

**Michigan State University  
Extension 2004-05 Annual Report  
of Accomplishments and Results**

**Thomas Coon  
Director**

## Overview

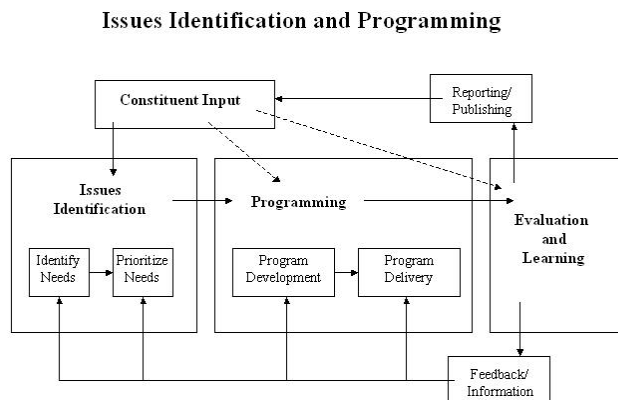
Since its beginning, Michigan State University Extension (MSUE) has focused on bringing knowledge-based educational programs to the people of the state to improve their lives and communities. Today's problems are very complex. Solutions require the expertise of numerous disciplines and the collaboration of many partners. Operating synergistically with the Michigan Agricultural Experiment Station (MAES) and other Michigan State University units, MSU Extension extends the University's knowledge resources to all Michigan citizens and assists them in meeting their learning needs through a variety of educational strategies, technologies and collaborative arrangements. Today, county-based staff members, in concert with on-campus faculty members, serve every county with programming focused on agriculture and natural resources; children, youth and families; and community and economic development. During 2004-05 MSUE directly educated 200,615 adults and 231,929 youth. In addition, MSUE reached over 2 million people indirectly through bulletins, hot-lines, newsletters, internet web pages, and volunteer work from master gardeners, 4-H volunteers, advisory group members, MSUE staff serving on local committees and boards, and local and state extension council members. Past MSUE impacts include:

- Educational programs and applied research projects that addressed health and obesity issues, helped officials and communities deal with land use issues, taught and supported parents, provided strong mentoring and other educational programs for children and youth (including 4-H), promoted value-added agriculture, helped protect the state's environment and natural resources, and controlled and eradicated the spread of infectious diseases.
- Long-term research projects that affected various agricultural and natural resource industries (including forestry and tourism) that made major contributions to the state's economy.
- Capacity building that addressed threats to Michigan's food security and the health of its citizens. Key examples of current research included bovine tuberculosis, West Nile virus, chronic wasting disease, hoof and mouth disease, emerald ash borer etc.
- Collaborations in communities in which MSU Extension provided the educational component to complement the services provided by other organizations and agencies (e.g., FIA, MDCH, WIC, DNR and MDA). This also included mandated continuing education programs for a variety of industries.
- Partnerships that strengthened the funding of the land grant system that provides public access to research information, education to the non-traditional students, and services to communities. These partnerships fund positions at the state and local levels and they ensure that state and local issues are addressed.

## Stakeholder Input and Planning Process

Michigan State University Extension (MSUE) uses an ecological model in approaching community needs by providing educational programs and information at multiple levels, which results in blended stakeholder input, funding sources, programs crossing over goal areas, integration of research and educational instruction, and multiple delivery approaches (direct and indirect). For example land use in Michigan plays a critical role in agriculture, environment, and community and economic development, which is addressed by multiple resources (federal, state, county, and other) and through multiple Area of Expertise (AoE) teams. In addition, stakeholder input on land use comes from a variety of sources and processes that combine information from local, county, regional, and state levels. Figure 1. shows MSUE's process of using constituent input to identify issues and assist in prioritizing needs. Through this process field and campus staff build individual, county, and statewide plans that address community needs. In turn, these plans are implemented, evaluated, and possibly changed over time through the evaluation, feedback and lessons learned. This report reflects the accomplishments and impacts from this process.

Figure 1.  
MSUE Program Planning and Implementation Process



Modified from Ted Ferris & Jim Kells Materials for Coaches and Co-Chairs

The primary stakeholder input for the planning process of 2004-05 programming came in 2002 when MSUE staff used the results of a statewide initiative of community input called “Sharpening Our Program Focus” that identified five priority areas: Building strong communities; Helping youth succeed; Enhancing profitability in agriculture; Encouraging responsible land and natural resources use; and Building healthy families. In addition, a survey was done in the spring of 2002 by the Institute for Public Policy and Social Research (IPPSR) called the State of the State Survey (SOSS) that assessed a variety of public topics with one set of questions asking for reactions to the identified program priorities for

MSU Extension. The 1012 random surveys were conducted in all six regions of the state. The findings supported the five priority areas with 78% of the respondents rated as a high priority to help youth succeed as well as building healthy families, followed by 70% indicating high priority for encouraging responsible land and natural resource use, 62% for building strong communities, and 51% for enhancing profitability for agriculture. It is noteworthy to state that only 3%-5% indicated any of these areas as a low priority. Local, regional and state focus areas were used by the 29 AoE teams, in collaboration with their advisory committees, partners and stakeholders, to strengthen existing goals, drop completed or obsolete goals, and create new initiatives. It is important to note that while the 2002 “Sharpening Our Program Focus” was core to the 2004-05 plans and program; counties, AoE Teams, and individual staff (i.e., agents and specialists) used stakeholder input annually through advisory groups, research, meetings with constituents, and surveys from conferences and workshops to refine and change their goals and plans.

During 2004-05, MSUE repeated the 2002 process by using the Institute for Public Policy and Social Research (IPPSR) to conduct another State of the State Survey (SOSS). Two of the newer top priorities identified by 80% of the public were “Ensuring that the food supply is safe and plentiful” and “Preparing today's youth for tomorrow's jobs.” In addition, MSUE started a new statewide initiative of community input called “Strengthening Michigan's Economy: Issue Identification” to identify key needs in the local communities, regions and state. Finally, the AoE’s used stakeholder input from the SOSS, local stakeholder input, and constituents in their area of expertise to identify and prioritize needs. Findings from these processes will be used in developing the 2007-11 Plan of Work.

## **Inputs and Resources**

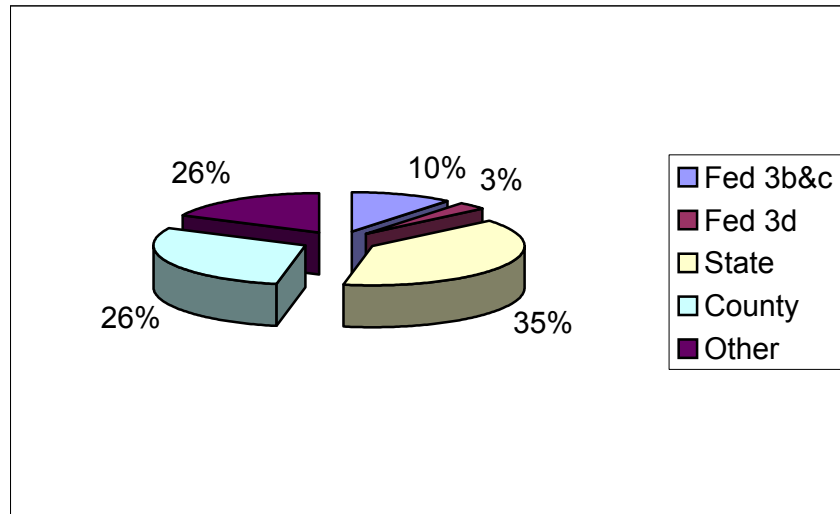
Table 1. shows the overall expenditures for MSUE for the 2004-05 federal programming year to be \$76.8 million, with \$8 million being Federal B and C formula dollars. These dollars have been critical in contributing to base programming in the counties as well as enhancing programs by matching state and county dollars. The match from the state is well over 100%, demonstrating strong support for MSU Extension’s partnership with USDA. Because Federal 3B and 3C dollars, like the state and county dollars, are integrated into virtually every MSUE program, the following report reflects the whole rather than a part. One major part that is missing from the following report is in-kind contributions, which include volunteer time (more than 28,500 volunteers assisted programming in 2004-05 and tangible resources, such as building space, materials, and travel that would be valued in the millions of dollars.

Table 1.  
Overall MSU Extension 2004-2005 Expenditures by Source of Funding and Federal Goal

Goal	FedBC	Fed3D	State	Local	Other	Total
1) Agriculture	1,811,864	55,185	7,195,816	3,675,602	1,547,361	14,285,828
2) Food Safety	856,826	605,806	3,706,546	3,285,513	4,314,995	12,769,687
3) Food, Nutrition, and Health	819,052	1,226,064	3,076,182	4,541,861	7,989,528	17,652,688
4) Environmental	1,753,701	73,085	6,151,772	4,035,118	3,669,470	15,683,146
5) Community, Human, and Youth Development	2,712,859	24,986	6,888,584	4,191,882	2,474,125	16,292,436
<b>Total</b>	<b>7,954,302</b>	<b>1,985,126</b>	<b>27,018,865</b>	<b>19,729,978</b>	<b>19,995,479</b>	<b>76,683,750</b>

Graph 1. shows 10% of MSUE funds were **Federal 3b and 3c**, 3% **Federal 3d** (mainly EFNEP), 35% **State**, 26% **County**, and 26% **Other** (competitive grants – multiple sources with FNP being the largest).

Graph 1.  
Overall 2004-05 MSU Extension Expenditures by Source of Funding



Graph 2. shows overall funding for MSUE by Federal Goals: 19% of funding involved programs that addressed **Goal 1)** An agricultural system that is highly competitive in the global economy; 17% for **Goal 2)** A safe and secure food and fiber system; 23% for **Goal 3)** A healthy, well-nourished population; 20% for **Goal 4)** Greater harmony between agriculture and the environment; and 21% for **Goal 5)** Enhanced economic opportunity and quality of life for Americans.

