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Cooperative Extension System

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ACCOMPLISHMENTS

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A. PLANNED PROGRAMS

National Goals

Goal 1: An agricultural system that is highly competitive in the global economy.

Overview:

Changes in government regulations and the economic environment have increased the risks of farming in South Carolina. Agricultural firms today (both large scale and small and limited resource firms) are forced to consider greater market, financial, production, and environmental risks than in the past. These risks require a significant change in agribusiness management philosophy and also provide a challenge to develop risk-oriented educational programs. Couple these changes with the advancements being made in agricultural technology, and it is understandable why a framework of educational programs was established to enable the agricultural system of South Carolina to become more competitive in the global economy. Two educational initiatives serve as the framework for implementing GPRA Goal 1. These two initiatives are:

- Risk Management Systems for Agricultural Firms
- Sustainable Agricultural Production Systems (Farm Safety)

Under these initiatives, projects were identified which serve as the basis for program planning and development.

For the Risk Management Systems for Agricultural Firms initiative, four projects were utilized: Agricultural Market Risk Management; Economic Analysis of Enterprises and Technologies; Business Systems and Financial Risk Management; and Agricultural Policy Education. The educational programs that were developed as part of these projects were directed at teaching management skills that ensure long-term profitability and sustainability for the farm business. These programs included business planning, creative problem solving, assessing alternate enterprise combinations and technologies for profitability while managing market and financial risks and maintaining the integrity of the environment. In addition, programs were developed to educate farmers and agribusiness personnel on agricultural policies created by major new federal agricultural legislation.

Under the Sustainable Agricultural Production Systems initiative, the Farm Safety project was identified as part of the Goal 1 framework. This project was developed to provide educational programs on safety issues associated with agricultural production and lifestyles; to increase awareness of agricultural safety; and to provide educational programs and awareness on safety issues associated with youth on farms and rural settings.

There was a total of 2,105.0 days or 9.2 FTE reported in areas that are classified under Goal 1. The total number of contacts reported in this goal was 20,318. The breakdown of these contacts is as follows: 10,217 white males, 6,269 white females, 2,223 black males, 1,398 black females, 117 classified as other males, and 94 classified as other females. From this group, a total of 1,363 were classified as limited resource. Accomplishment that were reported to the Clemson University Information Management System show 231 total programs and activities conducted in projects that are classified under Goal 1. There were a total of 5,264 participants who completed these educational programs. Of those completing the programs, 3,298 reported increasing their knowledge as a result of their participation. Of those participants who reported increasing knowledge, 1,361 indicated that they planned to adopt the recommended practices while 829 reported that they actually adopted or increased the use of recommended practices as a result of the programs.

Key Theme -- Agricultural Profitability (Risk Management)

- a. Response to educational demands in the area of risk management from South Carolina agribusinesses were to be through: 1) provision of current situation, outlook and management strategy information to the industry; 2) provision of increased training for front-line agents and state specialists; 3) provision of educational programs on market risk management tools available for use by primary producers and agribusinesses; and 4) development, distribution and training on microcomputer-based market risk management decision aids.
- b. Impact --
 - Situation, outlook and management strategy information developed for SC Agricultural industry. Developed and delivered market management information through the SC Agricultural Outlook Conference (SC Agricultural Expo) January 2002. Materials were provided to County Agriculture Agents for county or cluster commodity programs in the region.
 - Training for county agents and state specialists: A two-day inservice training for agricultural agents on market risk management techniques and loan deficiency payments. Agents were exposed to advancements in market risk management including developed software for decision analysis developed for firms facing agricultural market risk
 - Educational programs on risk management tools and products available for use by primary producers and agribusinesses: Eight multi-state workshops were offered on tactical market risk management procedures with a focus on the current agricultural environment.
 - Educational programs on risk management tools and products available for use by primary producers and agribusiness: A regional (VA, NC, SC, GA, and FL), in-depth training (3-4 days) on market risk management was developed and offered to agricultural producers, lenders and other agribusinesses under the auspices of the *Executive Marketing School*. The intent was to offer in-depth training to producers. This project

involved significant planning, materials development, promotion, and utilization of the SE Region's Agricultural Economists.

- Development and distribution of market risk management decision aids and data access: Spreadsheet-based software that reviews the existing marketing alternatives and calculates the potential performance of the strategies under varying market scenarios was developed. Further, a module on the probability of ex-ante price change derived from current market conditions was incorporated
 - A total of 96 programs and activities were conducted in the area of risk management with 2,813 participants. Of those participants, 2,460 indicated an increase in knowledge and 762 adopted or increased the use of recommended practices, and 1,077 reported that they plan to adopt practices.
- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State and Multistate

Key Theme – Agricultural Profitability (Economic Analysis of Enterprises and Technologies)

- a. Production decisions are no longer based mainly on government commodity program guidelines. Rather they are based on comparative profit potential of feasible alternative enterprises. Additionally, new production technologies are being introduced at a rapid rate. There is increased demand to evaluate new technologies. Extension faculty will be called upon to educate farm managers and others on financial risks – this begins with knowledge of basic enterprise budgeting. From this knowledge base, agribusinesses will be in an improved position to make better production decisions. This, in turn should increase long-term profitability and sustainability.
- b. Impact --
- Provision of current enterprise analysis information to SC Ag Industry: Approximately 100 enterprise budgets were developed and distributed including on the World Wide Web departmental site. These materials were provided to County Ag Agents for county or cluster commodity programs.
 - Training for county agents and state specialists: An inservice training for agricultural agents on enterprise analysis decision aids and techniques was held. Agents were exposed to advancements in enterprise budgeting tools including developed budgets for decision analysis for firms facing agricultural risk.
 - Educational programs on risk management tools and products available for use by primary producers and agribusinesses: County or Cluster workshops were offered on enterprise analysis procedures and issues. Computer-based breakeven spreadsheets were developed and distributed.

- A total of 20 programs and activities were conducted which dealt with the area of economic analysis of enterprises and technologies with 291 participants. Of those participants, 233 indicated an increase in knowledge and 61 adopted or increased the use of recommended practices, and an additional 123 planned to adopt practices.
- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State

Key Theme – Agricultural Profitability (Business and Financial Management Systems)

- a. The farm business environment demands greater entrepreneurial leadership abilities of farm businessmen. The change in government programs, rapid change in technology, the trend toward larger and more sophisticated farm businesses and the Mega trend toward industrialization has made it critical that farm managers learn how to develop a successful management system for their farm. It is also critical for Extension to develop these “management/ leadership/entrepreneurial” programs if we are to continue to be viewed by commercial farmers as an effective educational and informational provider. Extension has historically and is currently putting the huge majority of its resources into production-oriented programs. Farmers have found that high production does not make a successful business and continually express their need for Business Management and marketing programs
- b. Impact --
 - Executive Farmer Program - This program focuses on how to develop a systematic approach to problem solving and strategic planning. The end product is an Action Business Plan developed with the use of the farm firm’s own financial information. The emphasis is on analyzing the business records; setting business goals and developing an action plan that participants can take home and implement. Two workshops were conducted in FY 01-02.
 - A total of 86 programs and activities were conducted which dealt with the area of business and financial management systems with 657 participants. Of those participants, 331 indicated an increase in knowledge. Thirty-four persons reported that they either adopted or planed to use of recommended practices.
- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State

Agricultural Profitability (Agricultural Policy Education)

- a. Major new federal agricultural legislation is being debated and enacted. Understanding

the new policy environment will be critical for SC farms and agribusinesses.

b. Impact --

Educational programs were developed and delivered to assist farmers and agribusinesses in understanding proposed and existing policies and the impact on their operations. Extension agents were educated regarding the 2002 Farm Bill and other proposed and existing policies and the impact on their clientele's operations.

A total of 7 programs and activities were conducted which dealt with the area of Agricultural Policy Education with 119 participants. Of those participants, 70 indicated an increase in knowledge. Forty-six persons reported that they plan to adopt recommended practices.

c. Source of Federal Funds – Smith Lever 3b&c

d. Scope of Impact – State

Key Theme – Sustainable Agriculture/Farm Safety

a. The farm safety project focused on programs and activities designed to reduce on-farm injuries and fatalities. The major areas of concern were safer equipment operation.

b. Impact –

Twenty-two activities/programs were reported to this project with 1,384 people completing non-formal educational programs. Of these, 204 people reported increased knowledge and 87 planned to adopt recommended practices. An additional, 364 individuals received information through “non-program” contacts.

c. Source of Federal Funds – Smith Lever 3b&c

d. Scope of Impact – State

Goal 2: A safe and secure food and fiber system.

Overview:

Consumers are concerned about the safety of their food. However, only a limited number of

consumers understand the process involved in safe handling and distribution of food. Many commercial food handlers also need the technical assistance to enhance food safety and quality for the food industry. The primary focus for this goal was to provide effective educational programs and trainings to South Carolina citizens and industries which has led to increased knowledge and behavior toward safe food handling practices. The one initiative under this goal is Food Safety and Nutrition. This initiative has three project areas that are classified under Goal 2: 1) Food Safety Education for Consumers and Retail; 2) Food Safety – Farm to Processing, including Biotechnology; and 3) Making It Healthy Media.

Safe handling of food was taught to handlers in the food service industry and the general public. Commercial food processors were targeted in an effort to improve commercial food processing efficiencies and effectiveness/develop new markets/improve commercial handling, processing, preservation, and packaging to provide safe and high quality foods. Extension Agents also received training on safe food storage, handling and preservation. This enabled them to provide clientele with the appropriate information which improved their understanding of risks and responsibilities in relation to food and health. Attention was also given to providing consumers with scientifically based, reasonable food safety information through the media.

There was a total of 2,071.0 days or 9.0 FTE reported in areas that are classified under Goal 2. The total number of contacts reported in this goal was 16,232. The breakdown of these contacts is as follows: 3,097 white males, 8,211 white females, 1,320 black males, 3,460 black females, 38 classified as other males, and 106 classified as other females. From this group, a total of 1,804 were classified as limited resource. Accomplishment that were reported to the Clemson University Information Management System show 737 total programs and activities conducted in projects that are classified under Goal 2. There were a total of 6,601 participants who completed these educational programs. Of those completing the programs, 4,852 reported increasing their knowledge as a result of their participation. Of those participants who reported increasing knowledge, 2,979 indicated that they planned to adopt the recommended practices while 854 reported that they adopted or increased the use of recommended practices as a result of the programs.

Key Theme – Food Safety

- a. Media continues to be an important way to reach consumers with food safety and nutrition information. Counties have a wide variety of media opportunities including radio spots, development of press packets on specific nutrition subjects, new articles, and TV programs.

b. Impact --

Counties conducted 232 educational programs reaching 5,028 people. Of this number, 3,573 reported an increase in knowledge and 2,311 planned to adopt a recommended change. Over 3,500 consumers received answers to an individual food safety question through a call, newsletter, or home visit.

There were 2,804 consumers who completed home food safety programs offered and 5,399 who received information from a phone call to the Extension office.

Counties reported the distribution of 122 press kits, 9,411 column inches appearing in the printed media, 818 minutes of television air time, and 1,379 minutes of radio air time in the areas of food safety and nutrition.

c. Source of Federal Funds – Smith Lever 3b&c and generated

d. Scope of Impact – State

Key Theme – Food Handling

a. Counties have made great progress in reaching food service employees with ServSafe employee training. This is a 6- or 10-hour training on how to safely handle food in a food service operation.

b. Impact --

A total of 794 food handlers participate in a 10-hour certification course in food handling and passed an exam to receive a certificate.. A more indepth version of ServSafe was offered to managers and 143 food service managers passed a national exam and were certified. Counties report that while teaching ServSafe \$10,736 was generated in program support and 747 volunteer hours were logged.

c. Source of Federal Funds – Smith Lever 3b&c and generated

d. Scope of Impact – State

Key Theme – Food Quality

a. Interest continues to be high for information on a home-based food processing business. Contact with food processing industry was done through workshops, industry meetings, and individual contacts with growers, shipper, or processors.

b. Impact –

A total of 94 educational programs were conducted reaching 1,134 commercial food processors. Of this total number, 623 report adopting or increasing uses of the recommended practices. There were 52 new or value-added food products or packages entering the market as a result of the program.

- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State

Goal 3: A healthy, well-nourished population.

