:

81% (607 of 753) participants showed improvement in one or more food resource management practice (i.e. plan meals, compare prices, does not run out of food or uses grocery lists). 85% (645 of 757) participants showed improvement in one or more nutrition practice (i.e. plans meals, makes healthy food choices, prepares food without adding salt, reads nutrition labels or has children eat breakfast).

57% (420 of 734) participants showed improvement in one or more food safety practice (i.e. thawing and storing foods correctly).

For youth:

83.5% of children and youth improve their abilities to choose foods according to Federal Dietary Recommendations or gain knowledge.

37% of children and youth use safe food handling practices more often or gain knowledge. 31.5% of children and youth improve their physical activity practices or gain knowledge.

Family Fun Days

At the end of each event, parents were asked to give feedback. Standardized evaluations were used. The following are selected highlights for the Monongalia and Kanawha events:

Family Fun Event #2 (February 2014, Cohort 1.5) -

Report Date 08/07/2015

- 84% will very likely "utilize activity-based family outings"
- 79% will very likely "set an example for my children by engaging in physical activity"
- 83% will very likely "minimize screen-time to no more than 2 hours per day"

Family Fun Event #3 (April 2014, Cohort 1.5) -

- 91% will very likely "watch portion sizes for my preschool child"
- 87% will very likely "involve my child more in kitchen and mealtime activity"

Family Fun Event #4 (June 2014, Cohort 1.5) -

- 63% will very likely "choose healthy foods for a family picnic"
- 63% will very likely "add more physical activities into my families' summer"

Family Fun Event #1(October/November 2014, Cohort 2.0) -

- 100% agreed that the Family Fun Event ideas will be put to use right away
- 100% (of those who did not do this previously) planned to turn off TV and electronics during family mealtime
  - 100% agreed the event helped them gain skills in making positive mealtime experiences

Feedback on the overall Choose to Change Project included the following:

- 47% strongly agreed and 47% somewhat agreed that "my family has used the tools and topics we learned at Family Fun Events"
  - 82% strongly agreed that "Choosy has influenced my child's lifestyle choices"

#### Key Items of Evaluation

In our Family Nutrition programs youth and adults indicate that they are changing their behaviors related to choosing healthy foods, planning healthier meals, shopping for healthier, cost-effective foods, and using less additives that don't enhance health. More than half are using one or more food safety practices.

In our Family Fun Days which bring family members together to learn about activities that they can do together to enhance their own health, family members are choosing to incorporate healthy activities into their family life and are spending less time in sedentary activities such as TV watching and computer surfing.

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

## Program # 2

## 1. Name of the Planned Program

Youth Development

☑ Reporting on this Program

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

1. Program Knowledge Areas and Percentage

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

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

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

Voor 2014	Exter	nsion	Rese	arch
Year: 2014	1862	1890	1862	1890
Plan	59.0	0.0	0.0	0.0
Actual Paid	59.0	0.0	0.0	0.0
Actual Volunteer	12481.0	0.0	0.0	0.0

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

Exte	ension	Research		
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen	
810000	0	0	0	
1862 Matching	1890 Matching	1862 Matching	1890 Matching	
3266563	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 engage 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. This year, within the youth development area there were 39.037 direct contacts with adults and 218,463 direct contacts with you.

<u>Citizenship and Global Education</u> - Within the Citizenship and Global Education program, activities include clubs, camps and camp management, 4-H leadership skill development, 4-H workforce development, iRespect, Operation Military Kids, post-secondary education, global and cultural education and exchanges, and young adult programs. This area also includes diversity and inclusion educational activities including bullying awareness and prevention and disability awareness.

<u>Literacy Education</u> - Within the Literacy Education program area the largest program is Energy Express, a summer 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 category also includes the Reading Partner initiative.

<u>Science, Technology, Engineering and Math</u> - Within the STEM program area, educational activities included topics related to the environment, energy, forestry, agriculture, animals, technology and engineering, the biological sciences, and the physical sciences. A feature program in this area is the STEM Ambassador program which trains college students with STEM majors in pedagogy skills related to their field, and then places them in a 4-H state camp during the summer where they teach STEM related subjects and mentor campers who are interested in STEM careers.

Healthy Lifestyles - youth activities related to healthy living are reported in the Childhood Obesity section.

<u>Adult Leadership Development for Youth Activities</u>- WVU Extension faculty members train adults to work with youth in West Virginia. These programs train club leaders, camp counselors and staff.

## 2. Brief description of the target audience

Youths 9 to 21. More than 85,000 youth are 4-H members and more than 6,000 adult volunteers work directly and indirectly with them.

## 3. How was eXtension used?

eXtension was not used in this program

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

## 1. Standard output measures

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	39037	67239	218463	14315

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

Year:	2014
Actual:	0

## **Patents listed**

## 3. Publications (Standard General Output Measure)

## **Number of Peer Reviewed Publications**

2014	Extension	Research	Total
Actual	19	7	26

## V(F). State Defined Outputs

## **Output Target**

## Output #1

## **Output Measure**

• Number of educational activities

Year	Actual
2014	2685

## Output #2

## **Output Measure**

• Number of educational materials created or updated

Year	Actual
2014	0

## Output #3

## **Output Measure**

• Number of professional presentations

Year	Actual
2014	31

## Output #4

## **Output Measure**

• Number of 4-H educational materials distributed

Year	Actual
2014	81554

## V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content		
O. No.	OUTCOME NAME	
1	Number of youth participants who improve or increase skills in STEM subjects.	
2	Number of youth participants who use a new skill that they learned in a 4-H activity.	
3	Number of new groups or organizations that are established, enhanced, or changed their procedures.	
4	Number of youth participants who improve or increase leadership or citizenship skills	
5	Number of participants who improve or increase healthy living skills.	
6	Number of youth who increase or improve their literacy skills.	
7	Number of WVUES participants who gained knowledge and skill related to global education	
8	Number of youth participants who increased their skill in career exploration.	
9	Number of adults who learned skills that they will use to train others	
10	Number of participants who increase in curiosity/aspirations toward science, engineering and technology	

## V. State Defined Outcomes Table of Content

## Outcome #1

## 1. Outcome Measures

Number of youth participants who improve or increase skills in STEM subjects.

## 2. Associated Institution Types

• 1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

## 3b. Quantitative Outcome

Year	Actual

2014 9000

## 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

Waning interest in science, technology, engineering, and mathematics (STEM) disciplines is especially problematic in a state like West Virginia where only 17% of the predominantly rural population have a Bachelor's degrees or higher, the lowest rate of any state. Given the lack of parents and local employers with STEM degrees, West Virginia students have fewer role models in these fields, leading to limited knowledge of STEM career opportunities and the steps needed to pursue them. In addition, West Virginia students are ranked at the bottom of nearly every national metric for science and math preparedness (The Science and Engineering Readiness Index (SERI), National Assessment of Educational Progress (NAEP)).

## What has been done

WVUES launched the STEM Ambassador Program in 2012 to provide state youth with opportunities to engage in hands-on science, technology, and engineering projects during the summer camping season. WVU undergraduate students pursuing STEM degrees, are trained in pedagogy and curricula before spending 4-6 weeks teaching in 4-H summer camps. In addition to leading hands-on STEM activities, ambassadors also mentor students in STEM careers and college expectations. During 2014, ambassadors offered 373 days and 1,865 hours of direct STEM programming with 9,000 youth K-21. Ambassadors worked at a total of 60 events within 42 counties.

## Results

During the 2014 camping season, 9,000 youth from across the state of WV gained knowledge and skills related to science, technology, and engineering subjects.

## 4. Associated Knowledge Areas

## KA Code Knowledge Area

806 Youth Development

## Outcome #2

## 1. Outcome Measures

Number of youth participants who use a new skill that they learned in a 4-H activity.

## 2. Associated Institution Types

1862 Extension

## 3a. Outcome Type:

Change in Action Outcome Measure

## 3b. Quantitative Outcome

Year	Actual

2014 800

## 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

West Virginia has a rich history of oral storytelling. The West Virginia Storytelling Festival at Jackson's Mill provides an opportunity for schools to expose students to West Virginia heritage and learn about the rich and diverse cultures represented. Traditional story themes often include lessons on citizenship, truth-telling, playing fair, and treating others as they would wish to be treated. The incorporation of storytelling into literacy programs has been shown to improve reading comprehension, understanding the elements of a story, and understanding pacing and plot. Storytelling promotes gains in vocabulary and improves written communication skills.

## What has been done

The 2014 West Virginia Storytelling Festival was held at Jackson's Mill. The festival was comprised of two parts. First, the traditional daytime school program and the new public event. The event was planned, hosted and facilitated by members of the storytelling festival committee with four accomplished West Virginia storytellers providing the storytelling. This year seven schools participated in the daytime school program in order to reinforce their school literacy and heritage/citizenship education efforts. During the two-day program period, the festival served approximately 800 school children in grades K-6.

## Results

A brief, two question student evaluation was administered to a sampling of children participating in the daytime festival. Due to the young age of the majority of participants as well as time and logistics constraints, a sampling of approximately 5% of child participants was surveyed. The children were asked to identify what they had learned through their participation in the festival. Overwhelmingly, children reported learning how to tell engaging stories, learning about the different types of stories, and learning that stories may be told through a variety of means including music.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

#### Outcome #3

#### 1. Outcome Measures

Number of new groups or organizations that are established, enhanced, or changed their procedures.

## 2. Associated Institution Types

• 1862 Extension

## 3a. Outcome Type:

Change in Action Outcome Measure

#### 3b. Quantitative Outcome

Year	Actual
2014	1

## 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

In 2014, 20% of West Virginia's children are alone and unsupervised between the hours of 3 and 6 p.m. In West Virginia, in 2014, 19% of children participated in an after-school programs, compared to 13% in 2009 and 6% in 2004. After-school programs are an opportunity to promote school attendance, engagement in learning, and keep kids on track for success.

#### What has been done

The West Virginia Statewide After-school Network (WVSAN) was established by state agencies and after-school personnel throughout West Virginia with the purpose to create and sustain a statewide partnership that raises the awareness of the importance and accessibility of high quality "out-of-school time" programs for all school age children. WVUES coordinates WVSAN, providing an Extension Specialist as director.

#### Results

WVUES secured the following funding for WVSAN to match Mott Foundation grant:
\$13,000 West Virginia Department of Education
\$30,000 West Virginia Department of Health and Human Resources
\$45,000 National 4-H Council Walmart Youth Voice: Youth Choice grant
West Virginia was selected by Afterschool Alliance as first state in the country to pilot First Lego League at all 21st CCLC afterschool sites.
WVUES implemented WV 4-H Health Ambassador program at afterschool sites

## 4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

## Outcome #4

## 1. Outcome Measures

Number of youth participants who improve or increase leadership or citizenship skills

## 2. Associated Institution Types

• 1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

## 3b. Quantitative Outcome

Year	Actual
2014	1238

## 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

Civic engagement (citizenship) is the broadest mission mandate. It incorporates youth voice, leadership, respect, history, community youth development, SET, and healthy lifestyles. According to National 4-H Headquarters, 4-H citizenship is the knowledge, skills, attitudes and motivation that give youth the capacity to move beyond one's individual self-interest and to be committed to the well-being of some larger group

## What has been done

Civic engagement activities and presentations were conducted at a variety of venues. Training sessions for adults occurred at WVUES professional development events, the Civic Engagement Forum, 4-H Regional Meetings in the northern & southern regions, Extension Service Committees. Youth activities included Teen Leader Weekend, Older Members Conference Week Long Residential Camp, Wyoming County Older Weekend Camp & County Camp Week, Alpha I State 4-H Camp, State 4-H Days, and Civic Engagement Forum. The goals are to empower youth to be leaders in their communities and globally and to build skills of volunteers and faculty in effective civic engagement programming.

## Results

Youth participants at the Civic Engagement Forum (n=63) were asked if they agreed or disagreed that the program resulted in a list of behavioral changes. In most cases, 80 -- 100 percent agreed. The top three statements were: I respect people from different cultures (100%); I can make a difference in my community through community service (100%); and I can apply knowledge in ways that solve real-life problems through community service (98.4%). When asked

which item they were most likely to complete in the future, almost 75 percent said they would definitely plan to work on projects to better their community. Almost 70 percent said that they were encouraged to volunteer more, and nearly 60 percent said that they were interested in a career that helps others. When asked what they would do differently when they go home, 82.5 percent said that they would be involved in a community service project.

## 4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

## Outcome #5

## 1. Outcome Measures

Number of participants who improve or increase healthy living skills.

## 2. Associated Institution Types

• 1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

## 3b. Quantitative Outcome

Year A	ctual
--------	-------

2014 465

## 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

The National Institute of Food & Agriculture (NIFA, 2013), states that too many people experience financial crisis because of inadequate savings, too much debt, and poor planning. In the last decade the incidents of personal bankruptcy rose by 69%. Furthermore, more than half of Americans report living paycheck-to-paycheck. Financial programs for youth give young people the knowledge, skills, and motivation to build financial security.

## What has been done

The Reality Store program materials came from the University of Kentucky Cooperative Extension and were updated to reflect West Virginia taxes, costs, and prices. The program uses simulation exercises to help students look ahead and determine how they will manage finances. Students are given a career and monthly salary, marital status, and number of children. Jobs range from those that require a high school education to those requiring a college degree. Students visit 19 stations (ex. transportation, housing, utilities, etc.) where they make financial decisions. The program was delivered at five schools, reaching 465 students. There were 43 community
volunteers participated.