Graph 2.  
Overall 2004-2005 MSU Extension Funding by Federal Goal

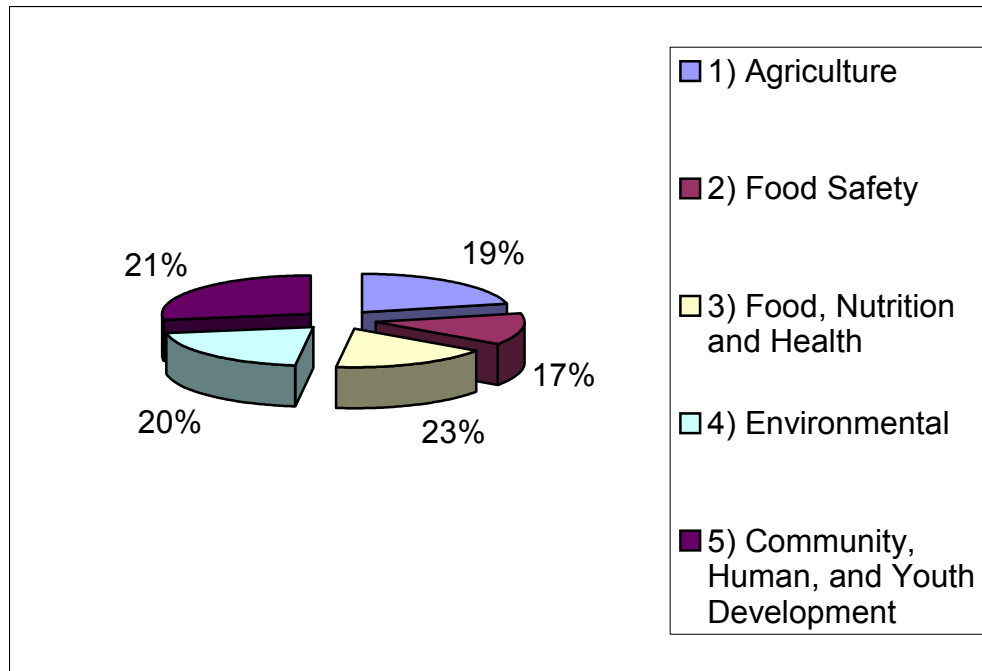


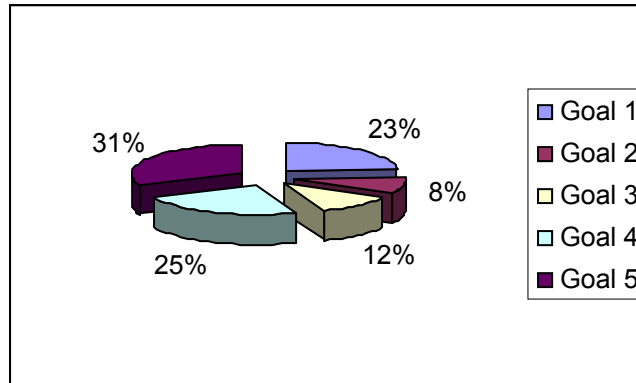
Table 2. shows that in 2004-2005, MSUE staff consisted of 1,052 full time equivalents (FTE) with 49% Professional (544 FTE's), 25% Para-Professional (293 FTE's), and 25% (295 FTE's) Office and Clerical staff members. The major change during this fiscal year was the loss of approximately 80 FTE's or 7% of the FTE's from the previous year. Sixteen percent of the total FTE's (170 FTE's) were funded by Federal 3b&c with 123 FTE's being Professional. Thirty percent of the total FTE's (322 FTE'S) were county funded employees.

Table 2.  
Total FTE by Professional/Para-Professional by Federal Goal

	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5	Total
Professional	121	45	61	128	162	<b>517</b>
Para-Professional	15	71	142	15	25	<b>268</b>
Office/Clerical	35	54	91	35	52	<b>267</b>
	171	170	294	178	239	<b>1,052</b>

Graph 3. shows the percentage of FTE by Federal Goal for Professional Staff members, where the largest group (31%) fell in Goal 5 (Community, Human, and Youth Development).

Graph 3.  
Percentage of Professional FTE's by Federal Goals



## Outputs

MSUE is dedicated to educating tomorrow's leaders and scholars. Innovative and hardworking MSUE faculty and staff members create knowledge and extend learning to serve Michigan, the nation and the international community. At MSU, faculty and staff members are expected to be active, learner-focused scholars, exemplifying scholarship across the land-grant mission. The essence of this scholarship is the thoughtful discovery, transmission and application of knowledge based in the ideas and methods of recognized disciplines, professions and interdisciplinary fields. What qualifies an activity as scholarship is that it be deeply informed by the most recent knowledge in the field, that the knowledge is skillfully interpreted and deployed, and that the activity is carried out with intelligent openness to new information, debate and criticism. The primary mechanism for educational program planning, implementation and evaluation for Michigan State University Extension is the Area of Expertise (AoE) team concept, which brings stakeholders, collaborators, faculty members, field staff members, and communities together for community need assessments, prioritization of MSUE programming goals, program development and implementation, and assessment of impact.

In 2004-05, through the efforts of the AoE teams, staff and volunteers, MSUE reached 432,544 people directly through educational programs. This was similar to the previous year with 430,123. Table 3. shows the number of participants reached directly for each of the AoE Teams by the five Federal Goals.

Table 3.  
Total Participants Reached Directly by AOE by Federal Goals

<b>Goal 1 - Agriculture</b>	<b>Adult</b>	<b>Youth</b>	<b>Total</b>
Beef	1,379	6,470	7,849
Consumer Horticulture	9,521	6,830	16,351
Dairy	4,855	3,112	7,967
Equine	275	17,537	17,812
Field Crops	17,043	4,751	21,794
Floriculture	1,346	0	1,346
Forage/Pastering/Grazing	1,529	12	1,541
Fruit	3,162	3,348	6,510
Livestock - Overall	778	8,590	9,368
Nursery/Landscape	2,478	0	2,478
Ornamentals - Overall	5,342	1,171	6,513
Sheep	20	4,688	4,708
Swine	884	10,847	11,731
Turfgrass	301	0	301
Vegetables	581	3,348	3,929
	<b>49,494</b>	<b>70,704</b>	<b>120,198</b>
<b>Goal 2 - Food Safety</b>			
Food Safety*	<b>12,074</b>	<b>12,050</b>	<b>24,124</b>
<b>Goal 3 - Food, Nutrition, and Health</b>			
Food, Nutrition & Health*	<b>48,297</b>	<b>44,749</b>	<b>93,046</b>
<b>Goal 4 - Environmental</b>			
Forestry	5,409	4,459	9,868
Land Use	2,927	7,634	10,561
Manure	1,286	970	2,256
Renewable Resources (RREA)	159	3,539	3,698
Sea Grant	2,636	4,326	6,962
Water Quality	7,674	14,225	21,899
Christmas Trees	513	0	513
	<b>20,604</b>	<b>35,153</b>	<b>55,757</b>
<b>Goal 5 - Community, Human, and Youth Development</b>			
Community Development	6,439	8,945	15,384
Economic Development	6,938	419	7,357
Family Resource Management	20,346	13,489	33,835
FIRM	3,443	16	3,459
Human Development	14,814	3,423	18,237
LeadNet	820	11,834	12,654
State & Local Government	552	0	552
Tourism	341	0	341
Volunteer Development	6,631	18,400	25,031
Youth Development**	9,822	12,747	22,569
	<b>70,146</b>	<b>69,273</b>	<b>139,419</b>

\* To avoid duplication, participants who received both food safety and food nutrition were counted only once.

\*\*\* To avoid duplication, youth who crossed goals were not counted again in youth development.



Table 4. shows that Goal 5 (Community, Human, and Youth Development) had the largest number of participants, followed by Goal 1 (Agriculture) and Goal 3 (Food, Nutrition, and Health). The numbers below do not include the millions of people that are educated through newsletters, TV, internet, radio and conferences on topics that include: [Emerald Ash Borer](#), [Helping Children and Their Families Cope with Disasters](#), and [MSUE Emergency Management](#).

Table 4.  
Total Participants Reached Directly by Federal Goal

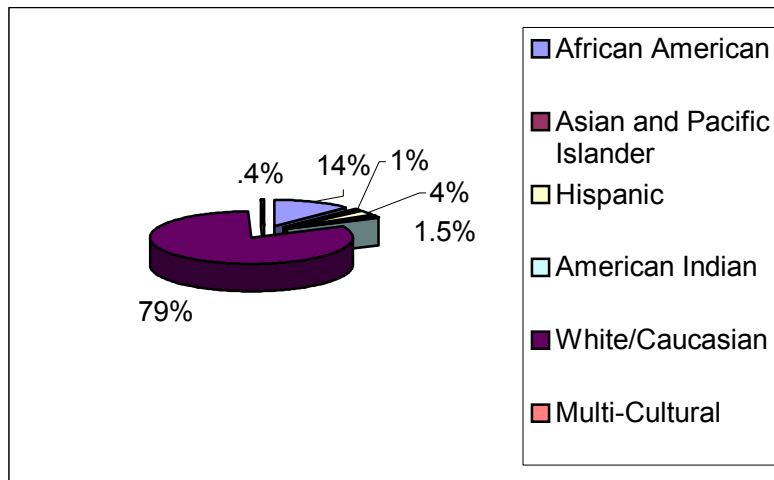
Goal Area	Adult	Youth	Total	%
Agriculture	49,494	70,704	<b>120,198</b>	27.7%
Food Safety*	12,074	12,050	<b>24,124</b>	5.6%
Food Nutrition and Health*	48,297	44,749	<b>93,046</b>	21.5%
Environmental	20,604	35,153	<b>55,757</b>	12.8%
Community, Human and Youth Development**	70,146	69,273	<b>139,419</b>	32.2%
	<b>200,615</b>	<b>231,929</b>	<b>432,544</b>	

\* To avoid duplication, participants who received both food safety and food nutrition were counted only once (20% Food Safety and 80% Food, Nutrition, and Health).

\*\* To avoid duplication, youth who crossed goals were not counted again in youth development.

Graph 4. shows the ethnic distribution of the 432,544 participants educated directly. Seventy-nine percent (79%) of the participants were Caucasian, 14% African American, 4% Hispanic, 1.5% Native American, 1% Asian, and .4% Multi-Cultural. This distribution is representative of Michigan's population: 80.9% Caucasian, 14.3% African American, 2.8% Hispanic, .6% Native American, and 1.7% Asian (Multi-Cultural was not used). Civil Rights information is imbedded in each of the plans with a description of the potential and targeted audiences and then linked to the actual audiences reached through our Extension Information System (EIS).

Graph 4.  
Percentage of Participants by Ethnic Groups



## Overview of Goal 1: An agricultural system that is highly competitive in the global economy

Over 100,000 participants (120,198) were directly involved in MSUE educational programs that focused on agriculture. Table 5. shows the number of participants and the Federal Key Themes for each of the sixteen AoE teams that work in Goal 1. Key themes highlighted in this report demonstrating impact were: adding value to new and old agricultural products, agricultural profitability, animal health, animal production efficiency, emerging infectious diseases, home lawn and gardening, new uses for agricultural products, ornamentals/green agriculture, plant health, and plant production efficiency.

Table 5.  
Number of Participants and Key Themes by AoE for Federal Goal 1.