Overview:

Americans are lacking knowledge in their basic nutrient needs and the skills needed in meal planning and food selection to meet these nutrient needs. The relationship of the risk of contracting certain chronic diseases, such as coronary heart disease, stroke, diabetes, cancer and poor nutritional status is well documented. South Carolina has dismal health statistics.

Heart disease, cancer, and stroke, account for nearly two-thirds of the deaths in the state.

The

South Carolina Department of Health has stated that 80 percent of all cancers, 50 percent of heart disease deaths, and 50 percent of all stroke deaths are due to lifestyle habits. Old eating and food preparation methods are hard to change. The initiative team determined that educational programs for youth and those individuals who affected the eating patterns of youth are essential if the risk factors for chronic disease are to be avoided and if the South Carolina health statistics are to improve.

One project under the Food Safety and Nutrition initiative was developed for this goal. This project, Food Safety and Nutrition Education centered on the Food Guide Pyramid and the Dietary Guidelines for Healthy Americans. Special attention was given to programming in the prevention of childhood obesity, increasing physical activity in all ages, and the development of food preparation skills which fit current nutritional needs and lifestyles. The objectives of the project focused on participants making healthy food choices; developing skills in procurement of food for good health; and demonstrating skills in preparing food – emphasizing healthy preparation techniques.

There was a total of 2,631.5 days or 11.4 FTE reported in the project area classified under Goal 3. The total number of contacts reported in this goal was 44,061. The breakdown of these contacts is as follows: 6,723 white males, 13,826 white females, 8,968 black males, 13,686 black females, 371 classified as other males, and 487 classified as other females. From this group, a total of 14,610 were classified as limited resource. Accomplishment that were reported to the Clemson University Information Management System show 1,114 total programs and activities conducted in the project classified under Goal 3. There were a total of 29,981 participants who completed these educational programs. Of those completing the programs 19,865 reported increasing their knowledge as a result of their participation. Of those participants who reported increasing knowledge, 7,860 indicated that they planned to adopt the recommended practices while 3,911 reported that they adopted or increased the use of recommended practices as a result of the programs.

Key Theme – Human Nutrition

- a. The nutrition education programs focused on the topic of preventing chronic disease through eating according to the Food Guide Pyramid and Dietary Guidelines. A variety of methods were used including day camp, demonstration contest, workshop, health fair, school enrichment, food demonstrations, exhibits and media.
- b. Impact –
Counties conducted 1,114 educational programs in nutrition and health reaching 29,981

adults; nearly 20,000 of these reported gaining knowledge, and 7,860 planned to adopt a recommended practice. An additional 5,944 consumers got answers to their food and nutrition questions through individual phone calls or contacts. Using federal Food Stamp dollars, counties report reaching 10,298 limited resource adults through 703 nutrition education programs. There were also 2,030 hours of volunteer time contributed.

- c. Source of Federal Funds – Smith Lever 3b&c and food stamp.
- d. Scope of Impact – State

Goal 4: Greater harmony between agriculture and the environment.

Overview:

Programs under Goal 4 are focused on six major initiative areas: 1) Sustainable Forest Management and Environmental Enhancement; 2) Sustainable Agricultural Production Systems; 3) Reducing the Impact of Animal Agriculture on the Environment; 4) Natural Resources and the Environment; 5) Household and Structural Pest Control and Pesticide Training; and 6) Environmental Horticulture Education.

The Sustainable Forest Management and Environmental Enhancement initiative has five project areas: 1) Provide Landowners with Alternative Silvicultural Systems; 2) Restoration and Management of Longleaf Pine; 3) Management Options for Conservation Reserve Program Lands; 4) Master Tree Farmer/Master Woodland Owner; and 5) Broadening the Practice of Sustainable Forestry on all Forest Lands. The primary focus of this initiative was to promote sustainable management of forestry resources and understanding of natural forest systems through: 1) proactive leadership, 2) continuing education, and 3) educational training on public issues affecting forestry. The programs emphasized: 1) development of landowner understanding of uneven-age management, mixed pine-hardwood management and natural regeneration systems (Programs on these subjects were also provided to forestry consultants and professional foresters who manage forest lands for landowners.); 2) economic and ecological significance of restoring and managing the longleaf pine ecosystem; 3) the “Master Tree Farmer” program both within South Carolina and the southeast region; and 4) logger education and training on “Best Management Practices”, and principles of sustainable forest management.

The Sustainable Agricultural Production Systems initiative has five major project areas under Goal 4: 1) Confined Animal Production Systems; 2) Integrated Crop Management (ICM) – Horticultural Crops; 3) Integrated Crop Management (ICM) – Agronomic Crops; 4) Grazing Livestock Production Systems; and 5) Organic Production Systems. With the expectations for agricultural producers to become better stewards of the land, the programs that are a part of these projects focused on teaching production and management skills that ensure sustainability. These programs specifically addressed both environmental and economic sustainability of agronomic, horticultural, and livestock production systems. Programs were delivered in the form of field days, educational meetings, demonstrations, and workshops and focused on nutrient and pest management, water quality, production, and economic efficiency.

The initiative, Reducing the Impact of Animal Agriculture on the Environment has two project areas: 1) Increase the Adoption of Environmentally Sound Animal Waste Handling and Utilization Systems and 2) Increase the Adoption of Nuisance Prevention Practices by Animal Industries. The major focus of this initiative is to teach the scientific principles of safe manure storage, utilization, and alternative conversions to animal producers. The results being an increase in the adoption of practices that lessen nuisance and environmental impacts through the educational process. The topics addressed included: control of odors and vectors, protection of water quality, nutrient management, siting of facilities, and alternative waste handling practices. Emphasis was on confined animal production facilities. Major program objectives included: Certification of animal facility operators; trainings on appropriate manure application methods, disposal systems for mortalities; and odor and vector prevention practices.

The Natural Resources and the Environment initiative has a total of seven major project areas: 1) Water Quality and Quantity; 2) Alternative Income Opportunities for Landowners; 3) Recreation and Tourism; 4) Master Wildlife/Master Naturalist; 5) Urban Wildlife; 6) Nuisance Species; and 7) Best Management Practices (BMP) Implementation and Assessment for a Horse Trail System. The major goals for this initiative was to educate landowners to accept and use practices that promote sustainable use and management of natural resources. Also, programs were offered to landowners and youth on the impacts of land management on water quality and on fish and wildlife resources. In addition, there were educational programs provided to private landowners on wildlife damage management. The Master Wildlife/Master Naturalist project provided certification training to private landowners on wildlife, wetland, and watershed management.

The initiative, Household and Structural Pest Control and Pesticide Training contains three project areas: 1) Pest Control/ Management Practices in Human Environments; 2) Wood Destroying Insect Pest Control; and 3) Pesticide Applicator Training and Education. The focus of programs in these project areas was on increasing clientele knowledge and implementation of: 1) safe pesticide application and responsibilities under pesticide regulations through Extension training and educational programs, this includes the certification and recertification training and education of pesticide applicators; 2) structural design that is conducive to pest damage; 3) alternative control methods for wood destroying insect; and 4) integrated approaches to pest management/control practices in human environments.

The Environmental Horticulture Education initiative is comprised of three project areas to deliver programs and information on plant health management: Horticultural Professional Education, Consumer Education, and Master Gardener Education. The key program components in this initiative is in training horticulture professionals and Master Gardeners to disseminate plant health management information directly to consumers. The goal is to utilize the horticultural professionals and the Master Gardeners to educate consumers and youth on plant identification, selection, culture, pest identification, integrated pest management and poisonous plants in the home environment. Another major component of this initiative is the dissemination of environmental horticulture information through the Urban Horticulture Center, the Home and Garden Information Center (a web site and toll free call-in line with recorded messages and information specialists) and the PAWS Horticulture Line.

There was a total of 16,245.5 days or 70.6 FTE reported in the areas classified under Goal 4. The total number of contacts reported in this goal was 247,794. The breakdown of these contacts is as follows: 114,641 white males, 71,535 white females, 18,000 black males, 13,871 black females, 1,418 classified as other males, and 1,329 classified as other females. From this group, a total of 4,708 were classified as limited resource. Accomplishment that were reported to the Clemson University Information Management System show 2,902 total

programs and activities conducted in projects that are classified under Goal 4. There were a total of 73,420 participants who completed these educational programs. Of those completing the programs, 52,084 reported increasing their knowledge as a result of their participation. Of those participants who reported increasing knowledge, 28,951 indicated that they planned to adopt the recommended practices while 4,612 reported that they actually adopted or increased the use of recommended practices as a result of the programs.

Key Theme - Forest Crops

- a. Many landowners fail to manage their forestland because they object to clearcutting or other conventional intensive practices that focus primarily on timber production. The purpose of this project is to encourage these landowners to develop management plans by providing them with alternative silvicultural systems that are suitable for their individual objectives. Alternative systems include uneven-age management, mixed pine/hardwood management and natural regeneration systems.

Educational efforts have been focused on both professional resource managers and landowners. Most landowners are unaware that alternative silvicultural systems are available and professional foresters are generally biased in favor of clearcutting and intensive management methods. Our objective is to provide landowners with an understanding of how these systems can be used to meet their desired management goals and to make trained, professional foresters available to service their needs. A proposal to fund intensive training on uneven-age management was completed in 2002. We expect to submit the proposal for funding in 2003, and to use funds to expand formal training to a meaningful level within the state.

- b. Impact --
During the year 2000--01 most efforts on this project were conducted at the county level. Forty-eight programs and activities were reported by county agents. Approximately 700 people completed non-formal programs with approximately 80 % reporting increased knowledge of the subject. Sixteen percent have reported adopting or increasing use of practices discussed during the training.

County activity declined somewhat in 2002 with 16 educational programs delivered to a total of 509 people. Three-hundred and four people reported increased knowledge and 30% or 153 landowners plan to adopt new management practices as a result of the programs. No formal, statewide training programs were conducted during the report period. The number of FTE's devoted to this project was 1.4.

- c. Source of Federal Funds - Smith Lever 3b&c
- d. Scope of Impact - State

Key Theme - Forest Crops

a. Longleaf pine is a highly desirable species because of its superior growth form, wood properties and the diversity of plant and animal species associated with the ecotype. Unfortunately, only a small fraction of the longleaf forest remains within its natural range. Renewed interest in the species has developed because of its ecological significance as well as financial reasons. Because of land ownership patterns, the majority of longleaf restoration efforts will require regeneration on non-industrial private lands. The objective of this project is to provide landowners and professional foresters with background and technical information necessary to expand longleaf production within its natural range.

b. Impact --

A total of 17 activities and programs were reported by county agents. These included, but were not limited to a workshop in Columbia, SC – “Restoring Longleaf Pine in the Sandhills”. The workshop was attended by 84 foresters and landowners. Altogether, a total of 832 people completed non-formal educational programs on Longleaf Pine. Approximately 70 % reported increased knowledge as a result of the activities and programs and 28% indicated that they have or will adopt practices discussed during the training. Approximately 8,000 additional acres of longleaf pine were planted during the 2000 – 01 reporting period. The number of FTE’s devoted to this project was 0.4.

In 2001-02, fifteen programs were delivered to a total of 219 landowners. Eighty % of participants reported increased knowledge of longleaf pine silviculture and 32 % plan to adopt practices. During the year 3,000 acres of additional longleaf pine regeneration were attributed to extension programming.

c. Source of Federal Funds – Smith Lever 3b&c

d. Scope of Impact – State

Key Theme - Forest Resource Management

a. Thousands of acres of pines have been planted on former agricultural lands under the Conservation Reserve Program. Now that the program is maturing some farmers have considered converting lands back to crops while others are uncertain about future management strategies. The objective of this project is to provide educational programs to inform farmers of the economical and ecological potential of retaining these lands in forest cover. Many of the stands are in need of thinning in order to maintain health and vigor of crop trees and create access for other practices including application of

municipal and agricultural waste.

b. Impact --

No formal programs were conducted under this project in 2000 -- 01. Counties reported only two activities. One hundred and two people completed non-formal education and reported increased knowledge. The number of FTE's devoted to this project was 0.2. Two additional activities were reported for 2001-02. Eleven landowners completed training programs and reported increased knowledge. Four plan to adopt practices.

c. Source of Federal Funds - Smith Lever 3b&c

d. Scope of Impact - State

Key Theme - Forest Resource Management

- a. The Master Tree Farmer/Master Woodland Owner program provides intensive forestry and wildlife training to landowners in return for 25 hours of volunteer time promoting forestry and the Tree Farm program in South Carolina. In 2000 - 2001 Master Tree Farmer continued as a flagship program for Extension Forest Resources. In Spring of 2001 the program was broadcast from Clemson University via videoconference to 14 states and 132 down-link sites across the south and to 4 states in the fall. Graduates received a total of 28 contact hours of instruction in forestry topics such as Forestry as an Investment, Pine Management, Hardwood Management, Marketing and Harvesting, and Wildlife Management.