### Results

Participants indicated on their evaluations that they increased their understanding of the following: the need to budget your money (77%); what it costs to maintain a household (80%); importance of wise financial choices (80%); what it costs to raise a child (77%); the education required to get a job (82%); how the type of job affects how much money you make (81%); making career choices (81%); the importance of staying in school (80%); the importance of education after high school (80%). Because of this program, schools in the county have asked for more follow-up

## 4. Associated Knowledge Areas

KA Code	Knowledge Area	
806	Youth Development	

### Outcome #6

### 1. Outcome Measures

Number of youth who increase or improve their literacy skills.

### 2. Associated Institution Types

• 1862 Extension

### 3a. Outcome Type:

Change in Knowledge Outcome Measure

### 3b. Quantitative Outcome

Year	Actual	
2014	3072	

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

#### Issue (Who cares and Why)

During the summer months, children are most at risk for falling behind on reading levels -- a preventable loss known as the "summer slide." Summer reading programs are most effective when they are fun and when they occur in a safe, enriching environment focused on reading, writing, art and drama. Many children do not get nutritious meals in the summer because their families cannot afford them, and if children are hungry they cannot learn, so it is important to provide family-style meals with children.

#### What has been done

Through the efforts of WVUES faculty and staff, 74 communities successfully implemented the Energy Express Program in 2014. 3,072 children participated at 74 community sites across the state with 2,435 attending at least 50% of the program days.

Approximately 139,520 nutritious meals were served to children and 20,292 to youth volunteers.

3024 family and community members served as volunteers. 56,538 hours of volunteer time were provided with 25,959 hours (46% of the time) devoted to devoted to reading and writing activities. There were an average of 42 volunteers contributing an average of 764 volunteer hours at each site.

## Results

2,435 children increased in word identification, reading comprehension, reading fluency and in broad reading, with an average age equivalent gain of 1.9 months.

Children's personal libraries expanded by approximately 20,028 take home books.

### 4. Associated Knowledge Areas

KA Code Knowledge Area 806 Youth Development

## Outcome #7

### 1. Outcome Measures

Number of WVUES participants who gained knowledge and skill related to global education

## 2. Associated Institution Types

• 1862 Extension

### 3a. Outcome Type:

Change in Knowledge Outcome Measure

### 3b. Quantitative Outcome

Year	Actual	
2014	679	

## 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

The W.K. Kellogg Commission's concept of the "engaged institution" requires land-grant educators to see community in the context of the global village. WVU Extension's responsibility is to help West Virginians become globally aware and to incorporate the requirements of a changing environment, one that is characterized by global interrelationships and cultural diversity into our programs. Global education is one of the top five priorities in WVU's new strategic plan and WVU Extension's strategic plan.

### What has been done

The Global Education Team conducted 13 educational sessions both in the USA and in other countries including China, Vietnam, South Korea, Japan, and Ireland. The specialist worked with Vietnam & the WVU Office of International Programs to develop a camper exchange. He attended the National Social Services Summer Institute in Vietnam where he presented on 4-H methods, while two Vietnamese campers attended WVUES state camp. The first Global 4-H (Clover) Network was formed this year. Our global outreach specialist was selected as one of six members of the eXtension national global design team.

### Results

The efforts of the Global Education Team resulted in an increased understanding among participants from other countries of 4-H philosophy and techniques including the Ages & Stages Model, child protection, risk factors, & educational engagement. Several people in Vietnam sent emails documenting their use of 4-H techniques and materials that had been translated into Vietnamese. Using what we learned in Korea, the National 4-H Council has been designing the Global Clover Network. In the USA, participants learned specific activities to implement training programs for inbound and outbound international youth groups. In West Virginia, 20 members of the Chinese delegations learned about 4-H, American culture, and camp expectations. Nine visiting Japanese and 40 host family members learned customs, cultural adaptations, and rules and procedures. 390 West Virginia 4-H youth gained cultural knowledge directly from these programs.

# 4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

### Outcome #8

## 1. Outcome Measures

Number of youth participants who increased their skill in career exploration.

### 2. Associated Institution Types

• 1862 Extension

### 3a. Outcome Type:

Change in Knowledge Outcome Measure

## 3b. Quantitative Outcome

Year	Actual	
2014	0	

### 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

Nearly 6.5 million U.S. teens and young adults, including 56,000 in West Virginia, are not in school and jobless, veering toward a path of chronic underemployment as adults and failing to gain the skills employers need in the 21st century, according to a 2012 KIDS COUNT® report from the Annie E. Casey Foundation. In terms of achieving economic success in adulthood, youth who drop out of school are clearly at a disadvantage, but those youth who have graduated and are not working, may also be more susceptible to lower levels of economic success.

### What has been done

The Post-Secondary Success Team implemented activities aimed at preparing youth and their parents for career readiness including: a Workforce and Career Exploration Track at State Teen Leader Weekend, a workshop called "Get in the Act!", a workshop called, "Making the Connection", a session for adults on preparing financially to send a child to college, a session to enhance youth public speaking skills, and "College 101". The team is currently conducting a review of the national, "Build Your Future" curriculum. They are also working on a research project on how the level of participation in 4-H affects a member's workforce skill development.

### Results

110 West Virginia 4-Hers gained knowledge and skill in exploring their future education and career options and performed hands-on project work in the area of career exploration.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

### Outcome #9

### 1. Outcome Measures

Number of adults who learned skills that they will use to train others

### 2. Associated Institution Types

• 1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

### 3b. Quantitative Outcome

Year	Actual	
2014	1025	

### 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

Cyber bullying can be defined as the use of information and communication technology particularly mobile phones and the internet, deliberately to upset someone else. Bullying and Cyberbullying continues to be a problem in West Virginia, and specifically McDowell County. This is also the #1 program requested by the McDowell County Board of Education.

### What has been done

WVUES faculty developed a curriculum to help youth and adults understand cyber-bullying and the consequences of being a cyber-bully; recognize types of cyber-bullying; describe the negative effects of cyber-bullying; and describe the strategies that can help prevent cyber-bullying. The curriculum contains the following modules: Train the Trainer: Younger Youth Module: Older Youth Module: Parent Module: and Social Media Youth and Educators Module. This last module is designed to give principals and school administration an overview of the cyberbullying terms, scope, and consequences to their students on a personal and academic level. Workshops were held in 11 locations in 2014.

## Results

630 adults who attended the iRespect workshops indicated that that they intended to do the following things:

I will set an example with my words to other kids on social media sites (87.5%)

I will know all my child's computer and internet passwords. (100%)

I will set boundaries for my child about what is appropriate internet behavior (100%)

I will review my child's friend's lists on Facebook and other social media sites (87.5%).

395 youths who attended the iRespect workshops indicated that they intended to do the following things:

I will set an example with my words to other kids on social media sites (62.5%). I will discuss the info from iRESPECT with my parents and friends (75%).

### 4. Associated Knowledge Areas

KA Code	Knowledge Area
000	Vauth Davialance

806 Youth Development

## Outcome #10

### 1. Outcome Measures

Number of participants who increase in curiosity/aspirations toward science, engineering and technology

### 2. Associated Institution Types

• 1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

## 3b. Quantitative Outcome

Year	Actual
2014	96

### 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. According to the West Virginia Higher Education Policy Commission, 75% of all tech-based companies stay in the state where they originated. High-tech jobs are created as a result of research, strengthening a state's economy with an influx of revenue and job growth. During the next decade, the demand nationally for scientists and engineers is expected to increase at four times the rate for all other occupations. However, youths' interest in science fields is dwindling and STEM degrees continue to decline.

#### What has been done

Youths attending Alpha I and Alpha II camps are introduced to science-rich educational classes that range from robotics and web page development to rocketry and nanotechnology. Participants take part in activities focusing on STEM and discover possible career opportunities. The youth participants rotate through four 75 minute STEM classes (one per day, spread out over four days), yielding 5 hours of STEM programming per week. The 2014 curriculum included activities in Seaperch Underwater Robotics, watershed and stream monitoring through probeware and GPS, use of unmanned aerial vehicles to explore aerospace engineering, and activities in engineering design.

### Results

All 96 participants who took part in the Alpha I and II STEM Tracks completed an evaluation or their knowledge perceptions of the course topics before and after taking the STEM workshops. The majority of youth rated themselves as having little knowledge prior to the courses and as having between some and strong knowledge after taking the courses. Further, the percent change for each topic was 48-73%.

### 4. Associated Knowledge Areas

KA CodeKnowledge Area806Youth Development

### V(H). Planned Program (External Factors)

### External factors which affected outcomes

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

### **Brief Explanation**

Budget cuts have affected some programs. Changes in school schedules have made it a priority for Energy Express to try out new formats with shorter schedules. Government regulations regarding background checks and safety consideration always affect the risk management procedures of 4-H.

### V(I). Planned Program (Evaluation Studies)

## **Evaluation Results**

For STEM education classes at two camps this summer

All 96 participants who took part in the Alpha I and II STEM Tracks completed an evaluation or their knowledge perceptions of the course topics before and after taking the STEM workshops. The majority of youth rated themselves as having little knowledge prior to the courses and as having between some and strong knowledge after taking the courses. Further, the percent change for each topic was 48-73%.

### 4-H Camp

At 4-H camp each year, we use evaluation forms that were created a number of years ago by the 4-H Camping Research Consortium. This year, the evaluation showed that the longer campers are members of 4-H the higher they rate indicators related to selected essential elements of youth development. These elements include:

## **Opportunity to Build a Relationship with a Caring Adult**

This is an index variable comprised of the following questions:

- · Leaders were people I could trust
- Leaders thought that helping others is important
- I could go to a leader if I had problem
- Leaders understood campers' problems
- Leaders tried to make homesick campers feel better
- Leaders liked being around campers
- Leaders helped campers be successful

## **Opportunity for Independent Learning and Mastery**

This is an index variable comprised of the following questions:

- My skills in some activities improved
- My classes were interesting
- I could make choices about how I spent my free time
- · I pushed myself to try harder because of challenging activities
- I learned things that will be useful in future
- I felt like I had a choice in my camp classes
- I felt good about something that I accomplished
- I could make choices for recreation activities
- Campers taught each other
- Campers could be a part of making group decisions
- Campers accomplished something they could not do the first day
- Campers had the opportunity to learn about different careers

## Emotionally Safe and Inclusive Environment

This is an index variable comprised of the following questions:

- Other kids did not like me
- Other kids made fun of me
- I was teased
- · Campers messed with others belongings
- Campers picked on one another
- Mean jokes were played on campers
- I felt free to express my opinion
- I felt accepted by other campers

## Physically Safe Environment

This is an index variable comprised of the following questions:

- I felt safe in my cottage/cabin
- I felt safe at night
- I felt safe in classes and activities

For each of the essential elements, the differences in campers by years in 4-H were significant, all indicating that the longer youths are members of 4-H, the higher their ratings are on measures of the essential elements of youth development.

## Key Items of Evaluation

Youth at 4-H camps who took STEM classes this year, reported that they improved their knowledge of STEM related topics.

For each of the essential elements that we strive to make present at our camps, the differences in campers by years in 4-H were significant. This finding occurs each year, showing that youth are affected positively by their experience at all 4-H activities, as well as camp.

# V(A). Planned Program (Summary)

## Program # 3

## 1. Name of the Planned Program

Workforce and Community Development

☑ Reporting on this Program

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

## 1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
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 and Social Services	15%			
	Total	100%			

# V(C). Planned Program (Inputs)

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

Year: 2014	Extension		Research		
rear: 2014	1862	1890	1862	1890	
Plan	21.0	0.0	0.0	0.0	
Actual Paid	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)

Exte	Extension Research		earch
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
675000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
979069	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 2014, the community and workforce development program area conducted 779 activities and recorded 73,178 adult contacts and 8,906 youth contacts. The activities in this program area a varied, but fall under the following four categories.

## Workforce Development

WVU-ES conducts workshops and training opportunities for workers in a variety of settings in West Virginia. Some workforce development is reported under other planned programs, where appropriate. Examples include ServSafe certification, logger training, and childcare provider training. Topics cover a broad range and include ADA and Civil Rights Compliance, how to start non-profit organizations, grant writing, 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.

WVU-ES contracts with OSHA to train workers. Topics include updates for construction industry outreach, OSHA standards for maritime, standards for general industry, occupational safety and health standards for construction, contractor refresher, inspector refresher, designer refresher, asbestos building inspector, asbestos management planner refresher, and general industry hazard awareness.

## Leadership Development

WVU Extension relies on volunteers to carry out 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 train their own volunteers training are our Community Education Outreach Service organization (CEOS), the Master Gardener program (reported under Food Security and World Hunger), and Energy Express (reported under Youth Development). Topics for volunteers include budgeting and planning for small organizations, public speaking, board responsibilities including serving as an officer, and communications.

## **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. These programs attract participants who are interested in initiating downtown revitalization programs to improve their community's capacity to attract and retain new businesses and make communities more desirable places to live and work. Recently, the community development faculty at West Virginia University Extension and West Virginia State University (1890) have come together to plan joint projects with mutually agreed upon outcomes.

### Labor Relations

Under the direction of the Labor Studies Institute at WVUES, faculty provide training for members of unions and other workers who negotiate for better working conditions.

## 2. Brief description of the target audience

Firefighters, EMS, law enforcement, first responders, upper management in the fire services, airport personnel, the general population, people who seek to implement or assist in the implementation of individual or employer compliance with state, federal, and local safety and health legislation,

employers/owners of businesses, volunteers, immigrants, migrant workers, youth, disabled community members, and older adults.