Goal 1	Adults	Youth	Total	Federal Key Themes
Beef	1,379	6,470	7,849	Animal Production Efficiency, Agricultural Profitability, Emerging Infectious Diseases
Consumer Horticulture	9,521	6,830	16,351	Home Lawn and Gardening, Ornamentals/Green Ag
Dairy	4,855	3,112	7,967	Animal Production Efficiency, Agricultural Profitability, Emerging Infectious Diseases
Equine	275	17,537	17,812	Animal Production Efficiency, Adding Value
Field Crops	17,043	4,751	21,794	Adding Value, Precision Ag, Agricultural Profitability, IPM
Floriculture	1,346	0	1,346	Adding Value, Agricultural Profitability, Biotechnology, IPM, Ornamentals/Green Ag
Forage/Pasturing/Grazing	1,529	12	1,541	Adding Value, Grazing, Emerging Infectious Diseases
Fruit	3,162	3,348	6,510	Adding Value, Ag Profitability, Niche Market, IPM

Goal 1 (continued)	Adults	Youth	Total	Federal Key Themes
Livestock - Overall	778	8,590	9,368	Animal Production Efficiency, Agricultural Profitability, Emerging Infectious Diseases
Nursery/Landscape	2,478	0	2,478	Home Lawn and Gardening, Ornamentals/Green Ag
Ornamentals - Overall	5,342	1,171	6,513	Adding Value, Agricultural Profitability, Biotechnology, IPM, Ornamentals/Green Ag
Sheep	20	4,688	4,708	Animal Production Efficiency, Small Farm Viability
Swine	884	10,847	11,731	Adding Value, Animal Production Efficiency, Manure Management
Turfgrass	301	0	301	Agricultural Profitability, Ornamental/Green Ag
Vegetables	581	3,348	3,929	Adding Value, Precision Ag, Agricultural Profitability, IPM
	<b>49,494</b>	<b>70,704</b>	<b>120,198</b>	

### **Examples of Impact in Goal 1.**

#### **Key Theme: Biofuels**

#### **Educational Initiative Title: Great Lakes Ethanol**

#### **Michael Score: Monroe, Washtenaw, and Lenawee Counties**

#### **Description of Program**

MSUE Agricultural Advisory Councils in Washtenaw and Lenawee Counties identified a need to address basic issues of farm profitability. Specifically, they asked MSUE to identify opportunities to convert agricultural commodities into higher-value consumer goods. These requests were affirmed during a regional agricultural economic outlook conference in 2001. MSUE worked in partnership with Ohio State University to conduct two national conferences on value-added agriculture and biofuel production. Participants learned about costs and benefits of launching new production facilities in our region. Following this focus on corn processing, MSUE worked with the Michigan Corn Marketing Program to

facilitate formation of a work group that applied itself to building a new ethanol production facility. MSUE mentored the study group through the business development process and helped Great Lakes Ethanol LLC(GLE) to link up with resource people they needed to launch their business venture.

## **Impact**

From 2004 through early 2005 GLE raised \$15 million in equity pledges. More than 90% of these investments came from Michigan farmers. In summer, 2005 GLE formed a joint venture with a farmer-owned ethanol production facility from Iowa. GLE received all of the necessary environmental permits and zoning approvals needed to break ground in August, 2005.

More than 250 farmers invested in GLE. Every corn producer in southeast Michigan will benefit from the anticipated 5 cents per bushel price increase that will result from conversion of 18 million bushels annually into 55 million gallons of ethanol. Michigan consumers will benefit from cleaner burning automobile fuel in the Detroit metro area. Local livestock producers will have access to more than 150,000 tons of distillers grain for livestock feeding. Refrigeration and carbonated beverage industries will have access to more than 100,000 tons of CO<sub>2</sub> for use in their business operations and product development.

In 2004-05 Field Crops AoE educated 21,794 participants.

## ***Source of Funds***

Smith-Lever 3b&c, state, county

## **Scope of Impact**

Multi-State

## **Key Theme: Adding Value to New Agricultural Products**

**Educational Initiative Title: Michigan Swine Finishing Management Program**

**Thomas Guthrie: State**

## **Description of Program**

Pork Area of Expertise (AoE) team members worked closely with pork producers in determining what topics and issues they wished to learn more about in regard to the management of a swine finishing facility. Contract swine farms represent a major production sector of the Michigan Swine Industry. On a contract farm the owner provides the rearing facilities, while the pigs and feed are provided by a different farm (contractor). Many of these farm owners are new entrants into the hog industry, constructing barns for contract production with limited previous hog production background. In addition, farm owners are raising hogs under contract

to diversify their farming operations and supplementing their income through contract swine production. The Michigan State University Extension Pork Area of Expertise team worked in conjunction with the National Pork Board, Michigan Pork Producers Association and the Michigan Agriculture Environmental Assurance Program (MAEAP) to develop and implement this program. The Michigan Pork Producers Association (MPPA) assisted with the promotion of this program by attaching a flyer of the program inside their Michigan Pork Producer News magazine. This program also utilized the National Pork Board's Grower Finisher Management CD, the Pork Quality Assurance Program (PQA), which allowed producers to become PQA Level III certified, and MAEAP allowed this program to qualify for the educational requirement of the MAEAP Progressive Planning option.

## Impact

Nine workshops with 217 participants were educated with this program. A follow-up survey found:

- Water Management: changed drinker height and flow rate adjustment = 65.5%
- Feeder Management: checked feeder adjustment = 93.7%, working to reduce feed waste and prevention of out-of-feed events = 53.3%,
- Feed Management: owners of pigs that have monitored feed particle size = 34.4%, owners of pigs that have added fat to rations = 20.3%, owners of pigs that have monitored mycotoxins in feed = 21.9%,
- Environmental Compliance: sampled manure after attending program: 81.0%, intent to complete a CNMP = 76.0%,
- Composting Mortality: changed methods used to manage mortality = 19.6%,
- Animal Comfort and Handling: no longer sort by pig size before placement into pens = 25.0%, calculated the system capacity of ventilation system = 20.6%, changed any portion of ventilation system management = 31.8%, changed animal handling techniques = 17.5%,
- Rodent Control: changes to rodent baiting program = 36.1%, changes in cleaning practices = 30.7 %,
- Treatment of Sick Pigs: changes to hospital pens= 12.9%, changed the way of sterilizing syringes = 17.7%, changes in treatments that are routinely given to sick pigs = 27.9%.

The Pork AoE team estimates that 50% of all hogs raised in Michigan were represented at the swine grower-finisher program. Additionally, the Pork AoE team anticipates that there would be a 2% increase in feed efficiency in the hogs that are managed by those that attended the program through improved feeder and water management, improved barn environment and reduced death loss. A 2% improvement in feed efficiency equates to 5,000 tons in feed savings, which equals a total feed savings of \$525,000. Many of these farm owners/contract swine growers are paid on incentives such as feed efficiency. Therefore, improved feed efficiency results in the opportunity for the contract producer to make more money. Through improved feed efficiency 50,000 pounds of less Phosphorous would be excreted in the manure. In turn, less phosphorous in manure improves the environmental stewardship practices of these contract swine growers. This project also represented a success in collaboration with all the partners and the ability to meet PQA Level III certification and educational requirements for MAEAP.

In 2004-05, the Swine AoE educated 884 adults and over 10,000 youth in this area.

### ***Source of Funds***

Smith-Lever 3b&c, state, county

### **Scope of Impact**

State

### **Key Theme: Agriculture Profitability**

**Educational Initiative Title: Profitable Farms Build Community**

**Dennis A. Stein: Central Region**

### **Description of Program**

A dairy family needed assistance to develop a business plan that would provide a basis for their farm expansion. The expansion program would increase the farms overall profitability long term and add an additional seven FTE jobs to this rural community base. This during a period of time when many industries are cutting back hours and jobs, agriculture reverses the trend and helps to build a stronger Michigan community. Rural communities are limited in resources and support by individuals and firms that service these areas. This makes it less likely that new ventures and the financial support for these ventures will be successfully developed.

## **Impact**

MSUE educator engaged the family members in understanding the process and steps in the development of a useable business plan. In addition, support was provided in the detailed analysis of the farms businesses financial history and how that information could be used to project future expansion options. By providing this family farm with educational and technical assistance they were able to develop and sell an expansion of the dairy production enterprise. The expansion generated an additional economic impact of \$4,000,000 to the local economy and provided employment for an additional seven Full Time Employees. The owner of the farm stated, "Without MSUE support and efforts this expansion of our dairy farm would not have happened!" and "Our dairy farm is now in a position that we will be able to compete on a positive basis in the future."

The FIRM AoE in 2004-05 assisted 3,443 farmers.

## ***Source of Funds***

Smith-Lever 3b&c, state, county

## **Scope of Impact**

State

**Key Theme: Adding Value to New and Old Agricultural Products**

**Educational Initiative Title: Sugarbeet Advancement Program**

**Steven S. Poindexter: State**

## **Description of Program**

The sugar beet industry in Michigan was an industry at risk when profitability declined for both producers and companies. Yields had declined for a multitude of reasons. To turn this situation around, the Sugarbeet Advancement program was formed. The mission of the Sugarbeet Advancement program was to utilize research and education in revitalizing the Michigan sugar beet industry through a cooperative effort involving MSU, sugar companies, and producers. The Advancement committee identified critical production problems. Its major efforts were to conduct on farm research and increase educational opportunities for sugar beet producers. The Sugarbeet Advancement Program was funded through an assessment of fees to sugar beet producers and companies. The program also received grant dollars from the stat of Michigan called "GREEN" along with MSUE, and Michigan Agricultural Experiment Station.

## **Impact**

A survey to sugarbeet growers was conducted by the Center for Evaluative Studies to evaluate the initiative. The major findings for the study include: 80% attended MSUE sugar beet related farm meeting/workshops with 81% of these respondents rating the quality of educational programs high. Most respondents (81%) agreed that the program provided research based information, 74% agreed the program provided information not readily available elsewhere and 72 percent indicated they gained new information and skills on beet production. About one-fifth of the respondents indicated that their yield had increased because of advancement efforts. This translates into a potential economic impact of \$2,376,025 for the growers. About 10 percent of the growers indicated savings in beet production cost ranging from \$100 to \$5000 with a mean of \$2330. Many growers indicated that they changed/modified and/or adopted one or more of the ten sugar beet practices surveyed because of Advancement efforts. The percentage of these practices were: Leafspot control 69%, Variety recommendation 56%, Herbicide use 52%, Pelleted seed 45%, Increased plant population 40%, Tillage practices 34%, Date of planting 27%, Planter modification 16%, Fertilizer practices 19%, and Other 4%. Two-thirds of the respondents considered the Sugarbeet Advancement program as the most credible and/or reliable source of sugarbeet production information, while one-fourth considered the processing company. Nearly half (46%) of the growers felt there was improvement in the quality of the Extension services as a result of the Advancement program.

