V(A). Planned Program (Summary)

Program # 14

1. Name of the Planned Program

Global Food Security and Hunger

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>604</td>
<td>Marketing and Distribution Practices</td>
<td>20%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>703</td>
<td>Nutrition Education and Behavior</td>
<td>40%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>704</td>
<td>Nutrition and Hunger in the Population</td>
<td>40%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

V(C). Planned Program (Inputs)

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

<table>
<thead>
<tr>
<th></th>
<th>Extension</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1862</td>
<td>1890</td>
</tr>
<tr>
<td>Actual</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>Extension</th>
<th>Research</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Smith-Lever 3b &amp; 3c</td>
<td>0</td>
<td>0</td>
<td>Hatch</td>
<td>0</td>
</tr>
<tr>
<td>1862 Matching</td>
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<td>0</td>
<td>1862 Matching</td>
<td>0</td>
</tr>
<tr>
<td>1862 All Other</td>
<td>0</td>
<td>0</td>
<td>1862 All Other</td>
<td>0</td>
</tr>
<tr>
<td>1890 Extension</td>
<td></td>
<td></td>
<td>1890 Matching</td>
<td>0</td>
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<tr>
<td>1890 Matching</td>
<td></td>
<td></td>
<td>1890 Matching</td>
<td>0</td>
</tr>
<tr>
<td>1890 All Other</td>
<td></td>
<td></td>
<td>1890 All Other</td>
<td>0</td>
</tr>
</tbody>
</table>

V(D). Planned Program (Activity)

1. Brief description of the Activity

Conduct research experiments that educate and solve applied problems;
Establish partnerships to identify needs and develop solutions;
Conduct workshops, both traditional and hands-on, and meetings to provide training for stakeholders and educators;
Develop products, curriculum, and resources for use by educators and directly by producers;
Organize and conduct state and regional conferences;
Partner with industry;
Conduct needs assessment and impact analysis.

2. Brief description of the target audience

Extension educators
Industry personnel
Commercial producers
Consumers
Policy makers
Master Gardeners
End uses
Academic colleagues
Students
K-12 educators
Pesticide applicators
Homeowners

V(E). Planned Program (Outputs)

1. Standard output measures

<table>
<thead>
<tr>
<th>2009</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
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</thead>
<tbody>
<tr>
<td>Plan</td>
<td>{NO DATA ENTERED}</td>
<td>{NO DATA ENTERED}</td>
<td>{NO DATA ENTERED}</td>
<td>{NO DATA ENTERED}</td>
</tr>
<tr>
<td>Actual</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

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

Patent Applications Submitted

Year: 2009
Plan: 0
Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

<table>
<thead>
<tr>
<th>2009</th>
<th>Extension</th>
<th>Research</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Actual</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- This is a new Planned Program for Virginia. We are only reporting on unplanned state defined outputs this year.
- Not reporting on this Output for this Annual Report
## V(G). State Defined Outcomes

<table>
<thead>
<tr>
<th>O. No.</th>
<th>OUTCOME NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Develop community programs that address hunger in communities</td>
</tr>
<tr>
<td>2</td>
<td>Increase the number of Family Nutrition Program participants that adopt behaviors that combats hunger</td>
</tr>
<tr>
<td>3</td>
<td>Increase the number of school systems that purchase food from local producers</td>
</tr>
<tr>
<td>4</td>
<td>Increase the number of adult participants who report that they ran out of food less often after participating in FNP.</td>
</tr>
<tr>
<td>5</td>
<td>Number of community gardening programs implemented to address food insecurity/hunger issues</td>
</tr>
</tbody>
</table>
Outcome #1

1. Outcome Measures
   Develop community programs that address hunger in communities

2. Associated Institution Types
   ● 1862 Extension

3a. Outcome Type:
   Change in Condition Outcome Measure

3b. Quantitative Outcome

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantitative Target</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>{No Data Entered}</td>
<td>1</td>
</tr>
</tbody>
</table>

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
According to the U.S. Department of Agriculture, one in ten households in the United States experiences hunger or the risk of hunger. Many frequently skip meals or eat too little, sometimes going without food for an entire day. Over 203,000 people are at risk of hunger in Northern Virginia. (This includes Alexandria City, Arlington, Falls Church City, Fairfax County, Manassas City and Prince William County.) (U.S. Census, 2000) In Northern Virginia (Alexandria City, Arlington, Falls Church City, Fairfax County, Manassas City, Prince William County), 1 in 6 children is at risk of or experiencing hunger. (U.S. Census, 2000) In the past year, the demand for hunger assistance has increased and research shows that hundreds of hungry children and adults are turned away from food banks each year because of lack of resources.