Local businesses, community-based organizations, elected officials, community leaders, community residents, fair and festivals boards, WVU ES faculty and staff

## 3. How was eXtension used?

eXtension was not used in this program

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

## 1. Standard output measures

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	73178	161902	8906	0

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

Year:	2014
Actual:	0

## Patents listed

## 3. Publications (Standard General Output Measure)

## Number of Peer Reviewed Publications

2014	Extension	Research	Total
Actual	11	4	15

## V(F). State Defined Outputs

## **Output Target**

## Output #1

## **Output Measure**

• Number of educational activities

Year	Actual
2014	779

# Output #2

## **Output Measure**

• Number of educational materials created or updated

Year	Actual
2014	0

## Output #3

## **Output Measure**

• Number of educational materials distributed

Year	Actual
2014	161902

## Output #4

## **Output Measure**

• Number of professional presentations

Year	Actual
2014	0

# Output #5

## **Output Measure**

• Number of outside organizations collaborating within this program area

Year	Actual
2014	0

# 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 and skills.		
2	Number of government and civic leaders who improve or increase skills		
3	Number of workers who use a new skill		
4	Number of volunteers who increase or improve skills.		
5	Number of people certified or licensed to practice in the field		
6	Number of new groups or organizations that are established or enhanced		
7	Number of economic improvements		
8	Number of employers who comply with OSHA specified limits for exposure of workers to hazardous substances and conditions.		
9	Number of government or civic groups that use a new skill or procedure.		
10	Number of local governments that develop comprehensive or strategic plans.		
11	Number of WV citizens who increase their knowledge and skill about community development.		
12	Number of labor unions or workers groups who change a procedure or policy.		

## Outcome #1

## 1. Outcome Measures

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

Not Reporting on this Outcome Measure

## Outcome #2

## 1. Outcome Measures

Number of government and civic leaders who improve or increase skills

## 2. Associated Institution Types

• 1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

## 3b. Quantitative Outcome

Year	Actual
2014	3

## 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

A key challenge in community development is how to engage broad community support, identify the underlying causes of issues and challenges together, learn from one another, and mobilize the community's capitals in a long-range and long-term problem solving approach.

## What has been done

Community planning activities occurred in two West Virginia communities, Doddridge County and the City of Ravenswood. Students from two graduate classes at WVU (PUBA 611 and ARE 540) were integrated into planning activities alongside community stakeholders. Students developed socio-economic reports to facilitate community education, discussion, and local decision making. In the fall of 2014 students from both classes participated in a two day planning charrette in Ravenswood that engaged local residents and community stakeholders in the participatory planning process.

### Results

As part of follow-through from recommendations county leaders have engaged with Historical Societies and EDA representatives in neighboring Ritchie, Tyler, and Gilmer Counties to create a heritage tourism task forces to identify assets and secure funding resources for planning and

project implementation.

In Ravenswood, input from the planning charrette was incorporated into the economic development comprehensive plan element. The City has already implemented several small projects such as the Little Libraries initiative and secured a VISTA worker to coordinate projects growing out of this work. The WVU Land Use and Sustainable Development Law Clinic is using the report and community feedback to craft a formal comprehensive plan for approval by City officials.

## 4. Associated Knowledge Areas

#### KA Code Knowledge Area

608 Community Resource Planning and Development

#### Outcome #3

### 1. Outcome Measures

Number of workers who use a new skill

### 2. Associated Institution Types

• 1862 Extension

#### 3a. Outcome Type:

Change in Action Outcome Measure

### 3b. Quantitative Outcome

Year	Actual	
2014	1129	

### 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

WVU Safety and Health Extension provides training and assistance to risk workers and small businesses engaged in high hazard industries in OSHA Region III. The program trains workers to recognize hazards and identify appropriate hazard-control measures and to understand their rights and employer responsibilities according to OSHA. The target audience is construction, logging, oil and gas extraction, landscaping, and manufacturing industries.

#### What has been done

WVUES conducted High Risk Small Business Occupational Safety and Health Training and Assistance (OSHTAC). In 2014, 1129 individuals were assisted with the support of this program either through safety and health training or through technical assistance such as inspections, safety program development and industrial hygiene assessments (air and noise level measurements). WVU Safety and Health Extension exceeded its training goal by reaching 1129 workers (proposed 900) through 69 training sessions (proposed 40) which resulted in 3403.5

training contact hours (proposed 3029).

### Results

The level 3 (follow-up) evaluations illustrate that changes to improve workplace safety and increased hazard recognition and awareness resulted from course participation.

## 4. Associated Knowledge Areas

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

## Outcome #4

### 1. Outcome Measures

Number of volunteers who increase or improve skills.

### 2. Associated Institution Types

• 1862 Extension

### 3a. Outcome Type:

Change in Knowledge Outcome Measure

## 3b. Quantitative Outcome

Year	Actual

2014 36

## 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

Most of West Virginia and much of the eastern United States was overwhelmed by a devastating derecho storm near the end of June 2012. This destructive storm caused severe property damage from fallen trees and flying debris and left countless thousands without electricity, food, medicines, and other necessities for over two weeks or more. Few families, individuals, businesses, or even governmental agencies were prepared to cope with those hardships and it was clear that an educational program was needed to teach residents how to prepare for and deal with emergency situations.

### What has been done

A new teaching program entitled Emergency Preparedness Basics was developed and presented to classes at Extension Spring Professional Development, the Community Educational Outreach Service (CEOS) annual meeting, the Community Leadership Academy, and to representatives of the Summers County Community Emergency Response Team (CERT).

### Results

Thirty-six state volunteers learned about "Emergency Preparedness Basics" including: --How to develop a plan to communicate and rendezvous with family, friends, and co-workers in an emergency situation;

--How to prepare your home (or business) for emergencies;

--How to prepare for an evacuation by developing emergency kits with food, water, medicines, and other necessities;

--And, financial preparedness by having backup copies of all important banking and IRS documents, wills, birth certificates, insurance papers, and similar information stored in a secure location such as a bank deposit box.

By acquiring this knowledge, these 36 state residents will be able to deal with emergency situations with a greater level of safety and comfort than those that have not had the training.

## 4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
723	Hazards to Human Health and Safety

## Outcome #5

## 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**

2014 82

## 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

Residential construction is very dangerous work. Fall from roofs, ladders and scaffolds are the leading cause of fatalities and serious injuries in this industry. When college students are tasked with building a solar residential home those risks are even greater due to the lack of true industry and work experience.

### What has been done

WVU Safety & Health Extension agreed to develop and deliver hands-on training to prepare the WVU Solar decathlon team to safely construction the solar house. Over several months WVU S&HE faculty delivered 120 training hours to 82 students. The faculty also conducted 20 follow work site inspections and continued to make recommendations on how to safely complete the project.

#### Results

These activities resulted in all students receiving an OSHA 10 Hour certification and most importantly no student were injured during the construction of the solar house.

### 4. Associated Knowledge Areas

#### KA Code Knowledge Area

723 Hazards to Human Health and Safety

### Outcome #6

### 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
2014	2

## 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Communities need help in addressing their environment to support better-connected, more sustainable places. They need to assess specific areas to identify conditions that affect walkability, connectivity and their ability to meet daily needs.

#### What has been done

Walking committees have been developed with wide community representation. An Extension specialist conducts workshops on walkability studies with the committees. Participants do a walking audit, conduct a small group discussion, and produce a report on findings and recommendations on top areas of concern. The specialist generates a composite report, including photographs and demographics, which is presented to the community and community

leaders. The study manual has been given to the Families & Health Unit and School of Public Health for their replication.

#### Results

The walkability study findings were used by Grafton to conduct a way finding study. As a result, the city of Grafton, WV received a \$2,500 mini grant from "Change the Future WV" to do GIS mapping for walking routes and for signage and map development. Grafton also received minigrants from Grafton Turn This Town Around project. A report was submitted to the city of Parkersburg for their review. Future projects are anticipated in Parkersburg as a result of the walkability study.

## 4. Associated Knowledge Areas

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

#### Outcome #7

## 1. Outcome Measures

Number of economic improvements

Not Reporting on this Outcome Measure

### Outcome #8

#### 1. Outcome Measures

Number of employers who comply with OSHA specified limits for exposure of workers to hazardous substances and conditions.

Not Reporting on this Outcome Measure

### Outcome #9

### 1. Outcome Measures

Number of government or civic groups that use a new skill or procedure.

### 2. Associated Institution Types

• 1862 Extension

### 3a. Outcome Type:

Change in Action Outcome Measure

### 3b. Quantitative Outcome

Year	Actual
2014	3

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Cultural-heritage tourism is one of the fastest growing niche tourism markets. While West Virginia is known for its natural beauty and outdoor recreation, an overnight visitor study ranked visiting a landmark/historic site as the second highest activity/experience. According to Mandala Research (2013) 76% of all U.S. leisure travelers can be defined as cultural-heritage travelers. Cultural heritage travelers total 129.6 million adults annually and they spend \$171 billion a year on these types of activities. A study currently being conducted by WVU to assess regional destination competitiveness in West Virginia, identified cultural and heritage attractions in the state and determined that both the Northern Panhandle and New River Gorge are less competitive than bordering states.

#### What has been done

The WVUES tourism specialist made presentations using research to illustrate travel trends related to cultural-heritage tourism, identify successful cultural-heritage tourism initiatives, and provide strategies to develop cultural-heritage tourism partnerships in West Virginia. A total of 199 community stakeholders in West Virginia and the southeast U.S. attended. The New River Gorge destination leadership team was formed to support cultural-heritage tourism opportunities. A public service grant was submitted with an action plan for heritage tourism development. The specialist is working with community leaders to develop a Cultural Advisory Network as a peer-to-peer exchange of cultural and heritage development opportunities in West Virginia. An online asset mapping form was developed.

#### Results

A leadership team in the New River Gorge area was formed to promote cultural heritage tourism.

A task force to measurably improve the economy within Doddridge, Ritchie, Tyler, and Gilmer counties by developing and promoting heritage tourism, was formed. The following themes were developed: North Bend Rail Trail and Outdoor Adventure, Oil & Gas, Underground Railroad & Civil War, Hospitality & Friendliness, Transportation, Culture, Hunting, Fishing & Trapping, and Identity and Industry. A total of 307 tourism assets were identified. Action strategies for 2015 were also identified.

The Cultural Advisory Network with a goal of peer-to-peer exchange of cultural and heritage development opportunities is forming.

## 4. Associated Knowledge Areas

### KA Code Knowledge Area

608 Community Resource Planning and Development805 Community Institutions and Social Services

### Outcome #10

### 1. Outcome Measures

Number of local governments that develop comprehensive or strategic plans.

### 2. Associated Institution Types

• 1862 Extension

### 3a. Outcome Type:

Change in Action Outcome Measure

### 3b. Quantitative Outcome

Year	Actual		
2014	8		

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

#### Issue (Who cares and Why)

Most West Virginia communities do very little planning for their futures, especially with respect to local land and comprehensive planning. Only about half the counties have active planning commissions, defined as at least meeting quarterly as required by law, and only about half of them (one quarter of all counties), have up-to-date comprehensive plans. The state's municipalities are even less likely to plan their futures, especially places with than 5,000 residents. The only places where planning is common are the handful of cities in the state which have a population exceeding 10,000 people.

#### What has been done

The Community Development specialist works on "Community Visioning/Planning Design" efforts in three locations: Lewis County, the city of Buckhannon, and Putnam County. He works with them throughout the entire planning process on larger scale projects. He also provides training and counsel to those working on or interested in planning. This "Community Planning Assistance" includes consultation on local planning efforts, follow-ups from larger planning projects, and presentations and training with 11 communities and groups. 65 unique individuals received direct instruction on planning, its procedures, its importance, and its impacts.

#### Results

Lewis County adopted its first comprehensive plan in April and has started developing guidelines. Buckhannon is creating its new "Buckhannon 2020 Plan." Putnam County's new plan is being used to establish preferred development areas and concepts. The city of Nitro used its plan as a guide and support documentation as it sought home rule status.

The city of Bethany used the information to make decisions related to housing development proposals. The Clay County Park amphitheater proposal has been shared with the WVU Landscape Architecture program which is offering assistance and education directly.

The Wetzel County 4-H Camp proposed expansion. The Parsons county planning project will begin in January 2015.

## 4. Associated Knowledge Areas

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

## Outcome #11

## 1. Outcome Measures

Number of WV citizens who increase their knowledge and skill about community development.

## 2. Associated Institution Types

• 1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

## **3b. Quantitative Outcome**

Year	Actual
2014	170

## 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

Emerging and established leaders in West Virginia need to identify and build on their community's assets to take advantage of development issues in West Virginia and surrounding regions. Local government officials and community development leaders need a solid foundation in public organizational and financial management.

### What has been done

2014 marks the third year for the annual Community Leadership Academy (CLA). The theme was "Preparing for Performance - Enabling Communities to Prepare for Opportunities and Challenges Successfully." Topics emphasized enhancing personal leadership skills and providing an understanding of current, complex issues affecting communities. The Community Leadership Academy is led by WVU Extension Service Community Resources and Economic Development, in partnership with the W.Va. Community Development Hub, West Virginia Association of Counties and WV County Commissioner's Association.

### Results

Sponsorships, and indication of partnership participation, grew from 8,000 in 2013 to \$16,500 in 2014. Attendance of community members has grown from 60 participants in 2012 to 125 in 2013 to 170 in 2014.

## 4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
803	Sociological and Technological Change Affecting Individuals, Families, and Communities

## Outcome #12

### 1. Outcome Measures

Number of labor unions or workers groups who change a procedure or policy.

## 2. Associated Institution Types

• 1862 Extension

## 3a. Outcome Type:

Change in Action Outcome Measure

## 3b. Quantitative Outcome

Year	Actual
2014	1

## 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

The state of West Virginia has a long history of labor relations, associated with the coal industry. WVUES has been involved in training for stewards and union administrators.

### What has been done

Extension specialists teach union basic leadership classes, including grievance handling, labor history and introduction to labor unions. Participants in these workshops improve skills and change practices. General results include enhanced contract enforcement, improved labor management relations, and enhanced sills related to determining meritorious grievances.

## Results

One Central Labor Council amended their Constitution which was a national mandate.