## ***Source of Funds***

Smith-Lever 3b&c, state, county

## **Scope of Impact**

State

## **Key Theme: Emerging Infectious Diseases**

**Educational Initiative Title: Increased Production and Yield of Asparagus in Norm Myers: Oceana and Mason Counties**

## **Description of Program**

Production of asparagus in West Central Michigan has declined in the last three years due to a combination of foreign competition in the processed asparagus market and very poor growing conditions result from two years of drought. More recently the discovery of a major new disease problem, Phytophthor megasperma, is impacting the production and yield of asparagus. At a recent



training called Oceana Asparagus Day the evaluation showed a heightened interest in this disease.

### **Impact**

Over 100 people attended the training. Eighty percent (80%) of those filling out evaluations felt that the disease portion of the program would change how they grow or purchase asparagus crowns and 96% felt that they would make changes in how they plant or manage new asparagus fields as a result of the training.

### **Source of Funds**

Smith-Lever 3b&c, state, county

### **Scope of Impact**

State

The AoE teams in Goal 1 met its 2004-05 Plan of Work goals by reaching its targeted population. The team and members have become more active in recruiting stakeholder input and involving collaborators in setting priorities and designing and implementing programs. Examples of collaborators included Michigan Cattlemen's Association, Department of Natural Resources, Michigan Department of Agriculture, Michigan Farm Bureau, Farm Credit Services, Michigan Bean Commission, Upper Peninsula Potato Growers Association, Soil Conservation District, Citizens Bank, Saginaw Valley State University/SBDC, Michigan Pork Producers, Michigan Department of Career Development, Michigan Grape Society, Cornell University, Ohio State University, Rutgers University, Michigan Apple Commission, and Michigan Migrant Legal Services.

**Overview of Goal 2: A safe and secure food and fiber system**

Funding and programming for Goal 2. and Goal 3. are funded mainly (94%) from other sources than Federal Formula dollars that focus on low income and underserved families. It is part of this report because MSUE has major outreach efforts in this area (over 100,000 participants each year are educated on food safety and nutrition) and programs in this area that are funded with Federal Formula dollars benefit from the research, expertise, and support from these other programs that clearly help the partnership in the land grant system. One of the main issues in describing Goal 2. is that it overlaps MSUE programming significantly with Goal 3. Often times programs in these areas teach both food safety and nutrition together. In order not to duplicate numbers, it is estimated that 20% of the effort and time goes into food safety (Goal 2.) and 80% towards nutrition (Goal 3). Therefore, the estimate of 24,124 participants is low for food safety and could go as high as 103,882 participants, who received both food safety and food nutrition instruction. The majority of effort for food safety outside of these programs would be ServSafe education to restaurants, businesses, and food markets. Table 6. shows the number of participants and Key Themes addressed by the Food Safety AoE Team.

Table 6.  
Number of Participants and Key Themes by AoE for Federal Goal 2. and Goal 3.

<b>Goal 2</b>	<b>Adults</b>	<b>Youth</b>	<b>Total</b>	<b>Key Themes</b>
Food Safety*	12,074	12,050	24,124	Food Handling, Food Safety, HACCP
<b>Goal 3</b>				
Food, Nutrition & Health*	48,297	44,749	93,046	Birth Weight, Human Health, Human Nutrition

\* To avoid duplication, participants who received both food safety and food nutrition were counted only once (20% Food Safety and 80% Food, Nutrition, and Health).

**Examples of Impact in Goal 2.**

**Key Theme: Food Safety and Food Handling**  
**Educational Initiative Title: Food Safety Education: ServSafe Training**  
**Darci Seamon and Cynthia Warren: Bay and Cass Counties**

**Description of Program**

The Bay County Department of Environmental Health as well as members of the Bay County Extension Council determined that there was a need to provide education to individuals and organizations preparing food for others. The Tri-County Food Safety Task Force comprised of schools, health departments,

division on aging, FDA, MDA and Extension Educators also recognized this as a need. A survey of the recipients of the local Family Focus newsletter showed that residents of Bay County were unaware of the new pathogens causing foodborne illnesses. Individuals and businesses involved in selling and preparing food were confused as to the requirements under the new Food Code. Due to new pathogens, food preservation and storage techniques ServSafe workshops were implemented to help restaurants, schools, and others serving food. In a similar fashion, the Cass County Health Department identified the need for MSUE to provide these types of trainings.

### **Impact**

Evaluation of the Bay County workshops found that 90% of the participants gained knowledge regarding food safety and handling. One of the organizations reported in a follow-up that it is saving \$3,000 a year from information gathered at a ServSafe 4-hour class. The organization realized that they were sanitizing dishes and utensils twice what the recommendation was. A six month follow-up evaluation of the Cass County workshops found 86% indicated that they had made changes in their food handling practices as a result of the program and 100% stated that they would recommend the ServSafe program to others. Topics that showed the greatest change were knowledge about food temperatures during cooking and the use of thermometers, wearing gloves, and preventing cross-contamination through proper sanitizing.

In 2004-05 there were nineteen 4-hour ServSafe courses conducted, with 136 individuals successfully being certified.

### **Source of Funds**

Smith-Lever 3b&c, state, local, county

### **Scope of Impact**

State

### **Key Theme: Food Safety and Food Handling**

**Educational Initiative Title: ServSafe Education in Washtenaw County**

**Joan Miller: Washtenaw County**

### **Description of Program**

The local goal for this program was to provide food safety education to targeted audiences, specifically food service managers and food handlers directly providing food to the public. The need was determined in response to Washtenaw County sanitarians' observation that food safety education would strongly contribute to the health and safety of Washtenaw County residents.

Inspectors found they were spending too much time educating food service managers on the basics of food safety. As more food service managers become certified, inspectors find vast improvement in their basic knowledge base and therefore, inspection time can be spent working on food safety systems in both commercial and institutional settings.

### **Impact**

Since June 2002, Washtenaw County has conducted ServSafe education to 394 students with 378 passing standardized testing to receive their food safety certification. This is a pass rate of 96 percent. Upon completion, 100 percent rate the course and its content good to excellent. Three month post-evaluations demonstrated over 40 percent of managers stated they had increased their monitoring of handwashing, watching for cross-contamination problems, checking that food is cooked to safe internal temperatures and claim to have started food safety education for their employees. Twenty percent of respondents stated improved inspections scores and a decrease in inspection violations. Twenty-four percent claimed improved employee morale and over 64 percent state that when hiring new staff completion of ServSafe would be a consideration in the hiring process.

### **Source of Funds**

Smith-Lever 3b&c, state, local, county

### **Scope of Impact**

State

**Key Theme: Food Safety and Human Nutrition**  
**Educational Initiative: Family Nutrition Program**  
**Karen Martin: State**

### **Description of Program**

Michigan State University Extension (MSUE) worked in collaboration with the state of Michigan's Family Independence Agency (FIA) to provide education through the Family Nutrition Program (FNP) for persons eligible for or receiving food stamps in all of Michigan's 83 counties during the 2004-05 program year. The educational efforts of FNP did not duplicate or supplant the efforts of other food and nutrition education programs such as the United States Department of Agriculture's (USDA) Expanded Food and Nutrition Education Program (EFNEP), Supplemental Nutrition Program for Women, Infants and Children (WIC), or the Commodity Supplemental Food Program (CSFP). In counties that have both FNP and EFNEP, FNP provided education to audiences not reached through EFNEP, such as seniors without children. FNP enabled county Extension Educators to reach a more diverse audience. The primary objective of the FNP

was to provide education to help individuals and families eligible for or receiving food stamps make safe, nutritious, and economical food choices. Education provided through FNP addressed four of the core elements identified by the Food and Nutrition Service (FNS) of the USDA: dietary quality, food resource management/shopping behaviors, food safety, and food security. The fifth core element, systems and environmental change, was addressed in a variety of ways. Examples include working with the Michigan Department of Community Health, Michigan Department of Education – Commodity Supplemental Food Program, Michigan Office of Services to the Aging, and three Indian Tribal Organizations to pilot the Senior Farmers' Market Nutrition Program.

### **Impact**

FNP educated 54,143 adult participants directly during 2004-05. These direct contacts included adults reached through either a series of lessons (6,628 adults) or one-time presentations (47,515 adults). There was a total of 42,673 direct educational contacts with youth. Approximately 2,000 adult participants who received a series of lessons completed both pre and post surveys. Results regarding food safety from this tool indicated: 45% fewer participants reported thawing frozen meat on the counter; 27% fewer participants reported letting food such as milk or meat sit out for more than two hours; and 16% more participants reported washing their hands before preparing or eating food.

### **Source of Funds**

Smith-Lever 3b&c, federal, state, county

### **Scope of Impact**

State

The Food Safety AoE team in Goal 2 met its 2004-05 Plan of Work goals by reaching its targeted population. The team and members have become more active in recruiting stakeholder input and involving collaborators in setting priorities and designing and implementing programs. Examples of collaborators included U.S. Food and Drug Administration, Health Departments, Substance Abuse Rehabilitation Centers, schools, juvenile centers and courts, Oakland Livingston Human Services Agency, Older Persons Commission, Child and Family Services of Southwest Michigan, University of Michigan, USDA, Kalamazoo Loaves & Fishes, Child Care Network, Great Lakes Indian Fish and Wildlife Commission, food banks, Hunger Action Coalition, Michigan Partnership for Community Caring, Michigan Department of Agriculture, and Salvation Army. One of the major indirect outreach efforts using some Formula Federal dollars was an AoE mini-grant, where over 300,000 students, teachers and parents in over 300 Wayne County schools received food safety information via three separate bookmarks and posters specifically developed for this grant. This campaign was provided in collaboration with the Wayne County Health Department.

**Overview of Goal 3: A healthy, well-nourished population**

As previously stated, funding and programming for Goal 2. overlaps Goal 3. by approximately 80%. EFNEP (Expanded Food and Nutrition Education Programs) and FNP (Family Nutrition Programs) provide education in both food safety and food nutrition. It is estimated that 103,882 received nutrition and health information. Table 7 shows the number of participants and Key Themes addressed by the Food, Nutrition, and Health AoE Team.

Table 7.  
Number of Participants and Key Themes by AoE for Federal Goal 2. and Goal 3.