Master Tree Farmer II, a more advanced level of training than MTF I, was delivered to 1700 attendees in 10 states in 2002.

b. Impact --

By using the video conference technology, the program was delivered to 2,875 forest landowners in 2001. Landowners representing 748,277 acres of forest land completed the course. Approximately 47 percent of the landowners were under 50 years of age and 20 percent were female. The Master Tree Farmer Program utilized 21 volunteers. The number of FTE's devoted to this project was 0.6. The following impacts were derived from analysis of evaluation data collected after landowners completed the training:

1. Ninety-eight percent of the participants would recommend the program to other landowners.
2. Ninety-four percent feel that the program will save them money when practicing forestry on their property.

3. Ninety-five percent of the landowners report that they will earn money by using knowledge they gained from the program for an estimated total gain of \$16 million.
4. Based on increased knowledge, eighty-eight percent of the landowners completing the course plan changes in the management of their forest property.
5. Ninety percent of the graduates indicated that they would attend a more advanced training program if it were offered.

A follow-up survey was conducted one-year after the program. Forty-three percent of 545 surveys were returned. They report the following updated impacts:

1. Eighty-one percent report their forest management level at good to excellent compared to twenty one percent prior to the program.
2. Ninety-four percent plan changes in forest management practices.
3. Eighty-two percent have made changes as a result of the training.
4. Sixty-six percent plan to make additional changes to forest management practices.
5. Respondents indicate that the course will save landowners more than \$13 million and earn them a total of \$6 million.

c. Source of Federal Funds - Smith Lever 3b&c

d. Scope of Impact – Multi-state

Key Theme - Forest Resource Management

- a. The objectives of this project are to: (1) Encourage landowners who sell timber to reforest following harvest; (2) inform landowners of the economic and environmental benefits of using Best Management Practices (BMP's) in all forest management operations; (3) develop and conduct training programs that improve the professionalism of logging and other timber operations businesses, and that promote sustainable forestry principles; and (4) work with established groups within the forestry community to support and promote appropriate training and outreach programs related to sustainable forest management. Some significant activities for 2001 included: (1) continued implementation of the South Carolina Timber Operations Professional (TOP) training program, (2) initiation of a Streamside Management Zone training program, and (3) completion of the publications – *U.S. Forests Facts & Figures 2001* and *Historical Overview of the Southern Forest Landscape and Associated Resources*.

In 2002, twenty-one, three-day TOP programs were conducted. In addition, 105 programs were reported at the county level.

b. Impact --

This program generated considerable activity at the county level in 2000-01. Counties reported 43 activities with 1267 landowners completing educational programs and 1038 or approximately 80 % reporting increased knowledge as a result of the programs. Eighty-five landowners reported the application of BMP's to their forest property.

Major efforts within this project were directed at logger training and education under the Timber Operations Professional (TOP) program. The program is jointly administered by Clemson Extension Forestry and the South Carolina Forestry Association. During this reporting period 635 loggers and foresters attended 17 programs conducted across the state. The program has had a significant beneficial effect on forest practices. Eighty-nine percent of the wood delivered to mills in South Carolina is delivered by loggers that have completed the TOP training. The percentage of acceptable overall Best Management Practices conducted on forest lands within the state, and reported by the South Carolina Forestry Commission has increased from 86.4 % in 1996 to 91.5 % in 1999. The TOP training program is supported with 15 volunteers.

The following impacts were reported for 2001-02:

1. More than 700 loggers, foresters, contractors and landowners earned TOP certificates.
 2. The number of people completing educational programs was 1,869.
 3. The number reporting increased knowledge was 1,307.
 4. Twenty-nine percent of landowners have adopted practices due to training.
 5. Ninety-five percent of all wood harvested and delivered was done so by loggers trained through this program.
 6. Best Management Practices compliance in South Carolina is reported at 93%.
- c. Source of Federal Funds – Smith Lever 3b&c, SMZ project – EPA & DEHEC
- d. Scope of Impact – State

Key Theme – Sustainable Agriculture / Confined Animal Systems

- a. The confined animal production systems project was comprised of programs and activities that were designed to improve production efficiency and to provide information on current and emerging specialty animal industries. Efforts focused on increasing efficiency of production, cutting costs, and other management options.
- b. Impact –
In terms of accomplishments, 154 programs/activities, which reported to the confined animal systems project were completed. These activities saw 2,830 people complete non-formal educational programs and 1,420 of those report increased knowledge with 507 indicating that they had changed or adopted new practices. An additional 923

individuals received information through “non-program” (phone, office, site visit) contacts.

- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State

Key Theme – Sustainable Agriculture / Integrated Management of Horticultural Crops

- a. The horticultural production systems project focused on programs and activities related to integrated crop management. The areas of concern were improving profitability and reducing the negative environmental impacts of horticultural cropping systems. Programs related to the adoption of new horticultural production systems were also a major thrust of this project.
- b. Impact –
The horticultural systems project had 309 activities/programs report to it with 3,534 people completing non-formal educational programs and 2,447 of those reporting increased knowledge. Four hundred and twelve people adopted practices/changes in production practices while 1,080 people completed programs on ICM (Integrated Crop Management) and planned to adopt those practices that represent or impact 62,334 acres of production fields. There were an additional 2,749 acres planted to new alternative horticultural crops. An additional 1,765 individuals received information through “non-program” (phone, office, site visit) contacts.
- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State

Key Theme – Sustainable Agriculture / Integrated Management of Agronomic Crops

- a. The agronomic production systems project focused on programs and activities related to integrated crop management. The areas of concern were improving profitability and reducing the negative environmental impacts of agronomic cropping systems. Programs related to the adoption of new agronomic production systems were also a major thrust of this project. In addition, programs dealing with the adoption of alternative methods of nutrient and pest management were conducted.
- b. Impact –
Six hundred fifty activities/programs were reported to this project with over 8,000 people completing non-formal educational programs. Of these 4,483 people reported increased

knowledge and 787 adopting recommended practices. Further, 1,948 people completed ICM programs and planned to adopt recommended practices. Over 94,000 acres were impacted by ICM project activities. An additional 5,974 individuals received information through “non-program” (phone, office, site visit) contacts.

- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State

Key Theme – Sustainable Agriculture / Grazing Production Systems

- a. The grazing animal production systems project focused programming efforts on several areas dealing with improved efficiency of production and utilization of resources. These areas included: improved marketing of grazing livestock; increase utilization of residue, waste, and by-products for supplemental feed; improved grazing management practices for increased efficiency of production; protection of water quality in and from pastures; and increased awareness of herd health and reproduction on economic efficiency.
- b. Impact –
The grazing animal systems project had 89 producers participate in the Pride/Quest and other managed marketing programs while just over 260 people improved their breeding program by utilizing EPD's in sire selection and proper breed complementation. 257 people reported implementing recommended grazing management systems to improve enterprise profitability and decrease detrimental environmental impacts of livestock. 565 individuals participated in youth activities. These numbers represent a significant proportion of the 8,966 people who completed one of the 228 non-formal educational programs or activities. In all, 6,223 people reported adopting or increasing the use of recommended practices. Another 3,517 individuals received information through “non-program” contacts.
- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State

Key Theme – Sustainable Agriculture / Organic Production

- a. The organic production project focused on extension and outreach programs related to organic production, marketing and certification. The Calhoun Fields Laboratory site was established for experiential learning in organic systems. Specific focus areas included diverse market crops, use of cover crops and green manures, and

alternative methods of pest and nutrient management. An agent training program entitled "Building Farming Systems for High Value Organic and Niche Market Commodities" was initiated with the first workshop held in December.

- b. Impact –
Twenty-one activities/programs were reported to this project with 97 people completing non-formal educational programs. Of these 72 people reported increased knowledge and 3 individuals adopting recommended practices. An Organic Growers School was also organized in the fall and attended by 75 farmers and home gardeners.
- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State

Key Theme – Agricultural Waste Management

- a. A total of 536 staff member days were devoted to increasing the adoption of environmentally sound animal waste handling and utilization systems. Special funds were provided from a USEPA travel grant and grant from Extension administration to send two specialists, three agents, and a representative from the USDA-NRCS to the following events:
 - (1) EPA Workshop on the New National Livestock Waste Management Curriculum, and
 - (2) The National Poultry Waste Management Symposium.Programs were also developed to train producers of confined animals in manure management, and to certify that these producers have achieved the required level of training by testing knowledge levels.
- b. Impact -
Increase the adoption of Environmentally Sound Animal Waste Handling and Utilization Practices.

By law, all livestock and poultry producers are required to attend the Confined Animal Manure Managers Program. In 2001-2002 the poultry version was initiated and 328 poultry producers received training in 2002 at 7 locations. Additional training sessions have been planned for 2003 for swine, poultry, and dairy producers. The teaching team is currently revising the swine and poultry training manuals to reflect recent changes in the SC Animal Waste Regulation. A dairy manure-training manual is being developed.

There were 94 activities conducted in South Carolina to teach best management practices in manure management. Topics included calibration of spreading equipment, soil

sampling to comply with SC regulations, manure sampling, and nutrient balancing calculations. Seminars and field days were also conducted to teach new uses for animal manure such as fertilization of pine plantations with animal manure and using manure to fertilize soybean-wheat rotations. A total of 1,861 producers participated in these activities. Of these, 996 reported an increase in their knowledge on the subject. Four hundred and eighty seven individuals indicated that they plan to adopt new manure management practices while 44 indicated that new BMP's are already in place.

A total of 580 individuals received information on environmentally sound manure management practices by way of one-on-one contacts, such as telephone calls, farm visits, and office consultations.

- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State

Key Theme – Agricultural Waste Management

- a. There were seven activities and programs conducted to increase the adoption of nuisance prevention practices with livestock producers. In addition, an entire chapter of the new poultry version of the Confined Animal Manure Management training manual deals with controlling vectors such as flies and rodents.
- b. Impacts –
A total of 270 producers were reported to have completed educational programs involving nuisance prevention. Of these, 266 participants reported an increase in knowledge and 239 indicated they plan to adopted best management practices to reduce rodent and fly populations on animal production farms.
- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State

Key Theme -- Natural Resources Management

- a. Assisted University of Georgia Cooperative Extension agents in developing the Master Naturalist program in their area. Conducted 14 all-day sessions of the Master Naturalist program. Two Master Wildlifer multi-county courses were held and a reference manual was provided to participants. Planning took place for satellite broadcast of Master Wildlifer across the South in February-March 2003. The broadcast will cover 12 states

with anticipated attendance between 3000 and 4000. A serial TV program has been developed on landscaping for wildlife in urban settings, and several programs have been aired. Eight radio programs were given on planning and improving backyards for wildlife.

- b. Impact --
Seven cooperative Extension agents from the East District of Georgia obtained information to establish their Master Naturalist program. Twenty-two adults from Beaufort area completed the program and contributed a minimum of 40 hours each of volunteer work in natural resources. The 61 attendees of the multi-county courses placed a reported combined value of \$ 230,000 for the courses and all reported increased knowledge from the courses. County, multi-county, state and southern regional programs reached over 1900 individuals. Sunflower has become a major crop in SC for seed production for wildlife.
- c. Source of Federal Funds - Smith Lever 3b&c, U.S. Forest Service. Other funding included BASF and registration fees from attendees.
- d. Scope of Impact -- State and Multistate Extension (SC, GA)

Key Theme - Natural Resources Management

- a. Cost-sharing practices under the Wildlife Habitat Incentives Program (WHIP) are being implemented at the Pee Dee Research Education Center, as well as wetland restoration and enhancement to illustrate how landowners can integrate wildlife and natural resource management into their existing farm and forestry operations. Over 20 other county and multi-county programs were given on wildlife management. Including a session in the Master Tree Farmer satellite course, and a session in the Governor's School. Three continuing education workshops were given to natural resource professionals. The publication "Enhancing Wildlife Habitats Through Sustainable Forest Management" was also written.
- b. Impacts --
Effort will illustrate to landowners how to implement natural resource management practices that can be cost-shared, improve wildlife habitat and forest productivity, and provide supplemental income.
- c. Source of Federal Funds - Smith Lever 3b&c and \$200,000 from the USDA Natural Resource Conservation Service; \$30,000 from Ducks Unlimited; \$16,000 from South Carolina Forestry Commission.