What has been done
Master Gardener Volunteers in Prince William played an instrumental role providing fresh produce to local food banks through the Plant a Row program. Master Gardener volunteers collected fresh produce, eggs, meats, pastries and coffee from local Farmer's Markets on Thursday, Saturday and Sundays throughout the growing season. After the Farmer's Market pick up, the produce was delivered to the SERVE Food Closet in Manassas and to ACTS Food Pantry in Dumfries. Both SERVE and ACTS provide emergency food assistance for the local community.

Results
Thirty Master Gardeners volunteered 702 hours for the season, making over 2018 contacts. Master Gardener Volunteers collected over 96,330 pounds of fresh produce from vendors at the Manassas City and the Dale City Farmer's Markets. The equivalent value of this produce for Farmer's/Marketer's who receive a tax deduction for their donations, based on receiving $1.60 per pound, equals a total of $154,128.

4. Associated Knowledge Areas

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>704</td>
<td>Nutrition and Hunger in the Population</td>
</tr>
</tbody>
</table>
Outcome #2

1. Outcome Measures

Increase the number of Family Nutrition Program participants that adopt behaviors that combats hunger

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantitative Target</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>{No Data Entered}</td>
<td>0</td>
</tr>
</tbody>
</table>

3c. Qualitative Outcome or Impact Statement

**Issue (Who cares and Why)**
Food Research and Action Center (FRAC) reports that 22.5% of children are growing up in homes where food is not available to meet basic nutritional needs. As a result, children are growth impaired and do not develop to their full potential academically and physically. Particularly troubling is the impact on pregnant teenage moms and their babies that results from food insecurity.

**What has been done**
FNP uses a core lesson series that includes the following: menu planning, preparing meals at home, food buying, food safety and storage. Messages included in these lessons are buying locally grown foods and encouraging gardening and appropriate food preservation as well as raising awareness of community resources to meet food security needs.

**Results**
Of the participants in EFNEP educational programs:
76% improved at least one food resource management practice by the completion of the lesson series. (planning meals, compares prices, does not run out of food and uses grocery list)
There was also a 41% decrease in families that ran out of food by the end of the month.
Of the participants in SNAP-Ed programs:
81% improved at least one food resource management practice by the completion of the lesson series. (planning meals, compares prices, does not run out of food and uses grocery list)
There was also a 33% decrease in families that ran out of food by the end of the month.

4. Associated Knowledge Areas

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>703</td>
<td>Nutrition Education and Behavior</td>
</tr>
</tbody>
</table>

Outcome #3

1. Outcome Measures

Increase the number of school systems that purchase food from local producers

2. Associated Institution Types
• 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantitative Target</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>(No Data Entered)</td>
<td>0</td>
</tr>
</tbody>
</table>

3c. Qualitative Outcome or Impact Statement

**Issue (Who cares and Why)**
Agriculture is Virginia's largest industry with an annual economic impact of $55 billion. And yet, Virginia farmers are struggling with economic profitability, uncertainty and viability. At the same time, individuals and Virginia communities are experiencing increased incidences of obesity, diabetes, diet-related diseases and in some instances, food insecurity. Expanding good, local fresh healthy food opportunities throughout Virginia's food system can improve agricultural economic vitality and strengthen community health and well-being. Economic data and projections that Virginia Cooperative Extension (VCE) developed in 2007 show that if each household in Virginia were to spend $10 per week for a year on local Virginia products, a significant economic impact would be generated. At a state level, this spending pattern would generate over $1.65 billion dollars in direct economic impact.

**What has been done**
VCE has been actively leading, assisting and educating Virginians on the role and importance of community-based food systems to local agriculture, local economies, and local communities. In March, April and November 2009, VCE led a collaboration to complete two two-day workshops attracting over 200 individuals on food entrepreneurship and business development for Virginia's local agriculture and value-added food producers. In September 2009, VCE collaborated to host a sustainability summit attracting over 130 individuals, providing practical information about how to strengthen the connection between Virginia's schools, colleges, universities, hospitals and our local food growers and producers. During 2009, VCE made presentations about the opportunity to develop sustainable, local and regional food systems at statewide conferences such as the Forum for Rural Innovation and Virginia Rural Planning Caucus Annual Meeting, regional conferences such as the Northern District Master Food Volunteer Training, and countless local meetings with agriculture, economic development and other community groups. VCE also published two articles in the Farm Business Management Newsletter educating VCE faculty about local and regional food system trends and opportunities.