<b>Goal 2</b>	<b>Adults</b>	<b>Youth</b>	<b>Total</b>	<b>Key Themes</b>
Food Safety*	12,074	12,050	24,124	Food Handling, Food Safety, HACCP
<b>Goal 3</b>				
Food, Nutrition & Health*	48,297	44,749	93,046	Birth Weight, Human Health, Human Nutrition

\* To avoid duplication, participants who received both food safety and food nutrition were counted only once (20% Food Safety and 80% Food, Nutrition, and Health).

**Examples of Impact in Goal 3.**

**Key Theme: Human Nutrition**  
**Educational Initiative: Family Nutrition Program**  
**Karen Martin: State**

**Description of Program**

Michigan State University Extension (MSUE) worked in collaboration with the state of Michigan’s Family Independence Agency (FIA) to provide education through the Family Nutrition Program (FNP) for persons eligible for or receiving food stamps in all of Michigan’s 83 counties during the 2004-05 program year (see full description in Food Safety).

**Impact**

FNP educated 54,143 adult participants directly during 2004-05. These direct contacts included adults reached through either a series of lessons (6,628 adults) or one-time presentations (47,515 adults). There was a total of 42,673 direct educational contacts with youth. Approximately 2,000 adult participants who received a series of lessons completed both pre and post surveys. Results regarding nutrition and food preparation from this tool indicated:

- 52% more participants reported using information on food labels to compare the fat or other nutrients in the food.
- 51% more participants reported thinking about healthy food choices.
- 48% more participants reported eating three or more kinds of vegetables during each day.
- 43% more participants reported eating more than one kind of fruit each day.
- 25% more participants reported preparing foods without adding salt.
- 25% more participants reported that their children ate within two hours of waking up.
- 56% more participants reported planning meals for a few days ahead before going grocery shopping.
- 45% more participants reported using a grocery list when shopping for food.
- 41% more participants reported comparing prices when shopping to find the best buy.
- 34% fewer participants reported running out of food at the end of the month.

In 2004, Michigan FNP worked in partnership with the Center for Civil Justice to increase participation in the Food Stamp Program (FSP). The Center for Civil Justice offered a toll-free Helpline that assisted low-income families in understanding how to apply for the FSP and offered telephone screening. MSU Extension staff members across the state provided information on this Helpline to the families with whom they worked, and distributed flyers and similar information to agencies such as WIC and emergency food providers in an effort to increase awareness of the Helpline and FSP. As a result of this project, over 2500 callers contacted the Helpline for screening or assistance. Of these callers, 95% of the callers were not receiving Food Stamps at the time they called, 82% received a Food Stamp screening, and 98% of the households screened appeared eligible for Food Stamps. The average amount for which callers were eligible was \$178.64. Many childless adults, immigrants, and recently unemployed persons were happy to hear that they could qualify for food stamps.

### **Source of Funds**

Smith-Lever 3b&c, Smith-Lever 3d, state, county, local

### **Scope of Impact**

State

**Key Theme: Human Health**  
**Educational Initiative: Healthy Youth Workgroup**  
**Karen Martin: State**

### **Program Description**

Childhood overweight is a critical health issue in Michigan. The combined total percent of Michigan WIC children (ages 2-5) who were either at risk of overweight or overweight was 28.1 percent in 2002. Nationally, the number of children aged 6 to 11 who are overweight has more than doubled in the past twenty years, while the number of overweight adolescents has tripled (Michigan height/weight data on children ages 6-11 is not collected on a statewide basis). In Michigan, 12 percent of students in grades 9 to 12 meet the definition for overweight. An initiative was created to address this problem, where the goal was to support community coalitions that would work collaboratively to promote healthy eating and physically active lifestyles to improve the health of children through prevention of weight problems.

### **Impact**

During the 2004-05 program year, there were eleven different projects and several media promotions conducted by 8 different coalitions, where 36,645 direct and indirect contacts were made with food stamp participants and 366,323 direct and indirect contacts were made with non-food stamp participants. These numbers were not included in the totals described above due to they were mainly indirect and unsubstantiated.

### **Source of Funds**

Smith-Lever 3b&c, federal, state, county, local

### **Scope of Impact**

State

**Key Theme: Human Health**  
**Educational Initiative: Children's Exposure to Secondhand Smoke Reduced**  
**Dawn Contreas: State**

### **Description of Program**

Mortality and morbidity of children will be reduced through decreased exposure to secondhand smoke. Parental smoking and smoking by other household members have been associated with respiratory infections, decreased lung function, middle ear effusions, and learning disabilities in children and infants.



These problems can be lessened for children by reducing their exposure to secondhand smoke. Smoking rates in the state of Michigan are higher than in the rest of the nation (25.6% versus 23.5% nationally), and among adults with no more than 12 years of formal education, rates are even higher (30.6%). Exposure to environmental tobacco smoke (ETS) in the homes of these smokers could pose a major health problem for non-smokers, particularly children. A grant was written to the Environmental Protection Agency (EPA) to secure funds to develop and test an educational intervention to reduce children's exposure to secondhand smoke.

### **Impact**

One hundred and sixty-one parents of young children, within 15 Michigan counties participated in this study. One hundred of those parents participated in the intervention group. The other sixty parents were part of the control group. One hundred percent of the parents involved in the intervention group signed a smoke-free home pledge. Out of those parents 97% reported reducing their children's exposure to secondhand smoke as a result of the program. Statistical analysis was conducted on the pretest and posttest variables. Paired t-tests showed that parents who participated in the intervention increased their overall knowledge, attitudes, and behaviors related to anti-secondhand smoke exposure at statistically significant levels (.000). Moreover, analysis showed that parents in the control group did not show statistically significant changes in their overall knowledge, attitudes, and behaviors related to anti-secondhand smoke exposure (.061). The educational intervention was determined to help low-income parents of young children decrease their children's exposure to the dangers of secondhand smoke.

### **Source of Funds**

Smith-Lever 3b&c, federal, state, county, local

### **Scope of Impact**

State

### **Key Theme: Human Nutrition**

**Educational Initiative: Fourth grade students jump into foods and fitness**

**Gretchen Hofing: Lenawee County**

### **Description of Program**

Schools have a role to play in children's health. One of the things they can do is encourage healthy eating and physical activity. The earlier children develop healthy, positive lifestyle habits, the longer they are likely to practice them. Learning and applying food, nutrition, and fitness information will improve a

child's overall health and fitness level and may reduce his or her risk of developing chronic diseases later in life. This project was collaboration between the schools and MSU Extension. Extension provided the curriculum, the instructor, and the program supplies. Collaboration was good with the schools and teachers in arranging time for the four lessons in their classrooms and as well as for administering the pre-and post-survey.

### **Impact**

More than 100 fourth grade students participated in a series of four lessons from the "Jump Into Foods and Fitness" curriculum where concepts such as five-a-day, the importance of breakfast, and the Food Guide Pyramid are combined with some kind of physical activity or creative assignment. These students completed a pre- and post-survey to evaluate behavior and knowledge changes. Ten of the questions focus on behaviors and ask the children to choose the most appropriate answer (almost always, sometimes, hardly ever) for each statement. Results of this evaluation are encouraging. Comparing the responses from before the lessons to after, positive increases were seen for the percent of students who answered "Almost always" to the statements "I wash my hands before eating or preparing food", "I choose healthy snacks when I have the choice", "I eat vegetables every day", "I drink milk or eat cheese at least two times a day", and "I eat fruits or drink real fruit juice every day". The number of children responding "Sometimes" decreased for each of the ten behaviors oriented statements after the lessons. Nearly 18 percent more children answered correctly that the Food Guide Pyramid tells us how much to eat of different foods, and 22 fewer children answered that they didn't know what the Food Guide Pyramid tells us. The last question assessed food safety by asking "You are going to make a sandwich for yourself. What do you do first?" After the lessons, eighty-two children answered "Wash your hands first" which was an increase of more than 13 percent.

### **Source of Funds**

Smith-Lever 3b&c, federal, state, county, local

### **Scope of Impact**

State

**Key Theme: Human Nutrition**  
**Educational Initiative: Healthy Lions Nutrition Mentoring Series**  
**Renee Kane: Kent County**

**Description of Program**

Need for nutrition education was determined by the school's Coordinated School Health Team. Their concerns over poor nutrition and lack of physical activity mirror the State Surgeon General's concern that over 60% of Michigan residents are considered overweight or obese. Statistics demonstrate that this problem disproportionately affects low-income individuals. To address this problem, Burton Middle School has partnered with the Kent County Coordinated School Health Program and MSUE with the goal of improving dietary quality of adults and youth, specifically by increasing fruit and vegetable consumption.

**Impact**

The audience for this project was 12 middle school and 30 elementary school students participating in a summer enrichment program at their school. The audience was predominately Hispanic, at an urban school where 95% of the children qualify for free or reduced meals according to Michigan Department of Education School Meals Data (October 2004). An evaluation of the program found:

- 25% increase in number of student who “almost always” wash hands before eating or preparing food
- 37% increase in number of students who “almost always” or “sometimes” read nutrition information on food labels
- 25% increase in number of students who “almost always” choose healthy snacks when they have the choice
- 12% increase in the number of students who “almost always” eat vegetables every day
- 12% increase in number of students who “almost always” eat fruits or drink real fruit juice every day
- 17% increase in number of students who “almost always” like to try new foods
- 13% increase in number of students who are “almost always” or “sometimes” physically active every day

- 25% increase in number of students who “almost always” drink milk or eat cheese at least two times a day

Program was important because it resulted in an increase in fruit and vegetable consumption, dairy consumption, and children's tendency to try new foods. The mentoring model was also determined to be an effective mode to presenting nutrition education.

### **Source of Funds**

Smith-Lever 3b&c, federal, state, county, local

### **Scope of Impact**

State

The Food, Nutrition, and Health AoE team in Goal 3 met its 2004-05 Plan of Work goals by reaching its targeted population. The team and members have become more active in recruiting stakeholder input and involving collaborators in setting priorities and designing and implementing programs. Examples of collaborators included WIC, Head Start, Work First, Early On, pregnant teen programs, Michigan Family Independence Agency, Michigan Department of Public Health, hospitals, Commodity Foods, shelters, Sault Tribe of Chippewa Indians Youth Services, Alpena Community College, U.S. Food and Drug Administration, Health Departments, Substance Abuse Rehabilitation Centers, schools, juvenile centers and courts, Oakland Livingston Human Services Agency, Older Persons Commission, Child and Family Services of Southwest Michigan, USDA, Kalamazoo Loaves & Fishes, Child Care Network, Great Lakes Indian Fish and Wildlife Commission, food banks, Hunger Action Coalition, Michigan Partnership for Community Caring, Michigan Department of Agriculture, and Salvation Army. In addition, the team is engaged in identifying underserved populations and developing strategies, collaborations, and programs to address these populations.