- d. Scope of Impact -- State and Multistate

Key Theme - Water Quality

- a. Programs such as 4-H2O, Project Wet, Nasty Waters and Enviroscape, and Home A Syst were conducted for youth and adult publics. Tours and programs at 113 Calhoun Street were conducted for multiple publics, while workshops were held on stream restoration for agents, engineers and government personnel. Train-the-trainer sessions were conducted for volunteer groups; publications and exhibits were produced and technical assistance for projects such as BMP's for Bioretention Cells were provided on water quality and quantity subjects covering lakes, ponds, streams and other water systems.
- b. Impact --
A total of 871.5 days were planned for water quality and quantity extension. Agents reported 996 days with 15,891 contacts. There were 313 programs and activities conducted with 11,232 individuals participating. A total of 6,198 people reported increased knowledge with 3,478 planning to adopt practices and 507 actually adopting practices. Citizens formed or are continuing active volunteer groups (one of over 1500 members) concerned with water quality.
- c. Source of Federal Funds - Smith Lever 3b&c EPA/SCDHEC 319
- d. Scope of Impact - State, Multistate (NC, AL)

Key Theme - Natural Resource Youth Education

- a. Program teams consisting of Cooperative Extension County agents, local representatives of state agencies and members of a local lake associations, conducted 12 "4H20 - Pontoon Classroom" summer day camps to teach children (ages 8-14) about water quality and non point source pollution. Each 4H20 - Pontoon Classroom was produced as an independent community partnership.
- b. Impact --
Twelve programs were presented in the summer of 2001, coordinated by agents from 15 counties and enrolling more than 250 children. This team approach not only enhanced the educational experience for the children, but also forged strong links between Extension, lake associations, state agencies, children in the programs and, indirectly, to the local schools.

- c. Source of Federal Funds - Smith Lever, USDA/CREES, EPA/SCDHEC
- d. Scope of Impact -- State

Key Theme - Wildlife Management

- a. Developed brochure on Zebra Mussels, and chapter on aquatic weed control. Conducted farm pond clinics, workshops and training sessions and provided technical assistance on management of aquatic weeds and toxic algae to landowners, real estate developers, forest industry personnel, pesticide applicators, government agency personnel, biologists, and environmental groups in multiple states. This included control of the new invasive exotic beach vitex (*Vitex rotundifolia*), and aquatic weed management to protect resources for the endangered wood stork. Agents work closely with wildlife control operators to ensure the most effective, safe and humane procedures are used. Specialists have developed college courses which include service-learning opportunities for students to provide solutions and assistance to landowners with animal damage problems.
- b. Impact --
Agents reported 399.5 days with 2,792 contacts. There were 90 programs and activities conducted with 985 individuals participating. A total of 931 people reported increased knowledge with 463 planning to adopt practices and 292 actually adopting practices. Pesticide applicators for three states received 5-8 hours of Continuing Certification Hours. A coordinated strategy has been developed by the SC Task Group on Toxic Algae to cope with toxic algal blooms in South Carolina Waters. Reduction in human-wildlife conflicts and negative economic impacts of wildlife.
- c. Source of Federal Funds - Smith Lever, USDA/CREES, EPA/SCDHEC
- d. Scope of Impact - State and Multistate Extension (SC, GA, NC).

Key Theme – Pesticide Safety Education Program (formerly Pesticide Applicator Training) - Initial Certification for Private Applicators

- a. Pesticide applicators are trained by the Cooperative Extension Service to become initially certified as Private Applicators. Applicators are trained to use the pesticide label and other information when handling Restricted Use Pesticides to protect themselves, agricultural workers, the public, water quality, and wildlife, especially endangered species.

In FY 2002 in South Carolina, 53% of the trainees answering the use demographic

question said they apply Restricted Use Pesticides in traditional agricultural crops, 18% in forestry, 21% in nurseries and on ornamentals, and 20% in greenhouses (percentages total to more than 100 because individual apply pesticides in more than one area). The proportion of trainees would planned to apply Restricted Use Pesticides showed a numerical decline in the traditional areas of agriculture and forestry, and an increase in ornamentals/nurseries and greenhouses.

- b. Impact –
Initial Certification Training of pesticide applicators was given by County Pesticide Training Coordinators at a minimum of 50 trainings. A minimum of 380 pesticide applicators was trained. Of the 35% of those trained who voluntarily answered the race demographic survey question, 80% were white, 16% were black, 5% were other. Proportions for race were unchanged for FY 2001. Of the 80% who answered the sex demographic survey question, 62% were male and 38% were female. This is a departure from the 90/10 percentages for sex in FY 2001. In FY 2002 45% of the trainees were 40-59 years old (47% responding).

Approximately ninety percent of trainees take the Private Applicator/Core training to obtain a Private Applicator license and up to 8% take the training to prepare for the Commercial Applicator Core Exam. Based on an average of individual training averages, trainees, pre-test / posttest scores showed that they increased their knowledge of how to handle pesticides safely by 21% as a result of the training (same results as FY 2002).

- c. Source of Federal Funds – EPA pass-through to the USDA Pesticide Safety Education Program
- d. Scope of impact – State Specific

Key Theme – Pesticide Safety Education Program (formerly Pesticide Applicator Training) – Recertification for Private Applicators

- a. Certified Private Pesticide Applicators are required to be recertified every five (5) years. There is not a way to verify numbers (because not all Recertification credits are obtained a one time, in one training), however, virtually all Private Pesticide Applicators receive all of their five (5) required Recertification credits through the County Extension offices. Commercial applicators also receive some of their Recertification credits through the County Extension offices, and many receive credits through other Extension sponsored or partnered programs. (Numerous commercial applicator programs are not Federally funded and not included here.)
- b. Impact -

Private Applicators get Recertification training in one or more of 16 topics, including worker safety, integrated pest management, transport and disposal of pesticides and rinsates, calibration and maintenance of application equipment, and water quality.

This year County Extension offices conducted a minimum of 8* Recertification trainings. Over 2,500 Private Applicators were recertified (received their final accumulation of 5 Recertification credits) this year. An unknown number of applicators were trained this year who obtained 1 – 4 Recertification credits.

*Based on applicator attendance in early Recertification time blocks, the number of scheduled Extension Recertification trainings vary in number across the five year Recertification block, increasing in frequency towards the end of the block. Numbers of Private Applicators becoming Recertified varies among years because Recertification is based on a five-year cycle. Few Private Applicators are Recertified in the initial years of the cycle, most are Recertified in the last two years and especially the last year. Also, not all Extension partnered trainings are recorded on the Pesticide Information Program web site (<http://entweb.clemson.edu/pesticid>) because of sponsorship. Additionally, many Private Applicators obtain some or all of their Recertification credits through self-study using material supplied by the County Extension offices.

- c. Source of Federal Funds - EPA pass-through funds to the USDA Pesticide Safety Education Program
- d. Scope of Impact – State specific

Key Theme – Pesticide Safety Education Program (formerly Pesticide Applicator Training) (Combined programs)

- a. While pesticide applicators are trained by the Cooperative Extension Service to become initially certified as Private Applicators, Extension also provides Recertification training for licensed applicators. However, Extension also provides other training opportunities for applicators (and Recertification credits usually may be obtained at these as well). Numbers of pesticide safety education programs conducted without Federal funding far exceed those funded via Federal program funds; numerous commercial applicator programs are not Federally funded and not included here.
- b. Impact –
In FY 2002 in South Carolina there were a minimum of 113 reported pesticide safety education and training programs combined. A minimum of 1,125 individuals (presumed to be mostly Private Applicators and P.A. trainees) were reported to complete educational programming. A minimum of 787 of these individuals reported increasing their knowledge and 412 reported they planned to adopt new practices. A minimum of 123

individuals reported that they did adopt new practices. A minimum of 462 individuals were reported to have received pesticide safety information through “non-program” contacts (very much under-reported category).

- c. Source of Federal Funds – EPA pass-through to the USDA Pesticide Safety Education Program
- d. Scope of Impact – State Specific

Key Theme – “Other” (Plant Health)

- a. The plant health area focused on three major projects during FY 2002. These projects were Environmental Horticulture Education for Horticulture Professionals, Master Gardener Education and Impact, and Consumer Education in Environmental Horticulture.

For the project area Environmental Horticulture Education for Horticulture Service Professionals, an Environmental Landscape Conference was held in Columbia, SC. There were 75 external participants and 5 county agents in attendance. Professional Turfgrass Schools were held in Greenville, Columbia, and Beaufort, SC with a total of 147 external participants and 9 county agents attending.

- b. Impacts –

For the project area of Environmental Horticulture Education for Horticulture Professionals, a total of 261 programs (92 of which were joint educational efforts with other agencies) were delivered to 5,203 participants with 3,201 participants reporting increased knowledge, 1,938 planning to adopt new practices and 482 adopting new practices. There were 111 newsletters or trade journal articles prepared. Personal contacts through telephone, office, and site visits totaled 3,640. The activities and programs of this project were accomplished through the input of 3.88 FTE.

The Master Gardener Education and Impact project included the delivery of 457 programs dealing with plant health issues with 7,514 participants. Participants in these programs reporting an increase in knowledge were 6,264 with 3,476 planning to adopt new practices and 629 adopting or increasing use of plant health management practices. This year, 1,350 residents were trained to become Master Gardeners. These trained Master Gardeners contacted 45,550 individuals and contributed 85,237 hours of service. Master Gardener volunteers contributed 132,952 miles of travel. The activities and programs of this project were accomplished through the input of 4.67 FTE.

For the project of Consumer Education in Environmental Horticulture, 545 activities or programs were conducted with 8,450 participants, 6,096 of which reported increased

knowledge, 2,055 planned to adopt new practices and 288 reporting practice adoption. There were 651 mass media activities. Plant health demonstration sites were visited by 7,008 consumers. There were 41,466 personal contacts through telephone, office, and site visits and 125,127 consumers received plant health management information through the Urban Horticulture Center at the Riverbanks Zoo, the Home & Garden Information Center, and the PAWS Horticulture Line. Extension web sites containing information on environmental horticulture reported 1,305,459 user/visitor sessions. The activities and programs of this project were accomplished through the input of 9.72 FTE.

- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State

Goal 5: Enhanced economy opportunity and quality of life for Americans.

Overview:

Programs under Goal 5 are focused on three major initiative areas: 1) Community, Leadership and Economic Development (CLED); 2) Families; and 3) 4-H, Youth, and Families. A total of 20 projects comprised these four initiative areas.

The Community, Leadership and Economic Development initiative is comprised of four project areas: 1) Community Leadership Development; 2) Economic Development; 3) Public Issues Education; and 4) Community Enhancement and Improvement. This initiative addresses the need for increased leadership training and development in South Carolina's rural, transitional, and inner city areas. The rural areas and inner city neighborhoods are frequently overlooked, ignored, or isolated from the benefits of sustained economic development found in other areas of the state. The transitional areas include counties at the fringe of metropolitan sprawls where the transition from agricultural to residential and industrial uses is taking place. These areas, characterized by flux or deprivation, often lack progressive leadership which can foster a sense of teamwork and regionalism to address the locale's economic and quality of life concerns effectively. Of additional concern, is the area of economic development which includes community, county, and regional workforce analysis, business development strategies, and policy formation. The Business Retention and Expansion program calls for local business surveys through visitation or focus groups with local economic development leaders to enhance workforce preparedness and business opportunities. Importance is placed on retaining and expanding existing business through

assessment and planning.

A major focus of the Community, Leadership and Economic Development initiative is to bring together a cross-section of local leaders to work on concerns at the county and regional level. Programming efforts have included engaging and partnering with citizens, local leaders, government officials, and a host of organizations, commissions, and historical groups in a variety of educational settings. Programs such as Palmetto Leadership offers community leadership development training, facilitates strategic planning for economic development, public issues education, youth leadership, and serves as a collaborative agency with other leadership program sponsors. Improving the quality of life and building great communities for the residents of South Carolina is the primary goal within this initiative.