**Results**
VCE faculty are actively leading and participating in the Virginia Food Systems Council and Virginia Farm-to-School Work Group. Through these efforts, VCE was instrumental in the formation and coordination of the first Virginia Farm-to-School Week where 30 school divisions purchased local foods for their cafeterias.

4. Associated Knowledge Areas

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>604</td>
<td>Marketing and Distribution Practices</td>
</tr>
</tbody>
</table>

Outcome #4

1. Outcome Measures

Increase the number of adult participants who report that they ran out of food less often after participating in FNP.

2. Associated Institution Types
3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantitative Target</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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<td>2051</td>
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</table>

3c. Qualitative Outcome or Impact Statement

**Issue (Who cares and Why)**

Food Research and Action Center (FRAC) reports that 22.5% of children are growing up in homes where food is not available to meet basic nutritional needs. As a result, children are growth impaired and do not develop to their full potential academically and physically. Particularly troubling is the impact on pregnant teenage moms and their babies that results from food insecurity.

**What has been done**

FNP which includes the EFNEP and SNAP-Ed programs uses a core lesson series that includes the following: menu planning, preparing meals at home, food buying, food safety and storage. Messages included in these lessons are buying locally grown foods and encouraging gardening and appropriate food preservation as well as raising awareness of community resources to meet food security needs.

**Results**

Of the participants in EFNEP program:

76% (1207 of 1589 participants) improved at least one food resource management practice by the completion of the lesson series (planning meals, compares prices, does not run out of food and uses grocery list). There was also a 41% (650 of 1589 participants) decrease in families that ran out of food by the end of the month.

Of the participants in SNAP-Ed programs:

81% (3599 of 4444 participants) improved at least one food resource management practice by the completion of the lesson series (planning meals, compares prices, does not run out of food and uses grocery list). There was also a 33% (1401 of 4346 participants) decrease in families that ran out of food by the end of the month.

4. Associated Knowledge Areas

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>703</td>
<td>Nutrition Education and Behavior</td>
</tr>
<tr>
<td>704</td>
<td>Nutrition and Hunger in the Population</td>
</tr>
</tbody>
</table>

Outcome #5

1. Outcome Measures

Number of community gardening programs implemented to address food insecurity/hunger issues

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure
3b. Quantitative Outcome

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantitative Target</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>(No Data Entered)</td>
<td>10</td>
</tr>
</tbody>
</table>

3c. Qualitative Outcome or Impact Statement

**Issue (Who cares and Why)**
According to a 2009 U.S. Department of Agriculture report, 14.6% of U.S. households were food insecure at least some time during 2008. Food insecurity rates were at their highest levels since 1995. Food insecurity typically translates into diet patterns that are low in vitamins, minerals, fruits, and vegetables. Access to high quality fresh produce by lower income families is limited at best.

**What has been done**
FCS, 4-H, and Agriculture agents across the Commonwealth partnered with a host of groups, including local Head Start programs, schools, faith-based organizations, and many others to start community and school gardens. The goals for the garden project overall are two-fold. The learning and behavior change objectives include teaching individuals and families how to garden. There is also a goal for alleviating food insecurity by providing the food that is grown is to families in facing or at risk of hunger issues.

**Results**
Ten gardening programs that address hunger issues were offered in 2009. One of the garden projects took place in Lee County, which has one the lowest per capita income rates in the state. Four hundred families participated in this garden program and a local church provided land for gardening and seven hundred pounds of potatoes were planted and yielded 700 bushels. In a suburban county (Henrico), the Gardens Growing Families Lakeside Garden helped 92% of gardeners save money at the grocery store by growing their own fruits and vegetables. In one urban location (Norfolk), over 561 pounds of produce was harvested and sent to the local food back for distribution. And in Suffolk, another rural area, 1550 pounds of produce was contributed to local Food Banks and Church Kitchens to help feed the Hungry.

4. Associated Knowledge Areas

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>704</td>
<td>Nutrition and Hunger in the Population</td>
</tr>
</tbody>
</table>

V(H). Planned Program (External Factors)

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

**Brief Explanation**

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

1. Evaluation Studies Planned
   - After Only (post program)
   - Retrospective (post program)
● Before-After (before and after program)
● During (during program)
● Time series (multiple points before and after program)
● Case Study

Evaluation Results

Key Items of Evaluation