## Overview of Goal 4: Greater harmony between agriculture and the environment

Forty six thousand three hundred ninety (55,757) participants received direct training on key themes in Goal 4. Table 8. shows the AoE Teams in this area, the number of participants, and the federal key themes for Goal 4.

Table 8.  
Number of Participants and Key Themes by AoE for Goal 4.

Goal 4	Adults	Youth	Total	Key Themes
Forestry	5,409	4,459	9,868	Forest Crops, Forest Resource Management
Land Use	2,927	7,634	10,561	Land Use, IPM, Natural Resources
Manure	1,286	970	2,256	Agricultural Waste, Water Quality
Renewable Resources(RREA)	159	3,539	3,698	Recycling, Forest Resource Management
Sea Grant	2,636	4,326	6,962	Water Quality, Natural Resources Management
Water Quality	7,674	14,225	21,899	Water Quality, Riparian Management, Nutrient Management
Christmas Trees	513	0	513	Forest Crops, IPM, Water Quality
	<b>20,604</b>	<b>35,153</b>	<b>55,757</b>	

### Examples of Impact in Goal 4.

#### **Key Theme: Soil Quality**

**Educational Initiative Title: Soil Sampling for Soybean Cyst Nematodes  
Phil Kaatz and Bruce MacKellar: Genesee, Lapeer, Macomb, and St. Clair Counties**

#### **Description of Program**

Increasing awareness of soybean cyst nematode, the major soybean pest in the United States, has been one of the key issues for soybean growers in the

southern Thumb area. Before the introduction of soybean aphids, soybean cyst nematodes were the most destructive pest of soybean production in the country. The pest can cause problems ranging from complete crop failure to 15% yield losses without showing visible symptoms. Because of the setback distances needed between hybrid seed corn fields and the prevalence of planting soybeans on these areas year after year, the counties have been showing significant signs that the pest has been causing yield drops for anyone who is able to identify the symptoms. In 2002, there were -0- soil samples taken for soybean cyst nematode (SCN) in St. Clair, Macomb and Lapeer County. The fact that there were no samples taken showed the need for better education for farmers. The cost of soil samples for SCN is at no cost to the producer. Samples are paid for by the check off dollars administered by the Michigan Soybean Promotion Committee through a grant to the MSU Diagnostic Lab. Stakeholders were aware of the need to do testing for the SCN, but had not received adequate training to recognize the signs of the pest. The goal of this initiative was to raise awareness of the prevalence of this pest, to convince producers that it is important to test their fields for the presence of the nematods, and to help them to select resistant varieties and develop management plants to improve productivity on the areas second largest acreage crop.

### **Impact**

Over 300 tests from the counties were conducted during 2004-05, which is a significant increase from the beginning of the initiative. Considering that soybeans from these counties represents 5.75 million bushels of soybeans valued \$34.5 Million dollars, it can be assumed this initiative has assisted in protecting this important industry in Michigan.

### ***Source of Funds***

Smith-Lever 3b&c, state, county

### **Scope of Impact**

State

**Key Theme: Land Use****Educational Initiative Title: Infrastructure Development and Management in Land Use Planning****Land Use AoE Team: State****Description of Program**

Through a stakeholder input process local governments expressed a need for education and materials on infrastructure development and management as it relates to land use planning, development and community investments, especially given growing interest in neo-traditional designs and cluster zoning. When local governments –especially small under staffed villages– attempt to implement "Smart Growth" principles of cluster design and dense development there is a need for sewage treatment and other infrastructure. However there is not the local knowledge on how government finance works and what funds and planning is necessary to pay for infrastructure. The AoE Team developed an in-service training program of "train the trainers" to prepare AoE members to work with local governments on this issue.

**Impact**

The pilot for this program was delivered in Traverse City, September 23, 2005. This pilot also served as a train-the-trainer for members of the Land Use team. Intent is the program will be repeated in other parts of Michigan during the next one to two years. Twenty three participants evaluated the program. Results indicated that 96% planned on using the information in the near future with examples being: "Methods of bonding (financing) municipal projects and types of projects these may be used for," "Process and sources of funding for infrastructure," "Communication to public on things needed to be changed in the community," "Capital Improvement Program," and "Waste water system sizes." Sixty two (62%) reported that would do something different in the future and 91% believed their communities will benefit from the trainings.

In 2004-05 the Land Use AoE Team reached 10,561 participants.

**Source of Funds**

Smith-Lever 3b&c, state, county

**Scope of Impact**

State

**Key Theme: Nutrient Management and Water Quality**  
**Educational Initiative Title: Cows in the Creek Project**  
**Thomas G. Rorabaugh: Central Region**

### **Description of Program**

Watering livestock in ponds and streams has proven adverse environmental consequences such as nutrient overload, stream bank erosion, siltation and negative visual impact on the non-farm community. In response to "Right to Farm" complaints, and observations by the agent of open water contact, a demonstration project was designed to promote "Best Management Practices for Nutrient Management (BMP's)". The goal was to show producers the Best Management Practices for controlling livestock access to stream water sites. Another goal was to demonstrate extended grazing techniques, with new and improved varieties suited to northern Michigan. Three sites were established on a demonstration farm to show livestock exclusion techniques for surface water courses, erosion control methods and buffer strip management to reduce nutrient overload. These sites included two limited access watering sites and an improved stream crossing. All sites were designed with Natural Resource Conservation Services (NRCS) specifications. A field day was held so producers could gain first hand knowledge of BMP's, and witness approved exclusion structures and buffer strip management.

### **Impact**

Thirty producers from six counties attended the field day and several producers have "stopped" by to look at the stream sites and the extended grazing results. Several Amish farmers also attended the event. Producers witnessed first hand how to properly construct stream watering sites and stream crossings using NRCS approved techniques. Producers also observed extended grazing varieties available for use on their own farms. Four Amish farms have adopted practices learned at the field day and by observing the demonstration site. Two farms have established stream watering sites for dairy cows and draft horses and adopted managed grazing practices. Two other Amish farms have completed pasture divisions and are adopting managed grazing.

During 2004-05, 2,256 participants were trained by the Manure AoE Team and 21,899 participants by the Water Quality AoE Team.

### **Source of Funds**

Smith-Lever 3b&c, state, county

### **Scope of Impact**

State



**Key Theme: Pesticide Application**  
**Educational Initiative Title: Educating Commercial Pesticide Applicators**  
**Mike Staton: Southwest Region**

### **Program Description**

Commercial pesticide applicators in southwest Michigan have had trouble earning enough commercial core, turf grass and ornamental credits to renew their pesticide certification. In addition, in the past MSUE has offered excellent pesticide recertification classes for commercial applicators (turf and ornamental) at Ag Action Day for years, but were not well attended. To address this issue, the team obtained a list of commercial applicators in each county from the Michigan Department of Agriculture (MDA). The list was used to directly promote the turf and ornamental Ag Action Day sessions.

### **Impact**

As a result of the targeted promotional effort, participation increased from around twenty applicators to over 80. In addition, a survey instrument was developed, distributed and summarized to help the team meet the educational needs of commercial applicators in turf and ornamentals. The results of the survey found seventy-nine percent (79%) indicated that they have had trouble accumulating enough commercial core, turf and ornamental credits to renew their pesticide certification. Ninety-eight percent (98%) indicated that we should continue to offer three turf/ornamental pest management classes at Ag Action Day each year. Ninety-two percent (92%) indicated that they would like to see and would participate in other types of recertification seminars such as in-season turf and ornamental pest management meetings. As a result of the training and survey, the team was able to meet the immediate educational needs of an underserved audience and gathered powerful survey information that improved our ability to meet the educational needs of this underserved audience.

In 2004-05, the Turfgrass and Ornamentals AoE Teams collectively reached 6,814 participants.

### **Source of Funds**

Smith-Lever 3b&c, state, county

### **Scope of Impact**

State

**Key Theme: Water Quality****Educational Initiative Title: Effective Irrigation Management for Nurseries****Thomas A. Dudek: Ottawa County****Description of Program**

New Water Use reporting legislation and increased emphasis on water issues created a local need to educate nursery growers on more efficient water usage. Ottawa County and surrounding counties are the focal point for nursery production in the state. Also the EQIP program piloted an effort to involve nurseries in their cost sharing and Ottawa County was chosen to be a pilot county. One of the areas they would cost share in is Irrigation System Efficiency testing. But before nurseries could apply for the funds they needed to understand the concepts of system efficiencies. A three session program developed by the University of Florida staff was used and adapted to Michigan's growing conditions and needs.

**Impact**

Seventeen growers representing 10 nurseries including the 3 largest nurseries in the state participated in the program. The impact of this effort was that 14 individuals showed a 17% gain in knowledge based on pre and post test scores (i.e. 74% to 91%). Fifty percent (50%) of the attendees planned on utilizing the written materials provided and conducting distribution uniformity tests on their overhead and micro irrigation systems. Sixty four percent planned on purchasing a pilot tube to measure nozzle pressures on their overhead irrigation systems. Over 4900 acres of nursery stock production was represented by the attending growers.

**Source of Funds**

Smith-Lever 3b&c, state, county

**Scope of Impact**

State

**Key Theme: Wildlife Management****Educational Initiative Title: Forests & Deer-Striving for Balance****Bill Cook: Multi-State****Description of Program**

Deer overabundance has become a major natural resource issue in many eastern states, including Michigan. Deer pose one of the most serious threats to Michigan forest health and sustainability. Browse impacts are widespread and

often severe, resulting in major long-term ecosystem changes, loss of biodiversity, inability to reproduce commercial tree species (multi-billion dollar industry), degrade wildlife habitat, and cause unnecessary damage to life and property (tens of millions of dollars, injuries, deaths).

A professional conference was conducted that looked at some of these impacts and examined management challenges. Twelve speakers addressed pertinent issues about forest impacts, recovery, and management. The conference emphasized that while biological and ecological resources are threatened, the solutions lie largely in the socio-political arena.

### **Impact**

200 people attended the conference in St. Ignace, most of which were natural resource professionals that consisted primarily of foresters and wildlife managers. Results from evaluation surveys found: nearly half the respondents were surprised by at least one presentation; 75% learned something new; 80% cited deer overabundance relevant to their jobs; 90% indicated the conference met/exceeded their expectations; and 100% of the respondents believed that agencies & organizations should reduce deer densities. Knowledge gains from this conference will help address the negative impacts of deer overabundance that can lead to habitat degradation that affects a wide range of plant and animal species, and a number of major ecological processes.

The Forestry AoE in 2004-05 reached 9,868 participants.