### 4. Associated Knowledge Areas

## KA Code Knowledge Area

805 Community Institutions and Social Services

## 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**

Many of the programs in the community and workforce program area are affected by government appropriations and policy changes because they are dependent on federal funds for operations.

## V(I). Planned Program (Evaluation Studies)

## **Evaluation Results**

## **OSHA Training Institute**

- Ranked first nationally in Number of OSHA 10 and 30 Hour Students Trained
- Ranked third nationally in number of OSHA courses delivered.
- In 6 month post assessment surveys of 2014 students:
- 98% of respondents reported that completion of trainer course at WVU improved their skills as a safety trainer
- 99% will apply the adult learning principles and training techniques provided through the WVU trainer course
  - 52% will make changes in safety policies and procedures

• 45% will make changes in how the implement, use or require personal protective equipment (respirators, hearing protection, fall protection harness, etc.).

## Key Items of Evaluation

Trainees in the OSHA Training Institute learn pedagogy skills related to safety training and go on to train hundreds of thousands of other workers in states adjacent to West Virginia.

# V(A). Planned Program (Summary)

## Program # 4

# 1. Name of the Planned Program

Global Food Security and Hunger

☑ Reporting on this Program

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

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
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: 2014	Extension		Research	
rear: 2014	1862	1890	1862	1890
Plan	28.0	0.0	0.0	0.0
Actual Paid	17.0	0.0	0.0	0.0
Actual Volunteer	2500.0	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
740000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
595038	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 has 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) engage individuals in the promotion, support, and sustainability of horticulture, 3) expand marketing opportunities for value-added products and develop food systems that support local consumers and local business creation and expansion; 4) enhance the agricultural knowledge so that citizens make informed decisions related to the production of food, fiber and wildlife ecology; and 5) build volunteer capacity related to agriculture within communities.

In 2014 there were 983 educational activities reported and 136,210 direct contacts in this program area. Of those direct contacts, 56,715 were with youth.

<u>Animal Production and Management.</u> Activities in this area include those that address animal health, livestock production, animal product marketing, grassland management, and aquaculture. The major initiatives included: feeder cattle marketing program, livestock improvement, grassland management, and aquaculture.

<u>Horticulture</u> - The major initiatives included: homeowner and commercial horticulture, the Master Gardener Program and International Conference. For the period 2011-2013/14, master gardeners across the state volunteered more than 81,000 hours in 718 projects contributing \$1,788.151 (at the national value of volunteer time) to their local communities and to WVU Extension Service, contacting 22,000 adults and 2,500 youth annually.

<u>Pest Management</u> - The major initiatives included: Integrated Pest Management, the White Tailed Deer Damage Program, and Weed Control Management and Master Gardener.

<u>Sustainable Agriculture: Agriculture Business/Small Farm Management</u> - The major initiatives included: West Virginia Small Farms Conference and Small Farms Website.

<u>Nutrient Management</u> - The major initiatives included fertilizer use and selection, soil sampling, and composting. The major initiatives included fertilizer use and selection, soil sampling, and composting.

<u>Agriculture Literacy</u> - The major initiatives included in this area are Agriculture in the Classroom, 4-H youth agriculture activities including judging, skillathons, and fairs and festivals.

## 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 faculty member was a member of the national Extension Master Gardener social media team through eXtension that is responsible for the EMG blog, Facebook and Twitter.

One faculty member was a member of the leadership team for The Garden Professors, an eXtension COP that writes and shares science based information to the public through a blog and social media.

One faculty member answered questions through the eXtension ask an expert program.

Last year I attended and presented two presentations at the National eXtension Conference.

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

## 1. Standard output measures

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	79495	833942	56715	263132

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

Year:	2014
Actual:	0

## **Patents listed**

## 3. Publications (Standard General Output Measure)

### Number of Peer Reviewed Publications

2014	Extension	Research	Total
Actual	26	13	39

## V(F). State Defined Outputs

## **Output Target**

# Output #1

## **Output Measure**

• Number of educational activities

Year	Actual
2014	983

# Output #2

## **Output Measure**

• Number of educational materials created or updated

Year	Actual
2014	24

## Output #3

# **Output Measure**

• Number of educational materials distributed

Year	Actual
2014	1094774

# Output #4

## **Output Measure**

• Number of professional presentations

Year	Actual
2014	43

# V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content			
O. No.	OUTCOME NAME		
1	Number of participants who improve or increase skills in farm management.		
2	Number of producers indicating adoption of recommended practices.		
3	Number of people certified or licensed to practice in the field		
4	Number of new groups or organizations that are established or enhanced		
5	Number of producers (and other members of the food supply chain) that have increased revenue.		
6	Dollar amounts generated as a result of implementing new techniques or procedures		
7	Number of participants who increase or improve skills in animal production and health.		
8	Number of participants who increase or improve skills in weed or pest management.		
9	Number of participants who increase or improve skills in aquaculture.		
10	Number of participants who increase or improve a skill in nutrient management.		
11	Number of farmers who produce ethnic specialty crops.		

### Outcome #1

## 1. Outcome Measures

Number of participants who improve or increase skills in farm management.

### 2. Associated Institution Types

• 1862 Extension

### 3a. Outcome Type:

Change in Knowledge Outcome Measure

### 3b. Quantitative Outcome

ual

### 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

Kanawha County is the state's largest county in terms of population size and fourth largest in terms of land area. This makes it difficult for Extension to reach a majority of the large and diverse population in the county. In order to reach a larger population, mass media such as newspaper and television can be effective tools.

### What has been done

The WVUES agriculture Extension agent in Kanawha County is the weekly garden columnist for the Charleston Gazette-Mail, which has a statewide distribution. The column is titled "Garden Guru," and focuses on seasonally appropriate garden and horticulture topics. Articles are often shared online by other groups such as the National Extension Master Gardener Facebook page. The agent also serves as a guest, one week each month, on the "Saturday Report with John Marra", a television show featuring agricultural experts. This station serves southern and central West Virginia, eastern Kentucky, and southeastern Ohio.

### Results

115,940 (the readership and viewership) have gained knowledge of appropriate garden and horticulture topics. The editor of the column has indicated that the Kanawha County agent's column receives the most comments and has the highest estimated readership of any in the paper.

### 4. Associated Knowledge Areas

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

- 213 Weeds Affecting Plants
- 216 Integrated Pest Management Systems
- 307 Animal Management Systems
- 308 Improved Animal Products (Before Harvest)
- 503 Quality Maintenance in Storing and Marketing Food Products
- 604 Marketing and Distribution Practices
- 607 Consumer Economics

## Outcome #2

## 1. Outcome Measures

Number of producers indicating adoption of recommended practices.

## 2. Associated Institution Types

1862 Extension

## 3a. Outcome Type:

Change in Action Outcome Measure

## 3b. Quantitative Outcome

Year	Actual
2014	15

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

### Issue (Who cares and Why)

If producers follow through with these practices that utilize grazing lands while protecting the environment, they will increase profitability and will decrease the impact their livestock have on the environment.

## What has been done

The Livestock Grazing School is a designed to educate livestock producers on economical and efficient ways of utilizing their grazing lands while protecting the environmental resources they are utilizing. This program is based on various methods of improved grazing strategies such as management intensive grazing, mob grazing, rotational grazing etc. It introduces producers, as well as those individual who may become producers, to these concepts and encourages them to incorporate these strategies into their operations. There were 15 participants this year.

### Results

As a direct result of the grazing school eight of the fifteen participants have indicated that they have incorporated at least one of the practices they learned about. The remaining seven have indicated that they plan to do so in the next year.

### 4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems
308	Improved Animal Products (Before Harvest)

### Outcome #3

## 1. Outcome Measures

Number of people certified or licensed to practice in the field

Not Reporting on this Outcome Measure

## Outcome #4

### 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
2014	15

### 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

The 2012 Census of Agriculture lists 210 farms in Kanawha County, a drop of 18 percent from the 256 farms in the 2007 census. Despite this drop in "traditional farms," interest in locally farmed products and small scale farming is at an all-time high. This interest comes from individuals living within city limits, rather than those who have traditional rural farmlands. The metropolitan area of Charleston is large market that, more and more, demands availability of local produce and agricultural products.

### What has been done

WVUES organized the WV Urban Agriculture Conference. Other agencies worked with WVUES including WVSU Extension Service, the Capitol Conservation District, the WV Farmers Market Association, the Natural Resources Conservation Service, the WV Food and Farm Coalition, the

Charleston Area Alliance, and SARE. Other urban agriculture efforts include: developing the Kanawha Community Garden Association, organizing the Kanawha Urban Ag Alliance, seeking resources and partnerships for developing urban farming space on the West Side of Charleston, coordinating workshops for urban agriculture producers, and consulting on urban agriculture governmental ordinances.

## Results

Fifteen partners from 12 agencies worked collaboratively to plan and implement the WV Urban Agriculture Conference. They raised \$12,000 in support funds. Two hundred and thirty-two individuals attended, and 100% of those indicated that they gained knowledge and skill because they attended the two-day conference.

## 4. Associated Knowledge Areas

KA Code	Knowledge Area
604	Marketing and Distribution Practices
607	Consumer Economics

## Outcome #5

## 1. Outcome Measures

Number of producers (and other members of the food supply chain) that have increased revenue.

## 2. Associated Institution Types

• 1862 Extension

## 3a. Outcome Type:

Change in Condition Outcome Measure

### 3b. Quantitative Outcome

Year	Actual
2014	512

## 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

Specialty crop producers in West Virginia are producing over 60 types of fruits, vegetables and herbs in 2014 primarily for direct markets. The commercial horticulture program has a long term goal of increasing supply, diversity and profitability of specialty crops by increasing knowledge and skills of new and established producers. There are approximately 550 high tunnels in operation or currently being constructed across West Virginia

### What has been done

In 2014, 15 training sessions for 512 growers were conducted related to specialty crop selection, season extension, scheduling, harvest, post-harvest handling and economics with growers across

the state. Over 1200 stakeholders were contacted through on-farm visits, workshops and production meetings. Over 90,000 clients in West Virginia received information related to specialty crop production.

### Results

Grower surveys reveal gross revenue of approximately \$3.00/ft2. Thus, given an average size high tunnel of 2100 ft2, growers are generating as much as \$3,500,000 in gross farm income per year with high tunnel production in West Virginia.

### 4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
307	Animal Management Systems
308	Improved Animal Products (Before Harvest)
604	Marketing and Distribution Practices
607	Consumer Economics

### Outcome #6

## 1. Outcome Measures

Dollar amounts generated as a result of implementing new techniques or procedures

### 2. Associated Institution Types

• 1862 Extension

#### 3a. Outcome Type:

Change in Action Outcome Measure

### 3b. Quantitative Outcome

Year	Actual
2014	4039

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

There is a need in West Virginia to build, support and strengthen a statewide network of those involved in local food economies, improve access for West Virginians to healthy, locally-produced food, and help food and farm businesses to grow.

#### What has been done

WVUES faculty work with the WV Food and Farm Coalition which builds linkages among farmers, processors, distributors and others interested in making the food economy stronger. In 2014, the Food Access work group selected mobile markets as a project that had the most

potential to benefit communities. A plan was made to develop an Request For Application that would be released at the upcoming Roadmap to the Food Economy Conference. Two applications were selected to be awarded funding and establish mobile markets.

### Results

MyMobileMarket, was established in Mingo County, WV using mobile market funds. MyMobileMarket visited five limited access communities over the market season. Those five additional markets generated \$4,039 in total revenue with \$1,952 (48%) coming from CSX vouchers. The MyMobileMarket project has used the initial grant from the food access group to garner additional funds for expansion and sustainability including \$7,000 from an Entrepreneur competition. A separate \$12,000 funding opportunity coincided with the mobile market award, offering a source of revenue through farmers market vouchers. The vouchers provided a supplemental source of revenue to allow the mobile market to build community recognition and a strong customer base in its first year of operation.

## 4. Associated Knowledge Areas

KA Code	Knowledge Area
604	Marketing and Distribution Practices
607	Consumer Economics

## Outcome #7

## 1. Outcome Measures

Number of participants who increase or improve skills in animal production and health.

### 2. Associated Institution Types

• 1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

### 3b. Quantitative Outcome

Year	Actual

2014	256
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## 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

Many small producers in WV are interested in small-scale pastured poultry as a new enterprise or for income diversification. However, WV poultry producers are constrained by very limited access to small-scale, custom poultry processing facilities. This idea is very popular among young, beginning farmers and women farmers, due to the quick turn-around, low physical requirements

and environmental "friendliness". They are interested in raising poultry on pasture, processing on-farm, and selling directly to local markets/individual customers. They would like to profit from federal exemptions permitting WV farmers to sell 3,000 broilers/year directly to consumers without inspection.

### What has been done

"Small-Scale, Backyard or Pastured Poultry Production for WV Livestock Producers" is a short, hands-on agent to farmer training program that introduces an alternative enterprise opportunity for small producers to operate under the 1,000 bird exemption. Each workshop was a 3-hour workshop, consisting of a 1.5 hours of presentation session, followed by a 1.5 hour processing demonstration. The training workshops covered topics for aspiring, beginning and mid-level small-scale poultry producers. During 2013-2014, the project has trained more than 256 producers and agricultural service providers in 12 counties. Educators and producers have also received follow-up support from the program to enhance their efforts through our interactive on-line curriculum.

## Results

256 producers gained knowledge and skills in the following areas: production, nutrition and management basics; the business-side of pastured-poultry; farm/food safety and labelling issues, and rules/regulations for direct marketing; and scale-appropriate processing equipment and processes.

## 4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems
308	Improved Animal Products (Before Harvest)
604	Marketing and Distribution Practices

## Outcome #8

### 1. Outcome Measures

Number of participants who increase or improve skills in weed or pest management.