In the Families initiative, the Building Family Strengths project addresses the dramatic social, demographic and economic changes our society has undergone in the past century that have deeply affected youth and their families in this country. Children need families for healthy physical, mental, social, moral, and emotional development. Strong families provide children with a sense of belonging and identity and create hope for the future. At the heart of concern about contemporary families is the awareness that children need committed, supportive caregivers who will be with them throughout their development. Extension in South Carolina has focused on strengthening individuals and families while addressing current issues facing children, youth, and families across the lifecycle.

Three projects under the Families initiative address the need for South Carolina families to have educational information on effective resource management. These projects are Financial Security in Later Life, Financial Stability for Individuals and Families, and Resource Management for Youth. Family resource management programs focus on increasing the knowledge, attitudes, skills and confidence to apply effective and successful financial management and wise consumer strategies. Financial management education programs increase the economic stability and security of individuals and families across the lifecycle.

Encouraging people to become active in their community is a national, state and local priority. The Extension System as a whole works to develop a statewide management system to more effectively recruit, recognize, promote and value partners/cooperators in order to maximize benefits. Under the Family and Community Leaders (FCL) Volunteer Management and Leadership Development project, efforts mainly focused on enhancing effective volunteer management systems; improving the cooperative relationship within FCL and expanding the membership scope; and increasing state and community support for FCL program development and implementation.

The 4-H, Youth, and Families initiative, offers a wide variety of programs and activities that can provide experiential learning opportunities for youth ages 5-19. South Carolina

families and youth have basic life skills and developmental needs that are addressed by educational programs offered through 4-H. Adults and family members can benefit from a child's involvement in the 4-H and Youth program and may become involved as volunteers. Volunteers play a critical role in multiplying the efforts of Extension professionals by disseminating information and coordinating educational events and activities for the 4-H youth of South Carolina. 4-H programs, activities, and events are conducted in ten major project areas. Eight of these project areas reflect the nationally recognized 4-H curriculum areas: 1) Communication and Expressive Arts; 2) Healthy Lifestyles; 3) Personal Development and Leadership; 4) Consumer and Family Science; 5) Plants and Animals; 6) Citizenship and Civic Education; 7) Environmental Education and Earth Science; and 8) Science and Technology. The ninth project is Teaching KATE (Kids About the Environment) which is a major science based natural resource educational youth program in South Carolina, while the tenth project is 4-H Volunteerism.

There was a total of 15,298.0 days or 66.5 FTE reported in areas that are classified under Goal 5. The total number of contacts reported in this goal was 229,108. The breakdown of these contacts are as follows: 61,731 white males, 85,081 white females, 33,613 black males, 45,284 black females, 1,471 classified as other males, and 1,928 classified as other females. From this group, a total of 15,253 were classified as limited resource. Accomplishment that were reported to the Clemson University Information Management System show 6,644 total programs and activities conducted in projects that are classified under Goal 5. There were a total of 121,545 participants who completed these educational programs. Of those completing the programs, 96,546 reported increasing their knowledge as a result of their participation. Of those participants who reported increasing knowledge, 44,630 indicated that they planned to adopt the recommended practices while 11,959 reported that they actually adopted or increased the use of recommended practices as a result of the programs.

Key Theme – Community Leadership Development

- a. This project addresses the need for increased leadership training and development in South Carolina's rural, suburban, inner-city, and transitional areas. Transitional areas include counties and communities at the fringes of metropolitan sprawl or changing neighborhoods. The Palmetto Leadership program is designed to assist leaders in rural counties that have a low tax base and relatively few income producing resources. These target areas often lack progressive leadership that looks beyond local political boundaries. Palmetto Leadership fosters teamwork, planning, and regionalism to address effectively the locale's economic and quality of life concerns. The community leadership program provides a facilitated and safe forum where conflicting interests and policies can be addressed constructively through action plans built by established and emerging leaders.

Through task forces citizens must increase leadership skills and effective use of planning

tools to address community issues, concerns, and policies. Components include a community asset inventory process, priority setting, socio-economic trend analysis, change management, planning, statistical analysis of local and regional socio-economic profile data, leadership and human capacity development, conflict negotiation and consensus building.

Topical issues addressed include economic development, education improvement, local government, public safety, health care, land use planning, growth management, recreation, tourism, and local cultural appreciation. The flexible curriculum is designed to fit the audience. The leadership curriculum template is similar from county to county, but local advisory groups have significant influence in shaping the actual program as presented. Web resources are identified to assist local leaders and program participants with task force planning and community issues. News releases publicize task force activities in local newspapers and electronic media. Local elected leaders and their councils utilize information and foster citizen participation and civic responsibility. In addition to community leadership program, nonprofit organization board and staff training was offered in the state. Fifteen agents have received nonprofit board training and have the capability to present programs to local nonprofit and voluntary organizations on board effectiveness, board governance, risk management, by-laws, board structure and function, public relations, motivation of volunteers, financial management, legal responsibilities, and other related board management and process issues. Clemson Extension partnered with the South Carolina Association of Nonprofit Organizations to provide this training to the state and made the training notebooks and materials available to the 13 state southern region of the U.S.

b. Impacts –

During the past year, 408 emerging and established local leaders participated in leadership programs sponsored or supported by Palmetto Leadership. Nineteen separate leadership programs were offered in counties, towns, and regions. These 19 programs covered five municipalities and one region that included combinations of counties. The 19 programs brought the total to 37 of the state's 46 counties in one year. Palmetto Leadership graduated 408 leaders in these counties: Allendale, Anderson (Pendleton), Bamberg, Barnwell, Tri-County (Allendale, Bamberg, and Barnwell) Region, Beaufort (Beaufort, Bluffton), Berkeley, Dorchester, Fairfield (Winnsboro), Greenville (Greenville Inner city - LEND), Hampton, Kershaw (Elgin), Lexington, Marlboro, McCormick, Newberry, Pickens, Spartanburg (Cowpens), Sumter (including City of Sumter), and Williamsburg.

1. CUMIS FY July 2001-02 planned time for Community Leadership Development is 1,309 days. The days reported are 1,763.5. The reports indicated that 6,550 white males, 7,034 white females, 2,535 black males, 3,427 black females, 55 other ethnic group males and 106 other ethnic group females received educational programming

in leadership development. A total of 985 limited resource persons received leadership programs.

2. The number of activities and programs totaled 442. The number of individuals completing non-formal education programs in community leadership training was 7,012.
3. The number of participants reporting increased knowledge was 6,512. The number of individuals planning to adopt or increase the use of suggested practices was 2,745 (39% of those completing the programs).
4. The number of people adopting practices is 917. This means that 13% of individuals completing educational programs became involved in task groups in a highly responsible manner. They assumed leadership positions and accomplished community-based results as a direct result of involvement in the leadership program. They were involved in one of the 1.8 task groups per leadership program. This is a slight drop from the previous year's performance. Last year the overall proportion of task forces formed from total community leadership programming was 15.4%. At the county level the purpose of the general programs is not designed to form task forces. Individual capacity development may be more singular or result in voluntary involvement in pre-existing community activities. In Palmetto Leadership task forces formed to address youth leadership, economic development, business appreciation, educational system support, county promotion materials, tourism plans, human services, and leadership programs. The key outcomes include the formation of strategic and tactical plans to address local concerns noted above.
5. The number of people who received information through "non-program" contacts such as telephone, office, and site visits was 1,648.
6. The number of individual completing leadership programs who collaborated with others in the region to address an issue or concern was 1,335. The Palmetto Leadership program values partnerships and collaboration. The program beneficiary appreciates the modeling of teamwork and support to address their needs.
7. The number of nonprofit organization board members trained was 671. This is a new area of training and may be expanded to include public official's board and council training in the future.
8. Palmetto Youth Leadership placed 871 youth in personal and community-based projects in over 21 counties.
9. An additional 345 youth at-risk were engaged in personal and community-based

projects. This is a major increase in youth at-risk program within the context of community leadership development programming.

10. A sample of Palmetto Leadership Program and Task Force Outcomes:

- Specialized programs raised citizen awareness of public issues in Elgin, Sumter, and Winnsboro among limited resource audiences and emerging leaders.
- Habitat for Humanity-Edgefield County hired Palmetto Leadership graduate as director.
- PL graduate Arlene Traxler won election for Edgefield County Treasurer.
- PL graduate, Sallie Cooks, was elected to the County School Board.
- PL Task Force for Habitat for Humanity-Edgefield County has built one house and plans 3 more.
- PL (Leadership Newberry County) has introduced movies on Saturday mornings at the downtown Newberry Opera House for children. The movies are cartoons, westerns, and general audience movies. This is an effort to promote downtown Newberry. The Task Force also plans to build a downtown park with donated land.
- Leadership Laurens County graduates have formed a Task Force to recruit a new class for 2002.
- Edisto Valley Palmetto Leadership graduates have applied for 501c3 status to continue operating the Edisto Development Council. The purpose of the Council is to promote the region's towns of Wagner, Perry, and Sallie in Aiken County.
- Midland Valley Palmetto Leadership graduates formed a Task Force to offer a Building Family Strengths Program in the Valley in Aiken County.
- A Palmetto Leadership Task Force in Edgefield County formed a Palmetto Leadership Youth Program. A project undertaken by the youth program graduates is the creation of a Landscape for Learning Project at the new Visitor Center for local Heritage Corridor region.
- An outgrowth of the Edisto Valley Palmetto Leadership program in Aiken County is the Corbitt Middle School Youth Leadership Program. The youth program graduates have planned a Paint the Drain project for Wagner. This project informs the public about the hazards of pouring paint into storm drains by painting warning notices to prevent pollution.
- Aiken County Mid-Carolina Middle School Youth Leadership graduates planted flowers to beautify school and increase school pride.

- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State

Key Theme – Promoting Business Programs

- a. This project addresses the need for increased expertise regarding economic development methods and strategies in South Carolina’s communities using business retention and expansion (BR&E) models. BR&E accounts for 40-80% of job growth in a community. Locally owned small businesses are growth opportunities for South Carolina. Extension professionals must increase their knowledge and understanding of economic development principles and become an important part of local and regional economic development. As the BR&E credentials of extension staff improve the focus can shift from agent training to BR&E program implementation. Sixteen members of the program area staff are certified in economic development and BR&E programming.

In the past five years, 19 extension agents with community development responsibility graduated from the SC Economic Developers’ School and were certified as Economic Developers. Sixteen agents became BR&E Certified Consultants and are qualified to coordinate local BR&E Programs. Extension staff members are expected to become an active and engaged resource to local and regional economic development officials. Five of 16 agents and specialists actively facilitated a local BR&E program during the past two years. The special emphasis during the past year was the BR&E Leadership program that used Focus Groups to collect information from local businesses, agencies, employees, and unemployed persons. They provided resource information from Clemson University, other land-grant institutions, and state economic development agencies. The BR&E Focus Group program was implemented in Barnwell County.

- b. Impacts –
 - 1. To date the most successful BR&E Visitation Program is the Beaufort County BR&E Program started in Spring 1999. Findings were reported in April 2000. Additional planning and policy making continued in 2000-01 with the publication of a Business Resource Guide and the BR&E Visitation Program Research Report. A Business Profiles of Northern Beaufort County is planned for December 2001. The Beaufort County Council, the Economic Development Board of Beaufort County, and the Palmetto Electric Cooperative provided significant financial support to the program. The program was considered by BREI (Business Retention and Expansion International) for a top award. This is a special role for Extension in the state economic development picture. The report prepared by the county community development agent and his staff has been given significant publicity. The report has

influenced public policy and the public officials' agenda. Media exposure of the BR&E Report provided an important role in educating public officials and the public about business development opportunities and obstacles in Beaufort County. The report is based on interviews and survey responses from 66 randomly selected business operators in the county. The businesses are engaged in building, manufacturing, and tourism industries.