### **Source of Funds**

Smith-Lever 3b&c, state, county

### **Scope of Impact**

Multi-State

The AoE Teams in Goal 4. met their 2004-05 Plan of Work goals by reaching their targeted population. All teams and members have become more active in recruiting stakeholder input and involving collaborators in setting priorities, and designing and implementing programs. Examples of collaborators have included: Northwest Michigan Council of Governments, planning departments, Western Michigan University, watershed groups, Rotaries, Chambers of Commerce, League of Women Voters, Farm Bureau, schools, DNR, U.S. Forest Service, drain commissioners, and Michigan Department of Agriculture.

## Overview of Goal 5: Enhanced economic opportunity and quality of life for Americans

Table 9 shows the AoE Teams, number of program participants, and federal key themes address by the AoE teams for Goal 5. It is important to note that youth were distributed by the content area and were not duplicated in Goal 5., whereby, an additional 164,115 youth from Goals 1 through 4 should be added to make the total number of youth to be 231,929 for this area.

Table 9.  
Total Participants Reached Directly by AOE for Federal Goal 5.

Goal 5	Adults	Youth	Total	Key Themes
Community Development	6,439	8,945	15,384	Community Development
Economic Development	6,938	419	7,357	Promoting Business Opportunities
Family Resource Management	20,346	13,489	33,835	Family Resource Management, Children, Youth and Families at Risk
FIRM	3,443	16	3,459	Agricultural Financial Management
Human Development	14,814	3,423	18,237	Parenting, Child Care
LeadNet	829	11,834	12,654	Leadership Training
State & Local Government	552	0	552	Community Development, Leadership Training
Tourism	341	0	341	Tourism
Volunteer Development*	6,631	18,400	25,031	Youth Development, Leadership Training
Youth Development**	9,822	12,747	22,569	Youth Development/4-H, Character Education, Children, Youth and Families at Risk
	<b>80,564</b>	<b>120,565</b>	<b>201,129</b>	

\* Number of adult volunteers who were trained. A total of 24,414 adults volunteered for 4-H and 3,000 for Master Gardeners.

\*\* To avoid duplication, youth who crossed goals were not counted again in youth development.

## **Examples of Impact in Goal 5.**

**Key Theme: Promoting Business Programs and Agricultural Profitability  
Educational Initiative Title: Abled Bodied Teens Mentoring Youth With  
Disabilities**

**Janelle Stewart: Lenawee County**

### **Description of Program**

In the early 1990's, two programs were started in Lenawee County that focused on youth mentoring youth with disabilities. Lenawee Therapeutic riding (LTR) provides assisted therapeutic horseback riding for physically and emotionally impaired individuals. The program takes into consideration each rider's capabilities with and without assistance from a certified riding instructor and then riding plans are developed and carried out with the assistance of volunteers. The second program, BLOOM Where You Are Planted (BLOOM) focuses on able-bodied youth serving as mentors to non-abled-bodied youth in hands-on, environmental, and educational programs. The able-bodied youth work one-on-one helping the youth with disabilities to complete such projects as planting/maintaining a flower garden, fishing, nature walks, and various crafts, using natural materials. Though both programs were originally designed with a volunteer component, the focus was to provide programming for individuals with disabilities. A survey was conducted with the 4-H youth volunteers who have been involved in these programs with the purpose in mind of evaluating the impact on teen volunteers in establishing mentoring relationships with individuals with disabilities.

### **Impact**

Over the past 15 years, these two programs have made it possible for 300 able-bodied volunteers to develop special relationships and friendships with non-abled-bodied youth. The results the survey showed that 84% of the survey respondents volunteered in the program(s) for two or more years. This demonstrates a very high rate of return for youth volunteers in the programs. One respondent said, "BLOOM was my favorite thing I ever did in 4-H." After volunteering with BLOOM or LTR programs 97% of the respondents said they were more comfortable interacting with individuals with disabilities. This reflects a 33% change from the participants stating they were originally uncomfortable interacting with individuals with disabilities prior to volunteering in these programs. 100% reported an increase in their awareness about the challenges the disabled face which heightened their sensitivity and empathy. One youth stated, "I think it's showed me that even though some of the kids can't communicate with words, they have other ways of communicating." Another said, "I became much more comfortable with disabled people and I understood them better." With a strong rate of return in volunteering for these programs, 52% have continued to work or interact with individuals with disabilities. Thirty-five percent

(35%) have maintained on-going friendships with individuals in the program. One youth volunteer said, "I was always interested in spending time with children that had disabilities; this was my first opportunity to get started." These results show these programs have a strong positive impact on youth with disabilities as well as the mentoring youth.

In 2004-05 18,400 youth were involved in volunteering and community service.

### **Source of Funds**

Smith-Lever 3b&c, state, county

### **Scope of Impact**

State

**Key Theme: Agricultural Financial Management**  
**Educational Initiative Title: Farm Information Systems - Telfarm**  
**Roger Betz: Southwest Region**

### **Description of Program**

Many of the commodity groups and AoE teams identify financial management and profitability as an important goal. In order to improve profitability, one has to understand what ones actual profitability is in order to compare. Besides useful income tax information, producers need to have accurate business analysis information to evaluate if the farm is actually making money, or is cash flow being obtained from outside sources? Businesses also need a comparative tool so that they can evaluate their business compared to others to help identify strengths and weaknesses within their business. State summaries are used from the individual's input data in order to create state type of farm reports. Individuals can use information to compare from one year to the next. Also, Michigan uses the information for various activities including the status of individual commodity groups. This is used, for one example, to help law makers determine state and federal programs to assist producers. This helps secure and maintain a national healthy and adequate food supply.

### **Impact**

146 Financial Business Analysis were completed in the southwest region through the cooperation of the southwest staff. The number of people impacted was much higher as many operations have 2 or more operators for the business. Producers were asked to rate their understanding of 11 financial indicators and ratios for their business, both before and after the Telfarm Business Analysis session. Of these indicators, producers indicated a change from 7.3% to 68.0% increase in their understanding of these individual ratios and financial indicators

for their business. Additional questions from the formal written evaluation: 1) How valuable do you consider this session to be to your farm business? 90% rated very valuable, with 10% somewhat valuable, 0 of little, and 0 of no value, indicating a very strong feelings of the importance of this session; 2) Did you learn something about your business today that you did not know before? Even though several of these producers have participated in these sessions for many years, 83% of them indicated yes, only 17% indicated no. When asked if yes, what they've learned? Examples included: Can see trends and assumptions quantified that I had a better year than what I realized; that we should continue in the business; gain an understanding of the previous year's balance sheet and how you have to use both of them; profitability appears to be low because of land values (in other words, a person understands the difference between profitability and inflation of land in terms of their balance sheet); we learned that debt to asset ratio isn't bad, and that we need to get our operating expenses down; how to make an expansion budget plan for the lender; that an expansion may be okay; understand the need for accurate records; that their draw was more than what their income was for the year; what areas to watch for as to not to get into financial trouble; good job of explaining things; business is in better shape than we anticipated; 3) Will the information received about your farm business influence your decision making in the next year? 80% indicated yes, only 20% indicated no. One farmer using the recommendations from this process increased their cow numbers by 75% and milk production increased over 4,000 lbs. per cow. As a result of participating in the Telfarm system, producers from Southwest Michigan benefited by over \$2,360,000 Million in income tax savings for the year.

### **Source of Funds**

Smith-Lever 3b&c, state, county

### **Scope of Impact**

State

### **Key Theme: Children, Youth and Families At-Risk**

**Educational Initiative Title: Juvenile Secure Drug Treatment Facilitation**

**Howard Wetter: Bay County**

### **Description of Program**

Eight years ago Bay County made a decision to expand their juvenile home facility by adding a new 12 bed wing to the existing 18 bed facility. The new facility was designed to address increased county needs. However the new wing was built larger to attract use from other counties who did not have their own juvenile facility. Fees paid by these out of county users were going to pay for the new construction. The projected increase in Bay County juvenile crime never

materialized. Other juvenile facilities were built in Midland and other parts of the state which made it harder to attract residents from other counties. As a result, the new wing of the juvenile facility was underutilized and closed in 2003. This placed the entire burden of paying off the construction bonds on the Bay County general fund, which was already under considerable stress. In 2003, a community group sponsored by the probate court identified this as a major issue that needed to be addressed. MSU Extension was invited to organize and facilitate a community work group to identify alternative uses for the unused wing of the juvenile home and ease the drain on the county's general fund. MSU Extension partnered with the Bay County Probate Court to identify weaknesses and needs in the current juvenile system, gaps in existing services, and issues that needed to be addressed to improve the system. Extension's goal in this partnership was to build stronger communities through better collaboration between local units of government and community groups and position MSU Extension as a catalyst for community change.

### **Impact**

Extension participated in planning meetings with the three co-chairs of probate court task force to set up a framework for the community facilitation. A series of group meetings were planned and a list of involved agencies and individuals were created. The new use had to be revenue neutral and be financially self supporting; the new use should address an unmet community need; the new use should have the potential to also pay for the cost of the new juvenile wing; The new use should to the extent possible, involve existing community resources. One solution that emerged from the MSUE facilitation process was to convert the new wing of the juvenile home into a secure drug treatment facility for both Bay County youth as well as available for a cost for youth from other counties. The solution was implemented on a pilot basis. The pilot was very successful. The fees charged to out of county users covered the entire program's operational costs. In addition, 25 Bay County youth received treatment in the pilot program who would have otherwise received no intensive 30 day substance abuse treatment valued at \$82,500. Current projections are that average occupancy will range between 7-9 youth per month with 3-4 of those youth from Bay County. As efforts to promote the program increase, it is expected that the program will be fully utilized. At projected use levels, the program will pay for itself, provide services to Bay County youth at no additional cost, and generate approximately \$75,000 in excess revenue which will be returned to the county general fund to off set other juvenile home costs.

### **Source of Funds**

Smith-Lever 3b&c, state, county, local

### **Scope of Impact**

State



**Key Theme: Children, Youth and Families At-Risk****Educational Initiative Title: Early Literacy: A Lullaby of Sounds and Words****Meagan Shedd: State****Description of Program**

The Families and Communities Together (FACT) coalition at Michigan State University provided support for the development of a parent education brochure related to emergent literacy development in young children. The brochure, *Early Literacy: A Lullaby of Sounds and Words*, was developed utilizing a strengths-based approach to literacy development. Its purpose was to provide developmentally appropriate information that affirms what parents are already doing, while simultaneously offering easy and practical suggestions for new literacy activities. Furthermore, the brochure was intended to target families regardless of income, race, ethnicity or education, focusing on the development of children from birth to age 5.