## 2. Associated Institution Types

1862 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

### 3b. Quantitative Outcome

Year	Actual
2014	200

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

Due to high humidity and optimum temperatures during the growing season, commodity growers, homeowners, and nursery and lawn care professionals experience very high insect and disease pressure on plants they grow. Many plant problems are environmental and/or related to imbalance in nutrition. Most small growers and home owners apply pesticides without precisely knowing the problem. Management initiatives of plant problems should be taken only after confirming the actual cause by collecting the right sample and sending it through county offices to the reputable diagnostic clinic.

# What has been done

WVU plant and pest diagnostic clinic obtained funding from National Plant Diagnostic Network and the North East IPM center to conduct educational programs on the importance of diagnostics and using appropriate products on a need basis only. The WVU Extension integrated pest management team organized a mobile pest ID clinic in Kanawha, Braxton, Jefferson, Marshall, Clay, and Mineral counties. Small growers and master gardeners learned about the diagnostic facilities in Morgantown. In addition, a quarterly newsletter, "IPM Chronicle" highlights the usefulness of monitoring and diagnostics.

# Results

The WVU Plant and Pest Diagnostic Clinic obtained over 400 samples which is double the number collected in 2013. This increase was attributed to behavioral changes of clientele who, because of their attendance at clinics, had decided to make pest management decisions based on diagnostic data. Recommendations and follow up conversation with those clientele revealed that they improved their knowledge on the importance of diagnostics and made decisions to collect samples and mail them to Morgantown. Out of those 400 clients, 50% indicated that they did it because of their improved awareness of the need to use data to make decisions, and would do the same if they encounter pest problems in the future.

# 4. Associated Knowledge Areas

KA Code	Knowledge Area
213	Weeds Affecting Plants
216	Integrated Pest Management Systems

# Outcome #9

# 1. Outcome Measures

Number of participants who increase or improve skills in aquaculture.

Not Reporting on this Outcome Measure

### Outcome #10

### 1. Outcome Measures

Number of participants who increase or improve a skill in nutrient management.

### 2. Associated Institution Types

• 1862 Extension

### 3a. Outcome Type:

Change in Knowledge Outcome Measure

### 3b. Quantitative Outcome

Year	Actual

2014 400

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Many plant problems are environmental and/or related to imbalance in nutrition. Surveys showed that most small growers and home owners buy pesticide products from local stores and apply it without knowing the problem. It is critical that management initiatives of plant problems are taken only after confirming the cause by collecting the right sample and sending it through county office to the reputable diagnostic clinic. This has the potential to minimize pesticide use.

### What has been done

WVU plant and pest diagnostic clinic obtained funding from National Plant Diagnostic Network and NE-IPM center to conduct educational programs to raise awareness about the importance of diagnostics and use of only appropriate products on a need basis. Educational programs offered by WVU Extension ANR unit integrated pest management team by organizing mobile pest ID clinic in Kanawha County, Braxton County, Jefferson County (2013); Marshall county, Clay County and Mineral County (2014). Small growers and master gardeners learned about the importance of diagnostics and facilities in Morgantown. In addition, quarterly newsletter IPM chronicle also highlighted the usefulness of monitoring and diagnostics.

#### Results

WVU Plant and Pest Diagnostic Clinic obtained over 400 samples which is double compared with 2013. This increase in sample was attributed to behavioral changes of clientele on making pest management decisions based on diagnostic data. Recommendations and follow up conversation with those clientele revealed that they improved their knowledge on the importance of diagnostics and made decisions to collect samples, fill out Clinic form and mail those to Morgantown. Out of those 400 clients, 50% indicated that they did it because of the improved awareness and would like to do the same if they encounter pest problems in the future.

### 4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
216	Integrated Pest Management Systems

### Outcome #11

### 1. Outcome Measures

Number of farmers who produce ethnic specialty crops.

# 2. Associated Institution Types

• 1862 Extension

# 3a. Outcome Type:

Change in Action Outcome Measure

### 3b. Quantitative Outcome

Year	Actual
2014	4

### 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

There are over 160,000 individuals legally living within 75 miles of Jefferson County, in the eastern panhandle, who were born outside the US. From 2000 to 2010 there was a 239% increase in number of persons of Hispanic or Latino origin and it is unclear how many undocumented immigrants also live in this area. This is a largely untapped consumer population. However, in Jefferson County, we have a deficit in production. When you can sell all you raise, it is difficult to convince people to try completely new crops.

### What has been done

Extension educators in the eastern panhandle of WV have focused on introducing ethnic specialty crops. This year we hosted a farm tour for UDC ethnic specialty crops farmers. They visited our largest farmers market, local farms, and our urban Ag demonstration. To increase traditional specialty crops, we are adding a greenhouse with funds from the county revolving high tunnel loan fund.

### Results

This year, four specialty producers have become fully operational. A new aqua-ponics producer has begun production. One WV ethnic producer visited UDC farms to consider his options to produce ethnic specialty crops.

KA Code	Knowledge Area
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604 Marketing and Distribution Practices

# V(H). Planned Program (External Factors)

# External factors which affected outcomes

- Economy
- Competing Programmatic Challenges
- Other (funding)

# **Brief Explanation**

Normal problems for small farmers related to production costs and market factors.

# V(I). Planned Program (Evaluation Studies)

### **Evaluation Results**

Evaluation for the **WV Urban Agriculture Conference** includes the amount of funding raised for the conference, number of attendees, and overall conference evaluation results from participants. Evaluation for these methods are varied, based on the activity. Corresponding to the numbered list above, evaluation data include:

- 1. Number of community gardens served
- 2. Number of active participants and contacts through online media
- 3. Amount of funds secured and partners involved
- 4. Number of participants
- 5. Number of contacts made with local government members concerning urban agriculture

Fifteen partners from 12 agencies were involved in the planning process and contributed \$12,000 in funding to get the conference running. Beyond all of the planning committee's expectations, 232 individuals attended the two-day conference. Of responses to the post-conference evaluation, 97 percent of respondents categorized the conference as either very good or excellent, and 100 percent indicated gaining at least one new skill and learning about one idea during the conference.

WVU Plant and Pest Diagnostic Clinic obtained over 400 samples which is double compared with 2013. This increase in sample was attributed to behavioral changes of clientele on making pest management decisions based on diagnostic data. Recommendations and follow up conversation with those clientele revealed that they improved their knowledge on the importance of diagnostics and made decisions to collect samples, fill out Clinic form and mail those to Morgantown. Out of those 400 clients, 50 percent indicated that they did it because of the improved awareness and would like to do the same if they encounter pest problems in the future.

### Key Items of Evaluation

The WV Urban Agriculture Conference was held for the first time in 2014. Evaluations show a large of collaboration among agencies in Charleston, WV. Evaluations indicate that participants learned skills they can use to conduct agriculture initiatives in urban areas.

Evaluations show that citizens of WV are making pest management decisions based on diagnostic data.

# V(A). Planned Program (Summary)

# Program # 5

# 1. Name of the Planned Program

Strengthening Families

☑ Reporting on this Program

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

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
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: 2014	Exter	nsion	Rese	arch
fear: 2014	1862	1890	1862	1890
Plan	26.0	0.0	0.0	0.0
Actual Paid	24.0	0.0	0.0	0.0
Actual Volunteer	3525.0	0.0	0.0	0.0

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

Exte	ension	Res	earch
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
390000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
1341788	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 2014, the Strengthening Families 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 organizations in order to strengthen families; 4) increasing the number of participants who are certified to provide childcare and offer relationship, parenting or financial education; and 5) increasing the amount of money raised as in-kind contributions to sustain programs.

This year there were 283 educational activities and 15,437 direct contacts recorded.

**<u>Financial Management</u>** - The major initiative within this program area was Reality Store.

**<u>Parenting Education</u>** - The major initiatives within this program area were: Healthy Families/Healthy Children program, Parenting Piece by Piece, Stewards of Children, Military Families, and Parenting Apart.

<u>Adult Relationship Education</u>- The major initiatives within this program area were: Healthy Families/ Healthy Children, The Five Love Languages, and Marriage Preparation Training.

**<u>Childcare Training</u>** -The major initiative in this area is the ACDS Childcare Provider Training.

# Adult Education

WVUES Extension faculty serve as liaisons and provide educational resources to the CEOS groups in West Virginia. Many faculty write and publish lesson plans for CEOS club meetings. There are approximately 4,000 members in West Virginia.

### 2. Brief description of the target audience

West Virginia parents, childcare providers in WV, older adults in WV, kin caregivers in WV, school teachers, WV citizens in significant relationships, Extension agents, social service personnel

# 3. How was eXtension used?

One faculty member is the lead for a learning community of practice under the Military Families Learning Network. It is the Caregiving Special Needs Concentration Area. In this capacity, she also serve as the PI for a \$73,000.00 grant from the Department of Defense (sub-award under Texas A&M).

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

# 1. Standard output measures

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	7502	215650	7935	0

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

Year:

2014

Actual:

#### 0

# **Patents listed**

# 3. Publications (Standard General Output Measure)

# **Number of Peer Reviewed Publications**

2014	Extension	Research	Total
Actual	8	4	12

# V(F). State Defined Outputs

# **Output Target**

# <u>Output #1</u>

# **Output Measure**

• Number of educational activities

Year	Actual
2014	283

# Output #2

# **Output Measure**

• Number of educational materials created or updated.

Year	Actual
2014	8

# Output #3

# **Output Measure**

• Number of educational materials distributed.

Year	Actual
2014	215650

# Output #4

# **Output Measure**

• Number of professional presentations

Year	Actual
2014	26

# V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content	
O. No.	OUTCOME NAME
1	Number of participants who increased their skills in family relationships.
2	Number of participants who improve or increase their skills in family financial management.
3	Number of participants who change a behavior or use a new skill related to family management.
4	Number of participants who train others
5	Amount of money raised by participants to support the program
6	Number of people certified or license to practice in the field
7	Number of new groups or organizations that are established or enhanced
8	Number of economic improvements related to families.
9	Number of social improvements related to families.
10	Number of participants who increase or improve their skills in parenting.

# V. State Defined Outcomes Table of Content

### Outcome #1

### 1. Outcome Measures

Number of participants who increased their skills in family relationships.

### 2. Associated Institution Types

• 1862 Extension

### 3a. Outcome Type:

Change in Knowledge Outcome Measure

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

Year	Actual
2014	116

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Although Goddard, Marshall, Olson, and Dennis (2012) noted the presence of a number of empirically validated curricula for relationship and marriage education, other Extension educators (Adler-Baeder, Higginbotham, & Lamke, 2004) have argued that many couple education programs are only loosely connected to research and are rarely evaluated.

### What has been done

One popular relationship and marriage Education program used in WV is based on "The Five Love Languages" (Chapman, 2004). The team developed a PowerPoint and handouts to standardize the program and spread it to other counties and states. A CEOS lesson entitled "Connecting with Others Using the Five Love Languages" is published online at http://fh.ext.wvu.edu/publications/ceos-lessons. Acknowledging the importance of demonstrating measurable impact as a base for future funding, we initiated research to measure impact of this popular program. In two trials, 116 participants participated in two versions of the training; one with only a didactic presentation, and one with a presentation and follow-up reminders to practice

### Results

For both groups ? Significant change on all items shows knowledge and confidence gained. I feel confident that:

- --I know my Love Language. (t -5.47, p<0.05).
- --I know my partner's Love Language. (t -4.69, p<0.05)
- --I can communicate using my partner's Love Language. (t -4.86, p<0.05).
- --I can work through conflicts using my knowledge of the Five Love Languages. (t -2.73, p<0.05).

93% said that they intended to do something differently as a result of attending the classes.

### 4. Associated Knowledge Areas

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

### Outcome #2

# 1. Outcome Measures

Number of participants who improve or increase their skills in family financial management.

# 2. Associated Institution Types

• 1862 Extension

# 3a. Outcome Type:

Change in Knowledge Outcome Measure

# 3b. Quantitative Outcome

Year	Actual
2014	0

# 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why) {No Data Entered}

# What has been done

{No Data Entered}

# Results

{No Data Entered}

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 change a behavior or use a new skill related to family management.

# 2. Associated Institution Types

• 1862 Extension

# 3a. Outcome Type:

Change in Action Outcome Measure

# **3b. Quantitative Outcome**

Year	Actual

2014 159

# 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

Deployments and multiple relocations are an integral part of life for military families. Sometimes fear of stigma gives way to hesitancy to seek help (Drummet, Coleman, & Cable 2003). As compared to national statistics, West Virginia has a high per capita military population; the fourth highest in the nation. Most military families in West Virginia have no military base, and this prevents them from readily accessing resources.

### What has been done

In 2012, WVUES in Harrison County formed "North Central West Virginia Joining Community Forces" (NCWVJCF). This outreach focuses on health literacy and financial education. Participants learn to keep updated medical records, communicate with health care providers, and utilize health history journals. NCWVJCF added eight new members in 2014 and distributed 73 adult health literacy journals and 86 children's health literacy journals to military families. NCWVJCF continued the Brown Bags for Vets project, the Purple up Event for Military Kids, and the Military Teen Adventure Camp. All of these projects serve healthy foods to military families.

### Results

Retrospective surveys were completed following financial and health literacy presentations.

Participants indicated that they had learned certain skills during the presentations: keep updated medical history, (4 to 41 percent), have family health history (4 to 37 percent), take a list of health concerns to doctor's visit (4 to 49 percent), have an updated medication list (22 to 57 percent), be confident to ask questions of my doctor (16 to 57 percent).

NCWV JCF added eight new members even though there was a loss of influential members due to relocations of positions in members' military service.

Brown Bags for Vets distributed more than 200 pounds of food this year for veterans and their families in need.