2. A reported 199 days of planned time was dedicated to economic development. Actual days reported totaled 203. The audience comprised 1,062 white males, 852 white females, 330 black males, 304 black females, 15 other ethnic group males, and 12 other ethnic group females. Twenty-four individuals receiving programs were in the limited resource category.
 3. There were 35 economic development programs were reported for the year.
 4. The number of individuals completing education programs was 1,660.
 5. The number of individuals reporting increased knowledge was 1,450.
 6. The number of individuals who plan to adopt economic development practices was 487.
 7. The number of individuals who actually adopted practices was 90.
 8. The number of individuals who received information through "non-program" contacts such as telephone, office and site visits was 104.
 9. The number of community leaders who participated in BR&E task groups was 125. This figure comprises a minimum of four counties.
 10. The number of collaborative efforts to enhance BR&E totaled 25 linkages.
- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State

Key Theme – Marketing Place – Community Enhancement (Tourism)

- a. Keep America Beautiful, Anti-litter programs, and other programs that enhance the appearance and quality of life of South Carolina communities are included in this program area. This program area also includes efforts to bring tourism to South

Carolina's rural counties arranged in a crescent from the northwest corner of the state to the Charleston area. This program refers to the four regions of the Heritage Corridor in the state. This designation is recognized by Federal agencies. The Heritage Corridor was created in South Carolina to attract tourism dollars to the band of counties from the foothills to the coast with many historic and cultural features. Rural areas of the state have experienced a shift of jobs and population to urban areas. Many rural areas must rely on tourism, recreation, and non-manufacturing activities for survival.

Coupled with this is the South Carolina Design Arts Partnership that provides communities with desired improvements in architectural, landscape, historical, and preservation designs. Many of the state's rural communities are losing tax base. This is reflected in the deteriorating physical appearance of streetscapes, parks, public places, landmarks, and historical sites. This partnership functions in concert with the SC Downtown Development Association, the S.C. Arts Commission, Clemson Extension, historical groups, preservationists, and local government and business leaders to improve and rehabilitate local communities.

The methodology for the Design Arts Partnership includes the use of City and Regional Planning faculty, student interns, and planning class projects through a case study approach. Activities follow a consulting model strategy. Students are graded in terms of their contribution to the project. Community leaders provide continuous input and evaluations of the on-going project. The evaluation process is based on costs, visual features, and collaboration.

b. Impacts –

1. The Marketing Place – Community Enhancement program area had 872 days of planned activity during the past fiscal year.
2. The actual number of project activity days reported is 981.5. This is a significant increase over the past year.
3. During the past year 22 on-going and new design and landscape projects (SC Design Arts Partnership) involving an average of 15 participants at each site. This effort includes over 243 activities, festivals, and special programs related to community improvement and enhancement.
4. The audience and participants in the community enhancement arena number 6,761 white males, 7,785 white females, 2,905 black males, 2,854 black females, 279 other ethnic group males, and 403 other ethnic group female. The number of limited resource participants is 75. It appears that many individuals are indirectly involved in these community enhancement projects as volunteers and do not attend actual educational programs. Some unofficial reports indicate that approximately 200

community members volunteered for activities that planned and managed the SCDAP landscape, redesign, and rehabilitation programs.

5. The number of individuals completing education program in the area of community enhancement and improvement was 7,151
6. The number of individuals reporting increased knowledge was 5,706.
7. The number of individuals who plan to adopt practices associated with community enhancement and improvement was 1,866. This figure represents 26% of the total that completed the community enhancement educational program.
8. The number of individuals adopting the practices and actually taking on a leadership position in local organizations is 262 or 14% of those who planned to adopt the practices.
9. The number of individuals who received information through “non-program” contacts such as telephone, office or site visits was 1,241.
10. The number of collaborating agencies in the task groups was 265 in the state.
11. The number of individuals completing the SC Design Arts Partnership program was 13.
12. The number of individuals who plan to participate in a task group and address a community issue or concern was 18. This figure is quite low and represents program leaders.
13. The amount of funds raised to support local programs and collaborative efforts was \$169,910 for the past fiscal year.

In Region 1, 2, and 3, regional centers with office staff have been established to enhance programs, cultural interpretation, and marketing efforts throughout the region. The Heritage Corridor project has a blacksmith in Region 2 construct artistic ironworks for sale. The Interpretation Center is operational in the Foothills Region. The Heritage Corridor Passport Project educates public school teachers about the Corridor, an African American Trail has been identified; an Agricultural Heritage Center Farm-City Day was scheduled, the Dorn Grist and Flour Mill restoration project was planned, and many brochures and news articles were prepared.

c. Source of Federal Funds – Smith Lever 3b&c

d. Scope of Impact – State

Key Theme – Public Issues Education

- a. This project promotes public issues education and the understanding of the process of shaping unified public policy. South Carolina is a state in transition from an agricultural and textile intensive economy with a large rural presence to a state with diversified economic development, a tourist and migrating retiree destination, and global markets. The state faces challenges regarding coastal and lake area development, environmental sustainability, urban sprawl, and the transition of rural areas and a way of life to an urban-orientation. Public disputes are inevitable in such a changing economic, political, and social setting.

This project provides an opportunity to educate audiences about alternative dispute resolution techniques and other conflict management skills are presented to promote effective comprehensive planning and issue management. Public Issues Management School trains participants to become certified facilitators using facilitation, negotiation, and mediation conflict resolution strategies. The curriculum is a 30-hour program that can be customized to meet specific agency or special audience needs.

The program offers models and practice to refine conflict management skills. Public Issues Education also calls for review and interpretation of federal and state legislation with particular emphasis on the Farm Bill and related agricultural and environmental statutes. Formulating public policy that impacts agricultural profitability and production, sustainable regional economic development, land use, public health, and environmental concerns is a complex process that requires careful facilitation and management. The application of scientific land grant-based information during the public policy decision process has far reaching implications for future generations.

- b. Impacts –
1. During the past year, extension educators planned 233 days to conduct public issues education programs.
 2. The actual reported time allocated to public issues education programs was 221 days during the past fiscal year.
 3. The audience for these programs included 1,301 white males, 1,308 white females, 924 black males, and 899 black females, 29 males from other ethnic groups, and 22 females from other ethnic groups. A total of 137 limited resource persons received public issues education programs.

4. The number of public issues educational programs conducted was 105 during the past fiscal year.
 5. The number of individuals completing public issues education programs was 2,412.
 6. The number of individuals reporting increased knowledge was 1,303.
 7. The number of individuals who plan to adopt practices was 829.
 8. The number of individuals adopting practices was 59.
 9. The number of individuals receiving information through “non-program” contacts such as telephone, office, and site visits was 1,353.
 10. The number of facilitated public meetings addressing public issues was 82.
 11. The number of public appearances used to promote understanding of public issues was 60.
 12. The number of printed materials used to promote understanding of public issues was 1,304.
- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State

Key Theme – Children, Youth, and Families at Risk

- a. Extension programming in Building Family Strengths provides opportunities to strengthen families and address issues facing children, youth and families. The program has a developmentally appropriate curriculum designed to strengthen families. This Building Family Strengths program has been the basis for a four-year program of work effort for SC Cooperative Extension. The SC Department of Health & Human Services continue to be partners with continuous financial support throughout this program of work period. Other partners involved in the statewide trainings and county delivery are Department of Social Services (Youth Services Program) Clemson University College of Health Education and Human Development, South Carolina State University, Anderson College, Faith-based institutions and secondary schools in South Carolina. In addition, Building Family Strengths has been identified by the CSREES Family Development/Resource Management base program team as a program of excellence. Utilizing the train-the-trainer model, this holistic approach to family programming has

been successful in a variety of settings that include traditional classrooms, state youth services, county extension Family and Consumer Sciences and 4-H agents, student teacher training, and non-profit organizations.

b. Impact –

In February 2001, a National Strengthening Families and Youth Conference was sponsored with over 160 participants across the US and Australia for professionals working with youth and families. Throughout the year, many train-the-trainer workshops were conducted by state and county extension faculty.

The focus of the Building Family Strengths program this has been on curriculum development and training utilizing the train-the-trainer model. To this end, professionals representing Extension, secondary schools, Headstart, daycare personnel, higher education, human service agencies, law enforcement, and clergy have been trained throughout the state.

The trainings were designed for diverse work settings and provided the basis for partnerships in the project. It also increases Extension's visibility and ability to program in many different settings. In addition, the curriculum design is applicable to audiences reached by many organizations.

The delivery of the Building Family Strengths curriculum throughout the state has demonstrated Extension's ability to offer train-the-trainer trainings (for a fee) to other professionals. The new planning cycle focuses on marketing the revised Building Family Strengths curriculum and targeting later life development stages – Building Family Strengths for Later Life to address emerging family issues of baby boomers.

There were 1,191 days reported for this project by Extension personnel across the state. A total of 1,805 white males, 3,042 white females, 2,316 black males, 3,262 black females, 85 other males, 76 other females and 1,728 limited resource contacted by Extension personnel working in this area. This project is reaching a very diverse audience. In addition there were 273 activities and programs conducted with 6, 423 participants completed non-formal education programs. Of those individuals completing programs 5,752 participants reported increased knowledge and 1,370 participants adopted or increased use of practices.

c. Source of Federal Funds – Smith Lever 3b&c

d. Scope of Impact – State

Key Theme – Children, Youth, and Families at Risk

- a. Society has undergone dramatic social, demographic and economic changes that have deeply affected individuals and families in this country. Extension will focus on strengthen individuals and families while addressing current issues facing children, youth and families across the lifecycle. Creating caring families and communities through collaborative efforts is a MUST if we are to meet the challenges today and beyond. This approach demands a team approach to programming that focuses on the needs of the total family. Strong families provide children with a sense of belonging and identity and create hope for the future. Extension programming in Building Family Strengths provides opportunities to strengthen families and address issues facing children, youth and families. The program has a developmentally appropriate curriculum designed to strengthen families. This Building Family Strengths program has been the recognized as a “model” for team programming by the NAE4-HA and Epsilon Sigma Phi, receiving state and national recognition. In addition, Building Family Strengths has been identified by the CSREES Family Development/Resource Management base program team as a program of excellence.

- b. Impact –
Utilizing the train-the-trainer model, this holistic approach to family programming has been successful in a variety of settings that include traditional classrooms, state youth services, county extension Family and Consumer Sciences and 4-H agents, student teacher training, and non-profit organizations. Examples include Strengthening Women workshop, Even Start Adult Education, Character Education Course Planning, Pregnancy prevention, Junior Achievement, After School Enrichment Programs, Communities in Schools, 21st Century Coordinators, Department of Social Services, Conflict Resolution, Anger Management, and the SC Council on Aging. Throughout the year, many train-the-trainer workshops were conducted by state and county extension faculty. The focus of the Building Family Strengths program this has been on curriculum development and training utilizing the train-the-trainer model. To this end, professionals representing Extension, secondary schools, Headstart, daycare personnel, higher education, human service agencies, law enforcement, and clergy have been trained throughout the state.

The trainings were designed for diverse work settings and provided the basis for partnerships in the project. It also increases Extension’s visibility and ability to program in many different settings. In addition, the curriculum design is applicable to audiences reached by many organizations. The delivery of the Building Family Strengths curriculum throughout the state has demonstrated Extension’s ability to offer train-the-trainer trainings (for a fee) to other professionals. The current planning cycle focuses on marketing the revised Building Family Strengths curriculum and targeting later life development stages – Building Family Strengths for Later Life to address emerging family issues of baby boomers.

There were 906 days reported for this project by Extension personnel across the state. A total of 1,660 white males, 3,488 white females, 1,761 black males, 3,553 black females,

163 other males, 196 other females and 1,604 limited resource contacted by Extension personnel working in this area.