**Impact**

The purpose of the evaluation was to determine if parent behaviors related to emergent literacy development changed as a result of receiving a parent education brochure. Further, the evaluation examined if behavior change was greater depending on the manner in which parents received the material. One hundred eighty-two participants representing 12 counties in Michigan completed the study. One hundred were enrolled in the home visit group and eighty-two were enrolled in the drop off group. Participants were recruited through Michigan State University Extension Family and Consumer Sciences programs. Counties were assigned to either the drop off or home visit group based on current programming efforts. Data was collected on a pre-test-post-test basis. Results indicated participants who received the brochure, *Early Literacy: A Lullaby of Sounds and Words*, demonstrated statistically significant increases in their parent literacy behaviors from pre- to post-assessment. Further analysis on each individual test item showed that there were statistically significant increases in 22 of the 25 parent literacy behaviors from pre- to post-assessment. Furthermore, results revealed that there were no statistical differences in raw change scores from pre- to post-assessment between the home visit group and the drop off group. These results suggest that delivery method did not affect parent behavior change related to emergent literacy development, as measured by the Parent Reading Survey.

**Source of Funds**

Smith-Lever 3b&amp;c, state, county, local

**Scope of Impact**

State

**Key Theme: Community Development****Educational Initiative Title: Master Gardener Program in Correctional Facilities****Stephen B. Fouch: UP Region****Description of Program**

Over the past 8 years, Kinross Correctional Facility has been the site for the first and longest lasting prison Master Gardener Program in Michigan and possibly the entire US. The initial goal included working with diverse audiences. The Master Gardener Program offers inmates an opportunity to learn a skill that can be used inside and outside when they are released. They learn to work as a team and obtain a sense of community. For some inmates, it is the first time they've succeeded in life and contributed instead of taking from someone else. Inmates need opportunities to gain self esteem and spend quality time on productive endeavors. The initial Master Gardener class was scheduled in response to a request by an officer who had taken the class in Chippewa County. The model was to "train the trainer". Teach the initial group of inmates and then allow them to "grow the program".

**Impact**

Over 100 inmates have completed Master Gardener training and received certification. Approximately 60 inmates have also earned Advance Master Gardener Certification. As a result of the program, an "in-house" garden association was formed called the "H.O.G.S." The acronym stands for "Horticulture Organic Growers Society". This group of inmates has taken over leadership of the Master Gardener program. The impact of this program on the prison, the other inmates and staff has been significant. The correction program has shown a significant decrease in "write-ups" and disciplinary actions that is believed to be part of the requirement that inmates are not allowed to participate unless they have a "clean" history for 12 months. In addition, as part of the volunteer requirement, inmates are involved in beautification of the prison, assisting with the classes, working in an acre garden, and more. In fact, over the past two years, non-profit groups from all over Northern Michigan have received nearly 20,000 pounds of produce from the prison garden. And the Michigan DNR has received thousands of tree seedlings grown by inmates for replanting on state land.

During 2004-05, 4,000 volunteers participated in the Mater Gardener Program and contributed over 100,000 hours of community service.

**Source of Funds**

Smith-Lever 3b&c, state, county, local

## **Scope of Impact**

State

**Key Theme: Community Development**  
**Educational Initiative Title: Wexford County Comprehensive Plan**  
**Kurt Schindler: Wexford County**

## **Description of Program**

Wexford County requested MSU Extension assistance in the development of a new county zoning ordinance for the county. Extension provided facilitation, technical assistance, and presentation of various alternatives to issues the county identified throughout the facilitation process.

## **Impact**

The Wexford County Comprehensive Plan was developed with the help of Extension, MSUE Victor Institute, and MSU Schools of Geography and Urban Planning and was implemented by the Wexford County Planning Department. It was the first plan in the State of Michigan to be processed under “MCL 125.104b Coordinated Planning Notices” and “MCL125.104c Plan Adoption Procedure”, it served, in this regard, as a model to other counties in the state; The Wexford County Comprehensive Plan received the Northwest Michigan Council of Governments top award for best planning in northwest Michigan. This plan has been delivered at the Michigan Society of Planning Education Conference, at the Citizen Planner Academy, and to counties around the state. To date, a number of counties have started their planning process, emulating the process used in Wexford.

## **Impact**

### ***Source of Funds***

Smith-Lever 3b&c, state, county, local

## **Scope of Impact**

State

The AoE Teams in Goal 5. met their 2004-05 Plan of Work goals by reaching their targeted population. All teams and members have become more active in recruiting stakeholder input and involving collaborators in setting priorities, and designing and implementing programs. In addition, the teams are engaged in identifying underserved populations and developing strategies, collaborations, and programs to address these populations. Examples of collaborators have included: Farm Credit Services, Intermediate School Districts, Chambers of Commerce, Community Foundations, Capital Area United Way, Kellogg Community College, Community Mental Health, Michigan Townships Association, Farm Bureau, Michigan State Police, Spectrum Health, Michigan Nonprofit Association, Michigan Department of Transportation, Small Business Development Center, Michigan State Housing Development Authority, Harvard University, Lutheran Social Services, Michigan Family Independence Agency, Family Counseling Center, Early Headstart, W.K. Kellogg Foundation, University of Wisconsin, American Youth Foundation, 4C, Child Abuse and Neglect Council, Community Action Agency, Michigan Department of Public Health, University of Michigan, NAACP, YMCA, Michigan Council on Crime and Delinquency, and Big Brothers/Big Sisters.

## Reaching Underserved Audiences

All agents identify in their educational initiative plans their target audiences for their programs and assess who is being reached and who is underserved. Based on these assessments, agents develop new educational initiatives to address reaching underserved populations. During 2004-05 MSU Extension reported progress and impact on over 56 educational initiatives that reached new underserved audiences in their counties. Progress was made in reaching new audiences for programs, involving new stakeholders from underserved areas and groups, expanding programs in new geographic (underserved) areas, and development of new programs.

Examples of progress in 2004-05 towards reaching underserved audiences included:

- more diverse audiences in 4-H Youth Development;
- more males in food and nutrition programs;
- more commodity marketing workshops that specifically targeted farm wives/spouses;
- more seniors and underserved youth recruited through a variety of organizations serving these populations;
- more fathers recruited for parenting programs;
- more low-income mothers recruited for parenting programs;
- more pork producers served, where they indicated they have recently become an underserved audience because feed companies and producer organizations no longer provide educational events;
- more low-income African American youth targeted through 4-H;
- more leaders were trained from underserved areas and populations;
- more outreach through Chambers of Commerce and local libraries to provide local community contacts, (especially underserved groups) through which information on classes, programs and volunteer opportunities was distributed;
- more services to Amish farmers;
- more collaboration with county health department clinics that resulted in more educational services to underserved audiences;
- and more housing programs for low-income audiences.
- more youth involved in state and local government issues;

In addition, AoE teams are examining the stakeholder input from Sharpening Our Program Focus to address new needs and underserved populations.

An example of addressing underserved audiences in 2004-05 was the correctional program helping inmates develop skills and give back to the communities.

## **Program Review Process**

MSU Extension continues to use the AoE team structure for the Program Review Process as stated in the Plan of Work with no changes. As mentioned above, the teams have begun to incorporate the information from the new round of stakeholder input.

In addition to the above process, counties and AoE teams during 2004-05 used over 200 advisory groups to identify local needs and action strategies. These groups ranged from local 4-H Foundations to Technical Advisory Committee Southwestern Michigan Solid Waste Consortium. This information will continue to be used for stakeholder input and Civil Rights compliance.

## **Evaluation of the Success of Multi-state and Joint Activities**

MSU Extension met its goal of 2% or \$164,511 as proposed in the Plan of Work by spending \$165,778 on multi-state activities (see Appendix A). The majority of these activities involved sharing information and educating others from other states. Examples of collaborations consisted of: Floriculture Programming in Michigan, Ohio, Indiana, Illinois; effects of deicing salt on blueberries with Indiana and Ohio; Ohio Lake Erie Balanced Growth Initiative that involved the Great Lakes Commission and Ohio-based stakeholders to assess a variety of indicators to gauge progress towards achieving balanced growth; Emerald Ash Borer Education Tri-State committee that worked together on common materials and consistent messages to the general public, public officials and media; a collaboration with Ohio on “Greenhouse Skill Training for Spanish Speakers;” and Tri-State Forestry Woodlands and Wildlife Workshops that is a cooperative effort between Extension and other agencies in Indiana, Michigan and Ohio on invasive species management, woodland and wildlife management, and wetlands stewardship.

## **Evaluation of the Success of Integration Activities**

Michigan State University Extension achieved its 2004-05 Integrated Activities goal with \$341,393 spent in this area that exceeds the 4% goal of \$317,007 (see Appendix B). The majority of integration comes from: AoE Team activities with field staff, specialists and faculty working together on needs assessments, program development, implementation, and evaluation; collaborative projects between the Michigan Agricultural Experiment Station and Extension; and faculty being directly involved in workshops, trainings, and technical assistance in the communities.

**For further information** regarding this report or MSU Extension contact Bruce E. Haas, Ph.D. at [haasb@msu.edu](mailto:haasb@msu.edu) or (517) 432-3491.

## **Appendix**

### **Michigan Multistate Extension Form and Documentation And Michigan Integrated Extension Form and Documentation**

Appendix

U.S. Department of Agriculture  
 Cooperative State Research, Education, and Extension Service  
 Supplement to the Annual Report of Accomplishments and Results  
 Multistate Extension Activities and Integrated Activities  
 (Attach Brief Summaries)

Institution Michigan State University Extension

State Michigan

Check one:  Multi-state Extension Activities  
 Integrated Activities (Hatch Act Funds)  
 Integrated Activities (Smith-Lever Act Funds)

Title of Planned Program/Activity	Actual Expenditures				
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
<u>Multi-state Collaboration</u>	<u>0</u>	\$114,754	\$182,083	\$227,379	\$165,778
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
<b>Total</b>	_____	\$114,754	\$182,083	\$227,379	\$165,778

Tom Coon  
Director

4/30/06  
Date



**Appendix**

**U.S. Department of Agriculture  
 Cooperative State Research, Education, and Extension Service  
 Supplement to the Annual Report of Accomplishments and Results  
 Multistate Extension Activities and Integrated Activities  
 (Attach Brief Summaries)**

Institution Michigan State University Extension  
 State Michigan

Check one:  Multistate Extension Activities  
 Integrated Activities (Hatch Act Funds)  
 Integrated Activities (Smith-Lever Act Funds)

**Actual Expenditures**

Title of Planned Program/Activity	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
<u>Integrated Research</u>	<u>0</u>	\$177,639	\$335,244	\$329,023	\$341,393
_____					
_____					
_____					
_____					
<b>Total</b>	<u>0</u>	\$177,639	\$335,244	\$329,023	\$341,393

Tom Coon                      4/30/06  
 Director                                      Date