# 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 train others

### 2. Associated Institution Types

• 1862 Extension

### 3a. Outcome Type:

Change in Action Outcome Measure

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

Year	Actual
2014	0

# 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why) {No Data Entered}

# What has been done

{No Data Entered}

# Results

{No Data Entered}

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

### Outcome #5

### 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
2014	25400

# 3c. Qualitative Outcome or Impact Statement

# Issue (Who cares and Why)

In the Gallup-Healthways Index, West Virginia residents have the lowest overall well-being for the fourth year in a row, with a Well-being Index score of 61.3 in 2012 -- slipping slightly lower than the 62.3 in 2011 (US 66.7). Depression is common, under-recognized, and under-treated among West Virginians. In a 2007 study of depression and utilization of available mental health resources by Mental Health America, West Virginia ranks 2nd highest out of 51 (includes District of Columbia) for incidence of depression and poor mental health outcomes (Thomson Healthcare, 2007).

### What has been done

The family life specialist developed a five session curriculum titled Stress Less with Mindfulness as well as numerous educational articles, web-based resources, and discussion leaders' guides related to emotional well-being. 12 stress management workshops reaching 370 individuals were held. Stress Less with Mindfulness was a second place National NEAFCS winner for best Health and Wellness Program, and first-place winner for West Virginia and the Northeast region. Twenty-two additional Extension educators in WV, Michigan, and Washington were certified to teach the Stress Less with Mindfulness program this year.

### Results

The WV health insurance program, PEIA, covered insured individuals who wanted to participate in the Stress Less with Mindfulness program. WVU Extension received \$25,400 in cost recovery payments for these workshops. This money was used to support other family educational programs. In addition, 93 percent of participants in the Stress Less with Mindfulness program indicated that they would do things differently because they participated in the workshop. The most common things that participants said they would do differently were: mindful breathing, laughing more, being more mindful of eating, walking, and their responses to stress.

### 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

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
2014	0

### 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

It is important for WV to invest in early childhood care. Everyday nationally five million children attend child care. The care that children get needs to be of the highest quality possible. There is a direct correlation between the amount and quality of training that early childhood educators receive and the quality of care that they pass on to young children.

### What has been done

WV has a nationally recognized Apprenticeship for Child Development Specialist (ACDS) program that is a four-semester training program for those employed in early care programs. ACDS promotes highly skilled, confident, early childhood employees: quality early childhood settings; and informed, supportive, early childhood professionals. Graduates received national certification through the US Department of Labor. This year, WVUES agents evaluated knowledge gained by ACDS apprenticeship students throughout the state and determined program integrity, demographics, and short- and long-term retention of knowledge, and overall satisfaction with the ACDS educational experience.

### Results

24 childcare workers were certified in 2014.

Data supports student competency in major content areas across all four semesters. Regardless of the location, students were able to answer questions correctly with a high level of accuracy.

There is strong retention of knowledge over semesters. Regardless of the semester, students answered questions correctly with a high level of accuracy.

Students reported that the ACDS program helped them to be better childcare providers.

Students reported positive interactions with ACDS instructors.

### 4. Associated Knowledge Areas

#### KA Code Knowledge Area

802 Human Development and Family Well-Being

### Outcome #7

### 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

2014 7

### 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

The impact of recent high profile sexual abuse cases has been a dramatic shift in public opinion about the common occurrence of child sexual abuse and the damaging impacts on children. Although most would agree that keeping West Virginia's children safe from sexual and physical abuse is a high priority, willingness for adults to take action is another matter. Worries about possibly being misinformed, retribution, embarrassment, and lack of information have contributed to the continued endangerment of many children by adults and older children. Individuals are becoming more ready to talk about this difficult topic and take action if given specific, safe steps to do so

### What has been done

WVU-ES specialists and agents have become certified in Stewards of Children: From Darkness to Light, an evidence-based program designed to encourage organizations to implement policies

which discourage child predators from volunteering or working there. This program was designated as a Priority Program by the WVU-ES Relationship and Parent Education Team as was Making a Difference: Mandate to Report, Responsibility to Prevent Child Abuse & Neglect. Four classes were held for 82 childcare providers and Nutrition Outreach Instructors. A partnership with the north central WV Child Care Resource Center to train center-based and inhome child care providers was developed. We also created a Stewards listserv to share resources and protocols.

### Results

Six outside groups requested educational programs on preventing and reducing child abuse from WVU-ES. WVU-ES developed a new partnership with Child Resource Center, Charleston who reimbursed Extension 50% of cost of participant workbooks. Eighty childcare providers received training related to prevention and reporting of child sexual abuse.

# 4. Associated Knowledge Areas

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

# Outcome #8

# 1. Outcome Measures

Number of economic improvements related to families.

Not Reporting on this Outcome Measure

### Outcome #9

# 1. Outcome Measures

Number of social improvements related to families.

Not Reporting on this Outcome Measure

### Outcome #10

# 1. Outcome Measures

Number of participants who increase or improve their skills in parenting.

Not Reporting on this Outcome Measure

# V(H). Planned Program (External Factors)

### External factors which affected outcomes

- Economy
- Competing Public priorities
- Competing Programmatic Challenges

### **Brief Explanation**

There was one specialist on leave for part of the year, so some programs were not offered.

### V(I). Planned Program (Evaluation Studies)

#### **Evaluation Results**

Parenting Piece by Piece Do you intend to do anything differently after hearing this information today? 40 (78%) Yes 11 (22%) No

# If yes, please describe one or two thing you will do differently after participating in this program.

Talk and listen to my child (12); Different ways to discipline (7); learn patience (2); Step back and think before I speak (3); Listen more (5); Think before react; communication(2);Use stress relievers to resolve problems in relationships (2); Contact my resources (2); Try to stay more positive about a situation, fix it and not go off! Be aware of my child's feelings; Conflict is between 2 or more people; Take a breather before or when upset; Three things I am grateful for; Be a role model; no bribes, just rewards; Talk to my daughter-spend time with her; Make my house child proof; Lead more by example; Rewards and values; make choices when to go for help; open up and play with my kids more

### Make Your Money Matter

**Two Things I learned**: How to budget(10); Every dollar has a name (5); Impulse buying (3); Saving tips (2); pay yourself first (2); Needs(2); manage money better(2); fixed/variable expenses; To start young; I need to control my spending; Write down your plan.

**From this program, in the coming month or so I will use:** A budget (11); Everything(2);The savings method; Knowledge of saving; Break down my budget to include more details with a remaining balance of zero; The budget sheet; The subtraction of funds; Less credit.

### Stewards of Children: From Darkness to Light

Of the 60 people attending the Stewards workshops, 53 turned in completed matched pre- and posttests. T-tests on the questions showed significant gains in two areas: 1) 10 of 17 questions measuring knowledge about child sexual abuse and 2) willingness of adults to engage in behaviors to protect children.

\*A remarkable finding is that parents and professionals **increased willingness to change 100% of the behaviors** identified as protecting children.

### Key Items of Evaluation

All of our family life programs use an evaluation form which asks participants what they learned and how they intend to change their behavior as a result of the program. More follow-up is needed to measure change over time.

# V(A). Planned Program (Summary)

# Program # 6

# 1. Name of the Planned Program

Climate Change

☑ Reporting on this Program

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

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	25%			
123	Management and Sustainability of Forest Resources	30%			
124	Urban Forestry	10%			
125	Agroforestry	20%			
605	Natural Resource and Environmental Economics	15%			
	Total	100%			

# V(C). Planned Program (Inputs)

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

Year: 2014	Exter	nsion	Research		
fear: 2014	1862	1890	1862	1890	
Plan	11.0	0.0	0.0	0.0	
Actual Paid	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)

Exte	ension	Res	earch
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
205000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
17506	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 2014, the Climate Change planned program at West Virginia University Extension worked towards developing an agriculture system that maintains high productivity in the face of climate changes. It helps producers plan for and make decisions to adapt to changing environments and sustain economic vitality and take advantage of emerging economic opportunities offered by climate change mitigation technologies.

Objectives addressed in this program area include:

• Decrease risk and loss to farming operations through use of risk mitigation tools and control of predation

- Improve woodlot conditions and expand forest and non-timber product production
- Improve the business and management competencies of forest/wood industry businesses.

• Increase compliance with and knowledge of the WV Best Management Practices for controlling soil erosion and sedimentation from logging operations.

• Increase the capacity of local communities and landowners in nutrient management and sustainability

Activities in this program area fall under several categories related to the protection of natural resources including: composting and utilization, nutrient management, forestry, logging and milling, hay production, and grassland management. Topics include: agricultural and cover crop, calibration methods & demonstration, WV GreenUp logging, forage economics, forage sampling and testing, nutrient management, grassland management, risk mitigation.

This year, there were 92 educational activities and 8,734 direct contacts reported in the climate change program area.

# 2. Brief description of the target audience

Target audiences include private forestland owners, forestry professionals, researchers, general public.

# 3. How was eXtension used?

One specialist wrote a "waste to worth" abstract which is posted on eXtension. One specialist answered 5 "ask and expert" questions via extension.org.

# V(E). Planned Program (Outputs)

# 1. Standard output measures

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	4734	4000	3623	0

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

Year:	2014
Actual:	0

### **Patents listed**

# 3. Publications (Standard General Output Measure)

# **Number of Peer Reviewed Publications**

2014	Extension	Research	Total
Actual	18	7	25

# V(F). State Defined Outputs

# **Output Target**

# Output #1

### **Output Measure**

• Number of educational climate control educational activities

Year	Actual
2014	92

# Output #2

### **Output Measure**

• Number of educational materials about climate control created or updated

Year	Actual
2014	2

# Output #3

# **Output Measure**

• Number of professional presentations about climate control

Year	Actual
2014	88

### Output #4

### **Output Measure**

• Number of educational materials about climate control distributed

Year	Actual
2014	4000

# Output #5

# **Output Measure**

• Number of current year climate control relevant research programs Not reporting on this Output for this Annual Report

# V(G). State Defined Outcomes

	V. State Defined Outcomes Table of Content
O. No.	OUTCOME NAME
1	Number of participants who increase their knowledge of management practices under climate variability and change
2	The number that adopted recommended adaptation strategies for production agriculture and natural resources management, including invasive species, pest management, pollutant loads, wetlands.
3	Number of participants who adopt recommended climate mitigation practices.
4	Number of groups or organizations that change their procedures and/or policies regarding climate control
5	Number of economic improvements
6	Number of environmental improvements
7	Number of participants who gained knowledge and skill about the economic and ecological value of wildlife.
8	Number who increased their knowledge of adaptive strategies for production agriculture and natural resource management.

### Outcome #1

### 1. Outcome Measures

Number of participants who increase their knowledge of management practices under climate variability and change

### 2. Associated Institution Types

• 1862 Extension

### 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

Year	Actual
2014	225

# 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

The purpose of Renewable Resources Extension Act (RREA)-supported programs in West Virginia is to put landowners in touch with natural resources professionals and to educate citizens about forests, wildlife, and water resources. Education programs developed for the 270,000 private landowners aim to demonstrate the importance of natural resources and how these resources can be managed to assure they are available for current and future use. Stakeholders include Master Gardeners, Master Naturalists, WV Woodland Stewards, and Woodland Owners Association members, and programs are carried out with funds from educational grants (e.g., USDA Redesign, WV Forest Stewardship Program).

#### What has been done

The first West Virginia Women Working in their Woods event was carried out in 2014. Twentyfive women woodland owners participated in the event held at Jackson's Mill State 4H Camp. Woodland owners networks, groups of individuals participated in "Walks in the Woods" and other natural resources seminars. In 2014, over 200 woodland owners, nature enthusiasts, and interested citizens participated in these educational opportunities.

#### Results

225 participants in woodland educational activities gained knowledge and skill about the importance of natural resources and how these resources can be managed to assure they are available for current and future use.

# 4. Associated Knowledge Areas

### KA Code Knowledge Area

123 Management and Sustainability of Forest Resources

### Outcome #2

# 1. Outcome Measures

The number that adopted recommended adaptation strategies for production agriculture and natural resources management, including invasive species, pest management, pollutant loads, wetlands.

### 2. Associated Institution Types

• 1862 Extension

### 3a. Outcome Type:

Change in Action Outcome Measure

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

Year	Actual
Year	Actual

2014 0

# 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why) {No Data Entered}

# What has been done

{No Data Entered}

### Results

{No Data Entered}

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
123	Management and Sustainability of Forest Resources
124	Urban Forestry
125	Agroforestry
605	Natural Resource and Environmental Economics

### Outcome #3

# 1. Outcome Measures

Number of participants who adopt recommended climate mitigation practices.

# 2. Associated Institution Types

• 1862 Extension

#### 3a. Outcome Type:

Change in Action Outcome Measure

# 3b. Quantitative Outcome

2014 0

### 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why) {No Data Entered}

# What has been done

{No Data Entered}

### Results

{No Data Entered}

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
123	Management and Sustainability of Forest Resources
124	Urban Forestry
125	Agroforestry
605	Natural Resource and Environmental Economics

#### Outcome #4

# 1. Outcome Measures

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

# 2. Associated Institution Types

• 1862 Extension

### 3a. Outcome Type:

Change in Action Outcome Measure

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

Year	Actual

2014 0

# 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why) {No Data Entered}

# What has been done

{No Data Entered}

### Results

{No Data Entered}

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
123	Management and Sustainability of Forest Resources
124	Urban Forestry
125	Agroforestry
605	Natural Resource and Environmental Economics

### Outcome #5

# 1. Outcome Measures

Number of economic improvements

# 2. Associated Institution Types

• 1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

# 3b. Quantitative Outcome

2014 0

# 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why) {No Data Entered}

# What has been done

{No Data Entered}

### Results

{No Data Entered}

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
123	Management and Sustainability of Forest Resources
124	Urban Forestry
125	Agroforestry
605	Natural Resource and Environmental Economics

### Outcome #6

# 1. Outcome Measures

Number of environmental improvements

# 2. Associated Institution Types

• 1862 Extension

# 3a. Outcome Type:

Change in Condition Outcome Measure

# 3b. Quantitative Outcome

2014 0

# 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why) {No Data Entered}

# What has been done

{No Data Entered}

### Results

{No Data Entered}

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
123	Management and Sustainability of Forest Resources
124	Urban Forestry
125	Agroforestry
605	Natural Resource and Environmental Economics

### Outcome #7

### 1. Outcome Measures

Number of participants who gained knowledge and skill about the economic and ecological value of wildlife.

# 2. Associated Institution Types

• 1862 Extension

### 3a. Outcome Type:

Change in Knowledge Outcome Measure

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

Year	Actual

2014 225

# 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Bats provide economic and ecological value to West Virginia. Bats eat bugs, and if bats had to be replaced with pesticides it would pose potential health and pollution threats because of greater levels of toxins in the environment. Landowners, would also have to expend greater funds on pesticides which would reduce their income.

### What has been done

Our wildlife specialist has developed a workshop/presentation entitled "Bats of West Virginia and Beyond," that he has presented to seven audiences for a total of 342 participants ranging in age from elementary school students to professional foresters, legislators and other adult learners.

### Results

342 participants gained a better understanding of the natural history of bats in West Virginia, the ecological services they provide, and how to better manage their habitats.

# 4. Associated Knowledge Areas

# KA Code Knowledge Area

605 Natural Resource and Environmental Economics

#### Outcome #8

### 1. Outcome Measures

Number who increased their knowledge of adaptive strategies for production agriculture and natural resource management.

### 2. Associated Institution Types

• 1862 Extension

### 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

Year	Actual
2014	0

### 3c. Qualitative Outcome or Impact Statement

### Issue (Who cares and Why)

Extension is charged with increasing the capacity of local communities and landowners to manage and sustain nutrients in the soil.

#### What has been done

In 2014, a number of educational activities were offered to land owners interested in managing and sustaining the nutrients in their soil. These initiatives include: reviewing winter feeding BMPs with livestock farmers, making presentations on the effectiveness of poultry litter for forage production, developing and promoting new site specific tools (GPS & GIS) to manage nutrients, making presentations to home gardeners on the fundamentals of soil management, adding vegetable crops to a new Extension soil fertility spread sheet tools and corresponding fact sheets, and speaking to golf course managers about new WV specific nutrient management tools available for their use.

### Results

437 participants in WVUES programs on soil management and sustainability gained knowledge and skills in winter feeding BMPS with livestock, using poultry litter for forage production, and using nutrient management tools.

### 4. Associated Knowledge Areas

#### KA Code Knowledge Area

102 Soil, Plant, Water, Nutrient Relationships

# V(H). Planned Program (External Factors)

# External factors which affected outcomes

- Economy
- Government Regulations
- Competing Programmatic Challenges

# **Brief Explanation**

# V(I). Planned Program (Evaluation Studies)

# **Evaluation Results**

None

# Key Items of Evaluation

Faculty use satisfaction surveys only in this program area.

# V(A). Planned Program (Summary)

# Program # 7

# 1. Name of the Planned Program

# Food Safety

☑ Reporting on this Program

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

# 1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
501	New and Improved Food Processing Technologies	20%			
502	New and Improved Food Products	40%			
504	Home and Commercial Food Service	40%			
	Total	100%			

# V(C). Planned Program (Inputs)

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

Year: 2014	Extension		Research	
fedi. 2014	1862	1890	1862	1890
Plan	7.0	0.0	0.0	0.0
Actual Paid	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)

Exte	ension	Res	earch
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
509270	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
1144799	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 2014, 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. In 2014, there were 103 educational activities in the community food preparation program area and 4901 direct contacts.

# Community Food Preparation

The major initiatives included food preservation and canning workshops/demonstrations, and Venison 101.

# Commercial Food Preparation

The major initiatives include ServSafe® Manager Food Safety Training, a food business workshop, a food defense workshop, Venison 101, and HACCP training.

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. She offered workshops based on her research.

# **Beef Quality Assurance**

The major initiatives included beef quality assurance certification, levels I and II; beef quality assurance for WVU farm worker; WVU-ES winter education series; the WV cattlemen's short course for producers; the West Virginia quality assurance feeder calf sale hands on vaccination training; Morgantown calf pool; Wardensville bull sale; bull test and Heifer evaluation sales; and 4-H Beef Quality Assurance. The programs are a valuable tool to help producers keep up-to date on new technology to insure that proper training and techniques are utilized when administering vaccines or animal health products. The members of the WV feeder cattle marketing pools and consignors to the WV Bull evaluation programs are recertified every two years.

# 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

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	2722	45325	2179	0

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

Year:	2014
Actual:	0

### **Patents listed**

# 3. Publications (Standard General Output Measure)

# **Number of Peer Reviewed Publications**

2014	Extension	Research	Total
Actual	1	2	3

# V(F). State Defined Outputs

# **Output Target**

# Output #1

### **Output Measure**

• Number of educational activities focused on increased safety of all inputs into the food chain

Year	Actual
2014	103

### Output #2

### **Output Measure**

 Number of educational materials created or updated focused on increased safety of all inputs into the food chain

Year	Actual
2014	1

# Output #3

# **Output Measure**

 Number of educational materials distributed focused on increased safety of all inputs into the food chain.

Year	Actual
2014	45325

# Output #4

### **Output Measure**

• Number of professional presentations on food safety

Year

Actual
2014 29

# V(G). State Defined Outcomes

# V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME		
1	Number of participants who increase or improve their skill in proper time and temperature controls in food preparation.		
2	Number of participants who improve or increase skills in safe food handling practices.		
3	Number of growers, producers, and food workers completing food safety certification.		
4	Number of improved prevention, detection, control and intervention technologies adopted.		
5	Number of projects characterizing social, economic, and/or cultural practices attributed to foodborne illness.		
6	Number of new or improved materials for teaching proper time and temperature controls in food preparation		
7	Number of projects to enhance knowledge of Beef Quality Assurance practices		

# Outcome #1

# 1. Outcome Measures

Number of participants who increase or improve their skill in proper time and temperature controls in food preparation.

Not Reporting on this Outcome Measure

# Outcome #2

# 1. Outcome Measures

Number of participants who improve or increase skills in safe food handling practices.

# 2. Associated Institution Types

• 1862 Extension

# 3a. Outcome Type:

Change in Knowledge Outcome Measure

# 3b. Quantitative Outcome

Year	Actual	
2014	22	

# 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Nationally, demand for local foods has because of consumers' concerns about safety of imported products, their trust that "neighbors" will adopt food safety standards, and their awareness that traditional foods often leave a heavy carbon footprint. There are increased opportunities for farmers and other non-farmer entrepreneurs to introduce and sell new foods in their communities. However, manufacturing and selling products that customers ingest opens the seller to unique business liability. It is therefore important that food entrepreneurs receive education and support from Extension to effectively establish and manage their ventures.

#### What has been done

West Virginia University Extension Service partnered with Penn State Extension to bring the "Food for Profit" program (one-day face-to-face workshop, a self-paced Internet training, and a series of Extension Fact Sheets) to West Virginia, providing needed education to potential food entrepreneurs, empowering them to successfully conduct a feasibility study and launch viable businesses. Participants of the workshop also learned about 6 key business risk management strategies. Food for Profit? (FFP) workshops were held in Kanawha and Barbour counties; a total of 22 people attended.

#### Results

The results of the evaluation with 18 participants indicated that: 44% (n=8) intended to become GAP/GHP certified or require such certification from their suppliers; 50% (n=9) wanted to develop a proactive recall plan; 39% (n=7) intended to procure adequate, appropriate insurance coverage, and/or notify consumers of potential or actual food allergens in their products; 33% (n=6) intended to determine and adopt good management practices; and 22% (n=4) intended to adopt HACCP practices or require it from co-packers who would manufacture and package their product. When asked what "next steps" they planned to take as result of attending the workshop, participants responded with following: have a good business plan, clean everything with disinfectant after washing with soap, send info/product for testing, work to obtain interstate certification for a product, work with supplier to see about product shipment & costing, have labels approved, check pricing/cost analysis of various products, do market research to increase sales, adhere to proper labeling, and read over insurance to add more liability coverage.

#### 4. Associated Knowledge Areas

#### KA Code Knowledge Area

504 Home and Commercial Food Service

# Outcome #3

# 1. Outcome Measures

Number of growers, producers, and food workers completing food safety certification.

# 2. Associated Institution Types

• 1862 Extension

#### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

Year	Actual		
2014	63		

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

#### Issue (Who cares and Why)

In many counties the health department requires that there is a person certified in ServSafe in charge at every food venue whenever it is open for business.

#### What has been done

Food safety classes were taught by Extension agents and retired county sanitarians. Those seeking re-certification took an online class or did a self-study by studying the text book, however the agents proctored the exams. The ServSafe Food Handler Program provides food safety

training to food handlers. The program covers five key areas: basic food safety, personal hygiene, cross-contamination & allergens, time & temperature, cleaning & sanitation.

#### Results

57 people gained national food safety certification as a direct result of teaching by WVUES Extension agents. In addition 6 people gained re-certification.

# 4. Associated Knowledge Areas

#### KA Code Knowledge Area

504 Home and Commercial Food Service

#### Outcome #4

#### 1. Outcome Measures

Number of improved prevention, detection, control and intervention technologies adopted.

#### 2. Associated Institution Types

• 1862 Extension

#### 3a. Outcome Type:

Change in Action Outcome Measure

#### 3b. Quantitative Outcome

Year	Actual		
2014	1		

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

#### Issue (Who cares and Why)

The beef industry in West Virginia is characterized by small farms where one or more members of the household work off the farm. Often off-farm employment may be seasonal or part-time, so farm income is a critical for many West Virginians. Because small-scale beef producers lack the critical mass to participate in commodity marketing strategies, farm revenue is not maximized and is frequently insufficient to justify full time employment. Cooperative marketing pools offer producers an opportunity to maximize returns 1) for above average management, health, and genetics; and 2) by marketing in commodity sized groups.

#### What has been done

To meet the demands of feeder cattle buyers and enhance the reputation of West Virginia feeder cattle, a system of cooperative marketing groups, known as pools, requiring improved management and genetics was implemented. To increase the number of cattle offered and attract a greater number of buyers, sales in 2014 utilized an online viewing tool created by WVU Extension. Extension personnel provided technical assistance and advice, delivered educational programming and extended organizational support to marketing pools.

#### Results

The total value of the 4,755 cattle (2,936 steers and 1,819 heifers) marketed through the 2014 WV Feeder Cattle Marketing Program was \$7,208,109 for an average (steers and heifers) of \$1,516/head. In contrast, these same calves would have only been worth \$1,425/head or a total of \$6,772,838 if marketed through the traditional graded sales. Cooperating producers returned an additional \$91.54/head marketed or a total of \$435,270 relative to equivalent weight class graded sale prices. The average producer was able to return an additional \$3,662 to their operation. While the costs of preconditioning calves can vary dramatically, producers marketing calves in the pools can expect to add value to their product regardless of their chosen program. When these increases in value are combined on a per head basis, along with an estimated savings in marketing charges, the total value added is \$271/head.

# 4. Associated Knowledge Areas

KA Code	Knowledge Area
501	New and Improved Food Processing Technologies
502	New and Improved Food Products

# Outcome #5

#### 1. Outcome Measures

Number of projects characterizing social, economic, and/or cultural practices attributed to foodborne illness.

Not Reporting on this Outcome Measure

#### Outcome #6

#### 1. Outcome Measures

Number of new or improved materials for teaching proper time and temperature controls in food preparation

# 2. Associated Institution Types

1862 Extension

# 3a. Outcome Type:

Change in Knowledge Outcome Measure

# 3b. Quantitative Outcome

Year	Actual		
2014	1		

# 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Just like other forms of home food preservation, food drying is often conducted in homes without research based knowledge. People often use methods handed down through friends and family, or just guesswork. Providing instructional workshops based in scientifically tested processes offers a public service which can reduce food safety hazards, improve taste and texture of dried foods, increase cost savings, and encourage good nutrition.

#### What has been done

WVUES faculty developed a research based interactive workshop to teach home food drying as a safe and reliable form of food preservation. They tested methods of food drying. This included drying fruits, fruit leather, herbs and meat jerky in both a food dehydrator and a home oven. Based upon the information gathered, course materials were developed including a course objectives, course outline, and participant take home resources. A pre-post evaluation tool was developed. A pilot workshop was held. Revisions were implemented.

#### Results

The materials developed for this course have been submitted to an Extension food preservation specialist for review. Upon receiving this feedback materials will be edited as needed and workshops will be conducted using the new curriculum.

#### 4. Associated Knowledge Areas

#### KA Code **Knowledge Area**

Home and Commercial Food Service 504

# Outcome #7

#### 1. Outcome Measures

Number of projects to enhance knowledge of Beef Quality Assurance practices

# 2. Associated Institution Types

1862 Extension

#### 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

Year	Actual	
2014	1	

2014

# 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

A team of researchers from the University of Missouri, University of Illinois, University of

Nebraska, Iowa State University, University of Minnesota, Kansas State University, Texas A&M University, and Washington State University as well as researchers from USDA-Beltsville and the USDA Meat Animal Research Center are working to improve feed efficiency.

# What has been done

In 2014, the WBEP became a collaborating partner with the National Program for Genetic Improvement of Feed Efficiency in Beef Cattle (http://www.beefefficiency.org) supplying DNA samples along with individual intake, performance, and pedigree data 159 spring born and 100 fall born bulls.

# Results

In part, because of WVUES participation in the National Program for Genetic Improvement of Feed Efficiency in Beef Cattle research project, team has made progress on its research objectives relative to feed efficiency including:

1. Gene expression analysis of various tissues in animals with differences in feed efficiency 2. Determine microbial population variation associated differences in feed efficiency

3.Evaluate mitochondrial (cell power houses) differences in animals with differences in feed efficiency

4. Conduct digestibility trials using animals with differences in feed efficiency.

5.Evaluate forage vs. concentrate level impacts on observed feed efficiency during different production phases (back-grounding and finishing)

6.Determine consistency of genetic marker tests across diets

# 4. Associated Knowledge Areas

KA Code Knowledge Area

502 New and Improved Food Products

# V(H). Planned Program (External Factors)

# External factors which affected outcomes

- Appropriations changes
- Competing Public priorities
- Competing Programmatic Challenges

# **Brief Explanation**

A new half-time Extension specialist has recently been hired who will work on food safety programs.

# V(I). Planned Program (Evaluation Studies)

# **Evaluation Results**

<u>Fruits Drying Workshop</u>: Participants self-evaluation of improvement in knowledge level (documents attached- comparison of pre- and post-workshop survey results):

1. Understanding of the steps needed to manufacture a dehydrated food product : 95% responded as moderate to considerable post-workshop as opposed to the majority (95%) said non-existent or minimal before the workshop.

2. Understanding of the steps needed to firm the fruit before dehydration: 79%

responded as moderate to considerable post-workshop as opposed to the majority (95%) said nonexistent or minimal before the workshop.

3. Understanding of the value added products from fruit dehydration byproducts: 69% responded as moderate to considerable post-workshop as opposed to the majority (89%) said non-existent or minimal before the workshop.

4. Understanding to increase the dried fruit yield: 58% responded as moderate to considerable post-workshop as opposed to the majority (100%) said non-existent or minimal before the workshop.

5. Understanding in adding special ingredients to produce dried fruits for various applications i.e., cereals etc.: 58% responded as moderate to considerable post-workshop as opposed to the majority (95%) said non-existent or minimal before the workshop.

6. Understanding in adding special ingredients as anti-sticking agents to dried fruit products for various applications: 63% responded as moderate to considerable post-workshop as opposed to the majority (100%) said non-existent or minimal before the workshop.

Food Preservation Workshop: Results of evaluations of participants -

1. Understanding of the steps needed to pressure can a food product: 80% responded that their knowledge was moderate to considerable after workshop compared to 50% saying non-existent to minimal before workshop.

2. Understanding of the steps needed to can a food product using boiling water bath: 100% responded that their knowledge was moderate to considerable after the workshop compared to 50% saying non-existent or minimal before the workshop.

3. Understanding of determining if the lids are sealed after canning a food product: 100% responded that their knowledge was moderate to considerable after the workshop compared to 30% saying non-existent or minimal before the workshop.

4. Understanding of using the approved recipes for canning a food product: 100% responded that their knowledge was moderate to considerable after the workshop compared to 50% saying non-existent or minimal before the workshop.

5. Understanding of the steps needed to freeze a product: 90% responded that their knowledge was moderate to considerable after the workshop compared to 30% saying non-existent or minimal before the workshop.

#### Key Items of Evaluation

# V(A). Planned Program (Summary)

# Program # 8

# 1. Name of the Planned Program

Sustainable Energy

☑ Reporting on this Program

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

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
123	Management and Sustainability of Forest Resources	50%			
131	Alternative Uses of Land	15%			
605	Natural Resource and Environmental Economics	35%			
	Total	100%			

# V(C). Planned Program (Inputs)

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

Voor 2014	Exter	nsion	Research		
Year: 2014	1862	1890	1862	1890	
Plan	3.0	0.0	0.0	0.0	
Actual Paid	12.0	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)

Exte	ension	Research		
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen	
370000	0	0	0	
1862 Matching	1890 Matching	1862 Matching	1890 Matching	
640681	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 Sustainable Energy planned program at West Virginia University Extension works toward energy independence to develop biomass use for biofuels by designing optimum forestry and crops for bioenergy production. It also works towards improving woodlot conditions and expanding forest and non-timber product production in general.

In 2014, there were 18 educational initiatives in this program area and 2,386 direct contacts.

Educational topics include: reclamation of Marcellus well sites, chestnut for reforestation, switchgrass potential for minesoils, chestnut growth on surface mines, bioenergy crops on surface mines, flow effects on acidity, survival of chestnut trees, biomass for bioenergy, switchgrass biomass stewardship, biomass issues for forest management plans, and workshops on byproduct utilization for bioproducts/bioenergy collaborative research on blueberry waste. One specialist is conducting research on reducing food waste and increasing agricultural byproduct utilization for producing other food products and/or producing bioproducts that will be useful for other applications such as enzymes/catalysts. Another specialist is conducting research on the reclamation of mined land with switchgrass, Miscanthus, and Arundo for biofuel production.

Other educational events included: Understanding Renegotiation and Renewal of Natural Gas Leases, Shale Mineral Management: Understanding Your Royalties, 3<sup>rd</sup> Annual Enhancing Public Understanding of Natural Gas Issues Conference, and WVUES NGET Tour of the Bakken Oil Region in North Dakota.

# 2. Brief description of the target audience

Foresters, government officials, consumers of wood products, commercial enterprises dealing with wood products, Extension staff and faculty.

#### 3. How was eXtension used?

eXtension was not used in this program

# V(E). Planned Program (Outputs)

#### 1. Standard output measures

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	1197	0	1189	0

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

Year:	2014
Actual:	0

# Patents listed

# 3. Publications (Standard General Output Measure)

## Number of Peer Reviewed Publications

2014	Extension	Research	Total
Actual	2	4	6

# V(F). State Defined Outputs

# **Output Target**

# Output #1

# Output Measure

• Number of educational materials created or updated about sustainable energy

Year	Actual
2014	7

# Output #2

# **Output Measure**

• Number of educational materials about sustainable energy distributed

Year	Actual
2014	2

# Output #3

# **Output Measure**

• Number of professional presentations on sustainable energy topics

Year	Actual
2014	14

# Output #4

# **Output Measure**

• Number of training activities related to sustainable energy

Year	Actual
2014	0

# V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content	

O. No.	OUTCOME NAME
1	Number of stakeholders participating in production/harvesting/storage systems that increase or improve their skills.
2	Number of youth who gain science process skills in biofuels.
3	Number of participants who adopt BMPs for production/harvesting/storage systems.
4	Number of participants who were trained in issues related to natural gas production.

#### Outcome #1

#### 1. Outcome Measures

Number of stakeholders participating in production/harvesting/storage systems that increase or improve their skills.

#### 2. Associated Institution Types

• 1862 Extension

#### 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

Year	Actual
2014	63

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

#### Issue (Who cares and Why)

West Virginia is well-suited to supply biofeedstocks for renewable energy to produce fuels such as ethanol and other transportation fuels. Forest by-products and wastes can be used, and dedicated energy crops such as switchgrass and Miscanthus can be grown 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 woody and herbaceous biomass energy crops. West Virginia is the nation's second largest coal-producing and third most heavily forested state in the nation. Opportunities exist for the co-development of biomass and coal energy which combine the sustainable qualities of woody biomass with the high quality fuel of West Virginia coal.

#### What has been done

Presentations were made at the American Society of Mining and Reclamation national meeting and at the National Association of Abandoned Mine Land Meeting. Topics included biomass and coal development opportunities, bioenergy research and development, torrefied biomass and coal blends, energy policy and environmental impacts, and the technical and financial feasibility of coal and biomass as feedstocks for liquid transportation fuels. Other educational topics throughout the year included: reclamation of Marcellus well sites, switchgrass potential for mine soils, chestnut growth on surface mines, quality of bioenergy crops on surface mines for ethanol production and yield, switchgrass biomass stewardship and biomass issues for forest management plans.

#### Results

Participants gained knowledge of West Virginia surface mine post-mining land use development, biomass and coal development opportunities, bioenergy research and development, torrefied biomass and coal blends, energy policy and environmental impacts, and the technical and financial feasibility of coal and biomass as feedstocks for liquid transportation fuels. West Virginia Department of Agriculture personnel and county commissioners gained on-the-ground experience with growth, development and harvesting technologies for warm-season grasses and forestry

wastes.

# 4. Associated Knowledge Areas

# KA Code Knowledge Area

123 Management and Sustainability of Forest Resources

# Outcome #2

#### 1. Outcome Measures

Number of youth who gain science process skills in biofuels.

# 2. Associated Institution Types

• 1862 Extension

# 3a. Outcome Type:

Change in Knowledge Outcome Measure

# 3b. Quantitative Outcome

Year	Actual
2014	250

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

#### Issue (Who cares and Why)

The purpose of RREA-supported programs in West Virginia is to put landowners in touch with natural resources professionals and to educate citizens about forests, wildlife, and water resources. Education programs developed for the 270,000 private landowners aim to demonstrate the importance of natural resources and how these resources can be managed to assure they are available for current and future use. Stakeholders include Master Gardeners, Master Naturalists, WV Woodland Stewards, and Woodland Owners Association members, and programs are carried out with funds from educational grants (e.g., USDA Redesign, WV Forest Stewardship Program).

#### What has been done

RREA supports Extension Specialists facilitation of the youth forestry contests and activities in West Virginia. The primary youth events include the WV Conservation Camp, the National 4H Forestry Invitational, and the Future Farmers of America state forestry contest. These youth activities had over 250 participants.

#### Results

250 youth in forestry activities in West Virginia gained knowledge and skill in the conservation of

our natural environment.

# 4. Associated Knowledge Areas

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

# Outcome #3

# 1. Outcome Measures

Number of participants who adopt BMPs for production/harvesting/storage systems.

Not Reporting on this Outcome Measure

# Outcome #4

# 1. Outcome Measures

Number of participants who were trained in issues related to natural gas production.

# 2. Associated Institution Types

• 1862 Extension

#### 3a. Outcome Type:

Change in Knowledge Outcome Measure

# 3b. Quantitative Outcome

Year	Actual
2014	820

# 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

With the discovery of the Marcellus shale and new drilling techniques to tap the natural gas it contains, West Virginia emerges as one of the central natural gas shale plays in the Appalachian Basin. The growth and economic development of the Marcellus shale in West Virginia provides opportunities for public and private landowners, local communities, and local and state governments to benefit from monies generated from land leases and royalties. However, with this economic growth and development comes safety and environmental concerns. WVUES Natural Gas Education Program (WVUES NGEP) was formed to address topics of interest and concern citizens have about the natural gas industry in WV.

#### What has been done

A WVUES Natural Gas Education Team (WVUES NGET) comprised of WVU professors, WVUES county Extension Agents, and representatives from the natural gas industry, WV state environmental agencies, and the environmental community collaborated to provide natural gas education throughout WV. WVU Extension held 11 educational programs including regional trainings, the third Annual Enhancing Public Awareness of Natural Gas Issues Conference, a session at the inaugural Women in Agriculture Conference, an educational program at Ritchie County High School to prepare youth for careers in the natural gas industry, and a tour of the Bakken Oil Region in North Dakota for 7 members of the WVUES Oil and Natural Gas Team.

# Results

Participants (820) increased their knowledge of natural gas development in the areas of leasing; hydraulic fracturing law and regulation; fire safety, prevention, and control on natural gas well drilling sites; natural gas drilling impacts on water; researching private property-deeds and leases; disposal of drilling wastes; landowners and their mineral rights; the WV Shale Gas Network; hydraulic fracturing/oil exploration in North Dakota and its relationship to WV; collegiate natural gas education programs and careers in the natural gas industry; managing natural gas windfalls; and mineral management/understanding royalty payments.

# 4. Associated Knowledge Areas

605 Natural Resource and Environmental Economics

# V(H). Planned Program (External Factors)

#### External factors which affected outcomes

• Competing Public priorities

# **Brief Explanation**

# V(I). Planned Program (Evaluation Studies)

#### **Evaluation Results**

More than 820 people attended the 11 natural gas educational programs directly offered by or in association with the WVUES NGET. Attendees increased their knowledge of natural gas development in the areas of leasing; hydraulic fracturing law and regulation; fire safety, prevention, and control on natural gas well drilling sites; natural gas drilling impacts on water; researching private property-deeds and leases; disposal of drilling wastes; landowners and their mineral rights; the WV Shale Gas Network; hydraulic fracturing/oil exploration in North Dakota and its relationship to WV; collegiate natural gas education programs and careers in the natural gas industry; managing natural gas windfalls; and mineral management/understanding royalty payments. As a result of the evaluation comments, the Team has identified new topics to be addressed during the 2015 series of regional education programs and at the statewide conference (May 2015).

# Key Items of Evaluation

# **VI. National Outcomes and Indicators**

# **1. NIFA Selected Outcomes and Indicators**

Childhood Obesity (Outcome 1, Indicator 1.c)	
13718	Number of children and youth who reported eating more of healthy foods.
Climate Change (Outcome 1, Indicator 4)	
0	Number of new crop varieties, animal breeds, and genotypes whit climate adaptive traits.
Global Food Security and Hunger (Outcome 1, Indicator 4.a)	
0	Number of participants adopting best practices and technologies resulting in increased yield, reduced inputs, increased efficiency, increased economic return, and/or conservation of resources.
Global Food Security and Hunger (Outcome 2, Indicator 1)	
0	Number of new or improved innovations developed for food enterprises.
Food Safety (Outcome 1, Indicator 1)	
0	Number of viable technologies developed or modified for the detection and
Sustainable Energy (Outcome 3, Indicator 2)	
0	Number of farmers who adopted a dedicated bioenergy crop
Sustainable Energy (Outcome 3, Indicator 4)	
0	Tons of feedstocks delivered.