Project 120: Building Family Strengths for Later Life

1.	Number of educational programs and activities conducted.	125
2.	Number of people completing educational programs.	2,192
3.	Number of people reporting increased knowledge.	2,011
4.	Number of people who plan to adopt practices.	1,250
5.	Number of people adopting practices.	177
6.	Number of people receiving information through “non-program” contacts such as telephone, office, and farm visits.	250
7.	Number reached through mass media.	54,517
8.	Number of volunteer hours.	102
9.	Number of people participating in Conflict Resolution/Anger Management programs.	449
10.	Number of people participating in Taking Charge in Challenging Times programs.	61

Project 121: Building Family Strengths – A Youth Development Approach

1.	Number of educational programs and activities conducted.	278
2.	Number of people completing educational programs.	4,663
3.	Number of people reporting increased knowledge.	3,816
4.	Number of people who plan to adopt practices.	968
5.	Number of people adopting practices.	128
6.	Number of people receiving information through “non-program” contacts such as telephone, office, and farm visits.	303
7.	Number reached through mass media.	7,713
8.	Number of volunteer hours.	370
9.	Number of people participating in Conflict Resolution/Anger Management programs.	342
10.	Number of professionals participating in Train-the-Trainer programs.	171

c. Source of Federal Funds – Smith Lever 3b&c

d. Scope of Impact – State

Key Theme – Family Resource Management

a. Programs in this area are designed to increase the number of South Carolinians who are financially literate and empowered with the knowledge, attitudes, skills, and confidence

to practice effective and successful financial management strategies that insure financial security and stability across the life cycle. Education programs encourage families to adopt financial practices which will increase financial security and stability and help families cope with financial impacts of periods of reduced income due to plant downsizing and military base closings, as well as from divorce, widowhood, and natural disasters.

Educational programs for youth encourage them to 1) set and achieve financial goals through regular savings, 2) help them understand and adopt basic financial management practices, 3) make wise consumer decisions in the marketplace, and 4) provide entrepreneurship concepts in preparation for real world experiences. Programs are conducted by county agents and specialists.

b. Impact –

Impact data for each of the projects are as follows:

Project 122: Financial Security in Later Life - There were 175 days planned and 215 days reported in this project area equaling .9 FTE's with a total of 1025 contacts and 844 people participating in 66 educational programs.

1. Number of educational programs activities conducted.	66
2. Number of people completing educational programs.	844
3. Number of people reporting increased knowledge.	698
4. Number of people who plan to adopt practices.	435
5. Number of people adopting practices.	47
6. Number of people receiving information through "non-program" contacts such as telephone, office, and farm visits.	70
7. Number of people who engage in activities which increase their financial literacy related to later life issues.	251
8. Number of people who develop a plan to achieve retirement and/or future income goals.	18
9. Number of people who utilize recommended practices in managing their use of credit in light of their long-term goals.	14
10. Number of people who initiate or increase contributions to a savings plan for retirement or future income needs.	15
11. Number of people who develop a plan for managing long-term health care needs.	95

Project 123: Financial Stability for Individuals and Families - There were 314 days planned and 290 days reported in this project area equaling 1.3 FTE's with a total of 2755 contacts and 1,760 participating in 129 educational programs.

1. Number of educational programs activities conducted.	129
2. Number of people completing educational programs.	1,760

3. Number of people reporting increased knowledge.	1,219
4. Number of people who plan to adopt practices.	844
5. Number of people adopting practices.	97
6. Number of people receiving information through "non-program" contacts such as telephone, office, and farm visits.	304
7. Number of people who set or revise spending and savings goals.	308
8. Number of people who participate in the Investing for Your Future program.	50
9. Number of people who develop a plan for accumulating, protecting, and distributing/transferring assets.	21
10. Number of participants in programs to cope with financial impacts of periods of reduced income (Ex. Taking Charge in Challenging Times)	204

Project 124: Resource Management for Youth - There were 264 days planned and 242 days reported in this project area equaling 1.1 FTE's with a total of 2,069 contacts and 1,434 participating in 71 educational programs.

1. Number of educational programs activities conducted.	71
2. Number of people completing educational programs.	1,434
3. Number of people reporting increased knowledge.	1,338
4. Number of people who plan to adopt practices.	600
5. Number of people adopting practices.	98
6. Number of people receiving information through "non-program" contacts such as telephone, office, and farm visits.	140
7. Number of participants in the High School Financial Planning program.	29
8. Number of participants in the Mini-Society program.	295
9. Number of participants in the LifeSmarts program.	7
10. Number of participants in a financial program (i.e. – "Money My Way" or "Financial Fitness for Youth" lessons).	520

c. Source of Federal Funds – Smith Lever 3b&c and some grant funding.

d. Scope of Impact – State Specific

Key Theme – Leadership Training and Development

a. There are many management systems used within the Cooperative Extension Service for collaboration. Some of these systems include Master Gardener Associations, Advisory Councils, Program Committees, Palmetto Leadership Classes, Landowners Associations, Keep America Beautiful Boards and Subcommittees, Family Community Leaders (FCL) Clubs and Associations, 4-H Clubs and 4-H Foundations. All management systems are used to collaborate on specific programs and projects of the Cooperative Extension

Service. Volunteer training is offered to these systems by the Cooperative Extension Service offices. Some of these trainings include: leadership development, orientation, goal establishment, meeting deadlines, measuring accomplishments, allocation of resources such as manpower, materials, money and time, and volunteer expectations.

At the state level, through the Volunteer Management Initiative Team, several strategies were implemented to use effective management systems for collaboration. Working relationships were re-established with the Governor's Office on Volunteerism and the South Carolina Association of Volunteer Administrators (SCAVA). A team member serves on the SCAVA Board.

The project team maintained a resource library. Information about the library was shared at the Volunteer Management inservice training.

- b. Impact –
During the 2000-01 fiscal year, 636 days were planned in this project area. Five hundred seventeen days were actually reported which included 162 programs which 2,123 people completed. Of those completing the program, 87% (1,858) reported an increase in knowledge and 74% (1,608) reported that they adopted or increased the use of practices that were taught.
- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State

Key Theme – Leadership Training and Development

- a. Reaching out to non-Extension volunteers opens opportunities for Cooperative Extension Service to become more visible in a community. It also offers an opportunity for non-Extension volunteers to become Extension volunteers.

A second program was designed to increase the knowledge of volunteer opportunities within the Extension System; to increase volunteer program successes within the system; and to utilize mass media to increase public awareness of Extension volunteer programs.

- b. Impact –
During the 2000-2001 fiscal year, 364 days were planned in this project area. Five hundred and five days were actually reported with 193 programs conducted which 3,489 people completed. Of those completing the program, 93% (3,256) reported an increase in knowledge and 65% (2,283) reported that they adopted or increased the use of practices that were taught.

Four hundred forty five days were planned to increase the knowledge of volunteer opportunities. Four hundred forty three days were reported. There were 197 activities and programs conducted that reached 4,776 citizens. Approximately, 66% reported an increase in knowledge.

- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State

Key Theme – Leadership Training and Development

- a. The purpose of this project was to implement an effective volunteer management system for FCL boards, committees and county organizations and to establish, revitalize and/or improve the cooperative relationship with FCL to expand the scope of its membership and programming efforts.
- b. Impact –
There were 940 days planned in this area and 1,256 were reported. Seven hundred and sixty four activities/programs were conducted with 721 Family, Community Leader (FCL) volunteers conducting programs with other groups. This included 41,567 contacts made by the FCL volunteers.
- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State

Key Theme – Youth Development/4-H (Communications & Expressive Arts)

- a. Living successfully in the information age requires that youth be knowledgeable and skilled in communicating their ideas and beliefs. This includes the ability to speak with poise and confidence in the public arena, effectively and efficiently communicate utilizing computer technology and through standard written formats. Extension 4-H programs provide opportunities for youth to become proficient in many communications modes. The opportunities exist through different delivery modes in order to reach a diverse audience of young South Carolina citizens. Competitive events are held which are designed to strengthen the skills of the 4-H participants:
 - Method Demonstrations in 4-H project areas
 - Public Speaking Contests
 - Livestock Judging Events with a “reasons” component

- Consumer Judging Contest
- Business Demonstration Contest
- Lifesmarts Contest - computer component

b. Impact –

4-H youth participating in various contests during the State Fair gave approximately 500,000 fair goers the opportunity to see what communications skills are developed through the 4-H program.

There were 163.5 days planned in this project with 186 days reported. A total of 481 white males, 665 white females, 339 black males, 681 black females, 29 other males, 49 other females and 61 limited resource youth were contacted through this project area. There were a total of 133 activities and programs conducted in this project area with 1,286 youth completing these programs. Of those youth participating, 1,061 reported an increase in knowledge, 240 reported adopting or increasing uses of practices, and 588 reported they plan to adopt new practices. The 4-H debating contest had 259 participants while 230 participated in public speaking contests with a total of 35 participating in Business Demonstration Contest. 147 Volunteers assisted with these programs.

c. Source of Federal Funds – Smith Lever 3b&c

d. Scope of Impact – State

Key Theme – Youth Development/4-H (Personal Development and Leadership)

- a. Youth need experience and training to become effective members of their communities. Without the skills and confidence to make appropriate decisions, youth often make poor choices about important issues.

The 4-H Program provides a variety of programs, events and activities designed to increase the ability of youth to develop their personal talents and their leadership skills. In addition, the program provides opportunities for youth to serve as partners in planning, implementing and evaluating the overall program. They are seen as partners in the program, not as recipients of the program

b. Impact –

There were 1,120.5 days planned in this project with 1,312 days reported. A total of 3,991 white males, 4,927 white females, 4,048 black males, 4,831 black females, 65 other males, 76 other females, and 1,028 limited resource youth were contacted through this project. There were 632 activities and programs conducted in this project with 9,807 youth completing these non-formal education programs, 8,627 of these youth reported an

increase in knowledge with 4,971 youth reported adopting or increasing uses of practices. A total of 3,227 volunteer hours were also reported.

- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State

Key Theme – Youth Development/4-H (Food & Nutrition)

- a. Youth are faced each day with making choices, some of which could impact their lives forever. They face the challenge of balancing their desire and ability to make healthy decisions with the desire to feel part of a group. Without the skills and confidence to make appropriate decisions, youth often make poor choices about important issues. The 4-H Program provides a variety of programs, events and activities designed to increase the ability of youth to make wise decisions. In addition, the program provides opportunities for youth to serve as partners in planning, implementing and evaluating the overall program. They are seen as partners in the program, not as recipients of the program
- b. Impacts –
There were 9615 days planned and 1,144.5 reported for this project. A total of 3,225 white males, 5,073 white females, 3,472 black males, 4,501 black females, 157 other males, 136 other females and including 2,816 limited resource youth were contacted through the 1,007 youth completing these non-formal educational programs. Of those youth completing the programs, 9,250 youth participants reporting an increase in knowledge and 1,999 youth reported adopting or increasing the use of practices with an additional 4,512 youth who plan to adopt recommended practices. In addition, volunteers reported 1,234 hours of volunteer time.
- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State

Key Theme – Youth Development/4-H (Family & Consumer Sciences)

- a. Society has undergone dramatic changes that have affected youth and families. Strong families provide children with a sense of belonging and the security of being loved and nurtured. Children from families without this strength and security often are at risk. The 4-H program does not seek to replace the influence and purpose of the family unit. It offers youth the opportunity to become a part of an organization where knowledge and

skills can be developed for life-time learning. The 4-H program seeks to support the family unit and strengthen the individual child, building upon the assets that are present. County Extension Agents receiving training through the Building Family Strengths Program utilize their training to reach and help individual youth and their families.

b. Impact –

There were 686.5 days planned for this project and 762.5 days reported. A total of 1805 white males, 4141 white females, 1759 black males, 2479 black females, 38 other males, 48 other females and 1,415 limited resource youth were contacted through efforts made in this project area. A total of 864 volunteers were also reported as participating in this project area. There were 492 programs and activities conducted with 6,217 youth completing non-formal educational programs. Of those youth participating, 4,606 reporting an increase in knowledge while 1,209 adopting or increasing uses of practices. There were 171 youth participating in Consumer Judging programs, 1,206 in Consumer Education classes, and 1,496 in clothing and textiles education classes.

c. Source of Federal Funds – Smith Lever 3b&c

d. Scope of Impact – State

Key Theme – Youth Development/4-H (Plants & Animals)

a. Teaching youth about plants and animals is much more than teaching them to appreciate life. Lifelong hobbies and careers develop over the course of a 4-H plant/animal experience. The value of discovering a hobby that is truly cherished and brings lifelong satisfaction coupled with the development of skills and conservation practices, makes this project very significant.

b. Impact –

There were 1201.5 days planned and 1,569 reported for this project area. A total of 14,380 white males, 14,704 white females, 5,501 black males, 5,963 black females, 214 other males, 222 other females and including 1,500 limited resource youth were contacted through efforts made in this project area. A total of 1233 volunteers participated in this project area. There were 741 activities and programs conducted with 17,490 youth completing these non-formal education programs. Of those youth completing the programs 12,971 youth reported increased knowledge while 787 youth reported adopting or increasing uses of practices. An additional 2,496 youth completing programs in plant/animal science indicated they plan to adopt recommended practices. A total of 6,970 youth participated in 4-H animal projects while 6,663 youth participated in plant projects.

- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State

Key Theme – Youth Development/4-H (Citizenship & Civic Education)

- a. American culture has undergone dramatic changes over the past few decades. From an agrarian society with interdependent families, we've become a culture of neighborhoods of strangers. The breakdown of the family unit is also evidenced in the breakdown of community. Youth have little understanding of the responsibilities of citizenship yet know much about their rights. The 4-H program is focused on teaching the responsibilities of American citizenship. A ceremony is held during State 4-H Congress recognizing youth who have reached their eighteenth birthday and are eligible to vote. State service projects were conducted to benefit children in crisis. Local club and county 4-H programs offered numerous opportunities to help others. Four 4-H members attended the National 4-H Conference in Washington, DC to provide input and vision for the 4-H program of the future. The State 4-H Council visited with the governor and was introduced from the South Carolina Senate and House of Representatives.
- b. Impact –
There were 440.5 days planned and 436.5 days reported in this project area. A total of 1,701 white males, 2,219 white females, 1,880 black males, 2,167 black females, 162 other males, 305 other females and included 898 limited resource youth were contacted through efforts in this project area. There were 311 programs conducted with a total of 5,529 youth completing these non-formal education programs. Of those youth who completed the programs, 4,807 youth reported an increase in knowledge with 757 of these youth reported adopting or increasing uses of practices. There were also 2,201 completing programs in Citizenship who plan to adopt recommended practices. In addition there were 2,131 youth participating in service learning and 466 youth who gave leadership to service learning projects. A total of 6,100 volunteer hours were reported in this project area.
- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State

Key Theme – Youth Development/4-H (Natural Resources & Shooting Sports)

- a. Children and youth lack a working knowledge of natural resources and environmental stewardship. Many have no experience in the natural environment or in outdoor recreation activities. The 4-H program seeks to create an awareness of the natural

environment. Included in the program emphasis is the understanding of individual and personal responsibility by every citizen to maintain the natural resources and to develop life skills through outdoor recreation activities.

b. Impact –

There were 515.5 days planned and 606.5 reported in this project area. A total of 3,053 white males, 2,193 white females, 1,186 black males, 1,109 black females, 91 other males, 69 other females and including 379 limited resource youth were contacted through efforts made in this project area. There were also 552 reported as volunteers. There were a total of 247 activities and programs conducted with 6,247 completing non-formal education programs. Of those youth who completed the programs, 4,762 reported increase in knowledge and 385 adopting or increasing uses of practices. An additional 2,675 plan to adopt recommended practices. In addition there were 1,373 youth reported in county natural resources programs, 1,615 who participated in shooting sports clubs, and 205 youth trained in hunter safety.

c. Source of Federal Funds – Smith Lever 3b&c

d. Scope of Impact -- State

Key Theme – Youth Development/4-H (Science, Safety & Technology)

- a. Youth live in a world where technology rapidly changes and becomes obsolete. Acquiring a basic understanding of electrical and mechanical science is vital to understanding the world around them. Having computer science skills has become a necessity for productive life in the world of work.

Safety skills in all walks of life are often taken for granted during the adolescent years. Vehicle safety is of grave concern during the adolescent years.

The South Carolina 4-H Energy Challenge, with support from SCANA Corporation, Duke Power Company, Inc., and Carolina Power and Light Company, continues to provide an opportunity for South Carolina students to learn about the world of energy. In addition, 4-H youth are actively engaged in electric, computer science, and safety programs.

South Carolina agencies continue to join together to address the serious problem of home fire related injuries and deaths involving children. Agencies working through 4-H to address these issues are South Carolina Fire Marshall's Office, South Carolina Firemen's Association, South Carolina Farm Bureau, and South Carolina Department of Health and Environmental Control. A comprehensive approach is needed in order to reach the

maximum number of families with fire safety training. The 4-H program in collaboration with other agencies has developed and continues to educate youth in fire prevention and safety. The fire safety curriculum spans K-5 and is provided as school enrichment programs to public and private schools. In support of the curriculum, a fire safety poster contest and creative writing contest are sponsored on the state level.

In addition, strong emphasis is needed on developing an awareness in youth of the relationship between sound nutrition and physical exercise. Healthy practices related to sound nutrition and physical exercise are often misunderstood or simply not practiced by even those youth who participate in organized athletic activities. In nutrition and fitness, the 4-H program offers instruction in workshops, seminars, school enrichment and camping.

b. Impact –

There were 914.5 days planned and 1,242.5 days reported in this project area. A total of 8,788 white males, 8,906 white females, 4,346 black males, 5,118 black females, 102 other males, 138 other females and including 2,369 limited resource youth were contacted through efforts made in this project area. There were 456 activities and programs conducted with 17,167 youth who completed these non-formal education programs. Of these youth who completed the programs 1,627 youth reported increase knowledge and 6,952 youth reported adopting or increasing uses of practices. There were also 1,627 youth who completed programs and plan to adopt the recommended practices. A total of 934 volunteers were reported in this project area.

c. Source of Federal Funds – Smith Lever 3b&c

d. Scope of Impact – State

Key Theme – Youth Development/4-H (Teaching KATE)

a. Some children never have the opportunity to explore the natural world around them. Experiencing the environment is often done through textbooks and other formal educational methods. Taking kids into the natural world to explore resources is the best way to teach them about the environment. Experiential learning is the hallmark of all 4-H programs and Teaching KATE (Kids About The Environment) is no exception.

b. Impact –

There were 351 days planned and 370 days reported for this project area. A total of 759 white males, 1,228 white females, 390 black males, 495 black females, 9 other males, and 21 other females were contacted through this program area. There were 19 activities and programs conducted with 345 completing non-formal education programs. Of those

youth who completed the programs 320 youth reported increase in knowledge and 116 youth reported adopting or increasing uses of practices. There were also 185 who plan to adopt recommended practices. In addition, 1,001 people were reached in promotion effort of Teaching KATE, 45 teachers took formal courses on Teaching KATE, and 160 teachers received Teaching KATE lesson plans.

- c. Source of Federal Funds – Smith Lever 3b&c
- d. Scope of Impact – State

B. STAKEHOLDER INPUT PROCESS

Section 102(c) of the AREERA Act of 1998 requires that land grant institutions provide information related to stakeholder input. The Act specifies that information on 1) actions taken to seek stakeholder input that encourages their participation and 2) a statement of process used by institutions to identify individuals and groups who are stakeholders and to collect input from them.

At Clemson University, stakeholder input is a key to successful extension programs. Clemson has a long history and tradition of seeking stakeholder input into the plan of work process. The process involved in seeking stakeholder input include the following steps: 1) identification of stakeholders--internal and external that should have input in the POW process, 2) process used in seeking stakeholder input, 3) POW questions for stakeholders, and 4) profile of external stakeholders.

Identification of Stakeholders--Internal and External:

Internal: Internal stakeholders include Extension administrators, program administrators, county Extension directors, Extension agents, agent associations, specialists, faculty, department chairs, school directors, and faculty and administrators from Experiment Stations (Research).

External: Extension advisory boards, commodity groups, community leaders, human service providers, business/industry, and collaborators such as Farm Bureau, Chamber of Commerce, Farm Service Agencies, etc.

Process Used to Seek Stakeholder Input and Questions

Nominal group technique (NGT) was used to garner stakeholder input to the POW process. NGT is a process where a group of individuals generate a large number of ideas in a relatively short period of time. NGT is helpful in identifying problems, exploring solutions and establishing priorities.

Several steps were involved in conducting the NGT. First, each of the 46 South Carolina counties was asked to conduct a NGT. Second, instructions were provided to all county offices/county directors of the steps involved in conducting the NGT. Third, to assure diversity, emphasis was placed on obtaining a cross-section of people that represent the local community. Fourth, a set of rules and procedures were established for the smooth operation of NGT. Fifth, a series of questions were identified to which stakeholders were to respond. These questions included: 1) What are the five most critical issues facing your communities in the next five years? 2) Is Extension addressing any of these issues? and 3) What partnerships do you think might be formed with Extension to address the issues or concerns? The responses to these questions were summarized by county, by cluster and by state as a whole. The initiatives and projects that were developed for the state plan of work are a result of this process which were later included in the strategic goals of Public Service and Agriculture (PSA) in South Carolina.

Profile of Stakeholders

Of all the external stakeholders, Extension advisory boards play a significant role in the POW. Extension advisory board members constantly provide input to Cooperative Extension in South Carolina. A profile of advisory board members would help address the diversity

issue. Of the 237 advisory board members who provided input, 48% were male, 52% female; 81% Caucasian, 15% African-American, and 4% other. Regarding age, 5% were less than 35 years of age, 46% between ages 36 and 55 years, and 49% more than 55 years. Eighty-four percent were married and living with a partner. Regarding education, 15% had completed high school, 18% some college, 35% were college graduates, while the remaining 32% held masters or professional degrees.

A study conducted by Dukes (1999) on the Expectations of Public Service at Land Grant Institutions for the 21st Century by traditional and non-traditional audiences in South Carolina found that important issues facing communities in South Carolina are: 1) growth and population, 2) environment, 3) community and economic development, 4) agriculture productivity, 5) family issues, and 6) food, health and nutrition.

C. PROGRAM REVIEW PROCESS

There have been no significant changes in the program review processes since the 5-Year Plan of Work was submitted in July, 1999.

D. EVALUATION OF THE SUCCESS OF MULTI AND JOINT ACTIVITIES

South Carolina participates in a variety of multistate, multi-institutional/organizational, and multidisciplinary activities. Several of these activities involve positions that are partially funded by South Carolina Extension funds but are located in other states within the southern region. The activities that are reported below are those activities for which South Carolina provided primary leadership.

Market Risk Management

The multi-state educational programs on risk management tools and products available for use by primary producers and agribusinesses were:

Eight multi-state workshops on tactical market risk management procedures with a focus on the current agricultural environment.

A regional (VA, NC, SC, GA, and FL), in-depth training on market risk management was developed and offered to agricultural producers, lenders and other agribusinesses under the auspices of the *Executive Marketing School*. The intent was to offer in-depth training to producers. This project involved significant planning, materials development, promotion, and utilization of the SE Region's Agricultural Economists

Master Tree Farmer/Master Woodland Owner

The Master Tree Farmer/Master Woodland Owner program provides intensive forestry and wildlife training to landowners in return for 25 hours of volunteer time promoting forestry and the Tree Farm program in South Carolina. In 2000 - 2001 Master Tree Farmer continued as a flagship program for Extension Forest Resources. In Spring of 2001 the program was broadcast from Clemson University via videoconference to 14 states and 132 down-link sites across the south and to 4 states in the fall. Graduates received a total of 28 contact hours of instruction in forestry topics such as Forestry as an Investment, Pine Management, Hardwood Management, Marketing and Harvesting, and Wildlife Management. Master Tree Farmer II, a more advanced level of training than MTF I, was delivered to 1700 attendees in 10 states in 2002.

By using the video conference technology, the program was delivered to 2875 forest landowners in 2001. Landowners representing 748,277 acres of forest land completed the course. Approximately 47 percent of the landowners were under 50 years of age and 20 percent were female. The Master Tree Farmer Program utilized 21 volunteers. The number of FTE's devoted to this project was 0.6. The following impacts were derived from analysis of evaluation data collected after landowners completed the training:

1. Ninety-eight percent of the participants would recommend the program to other landowners.
2. Ninety-four percent feel that the program will save them money when practicing forestry on their property.
3. Ninety-five percent of the landowners report that they will earn money by using knowledge they gained from the program for an estimated total gain of \$16 million.
4. Based on increased knowledge, eighty-eight percent of the landowners completing the course plan changes in the management of their forest property.
6. Ninety percent of the graduates indicated that they would attend a more advanced training program if it were offered.

A follow-up survey was conducted one-year after the MTF I program. Forty-three percent of 545 surveys were returned. They report the following updated impacts:

1. Eighty-one percent report their forest management level at good to excellent compared to twenty one percent prior to the program.
2. Ninety-four percent plan changes in forest management practices.
3. Eighty-two percent have made changes as a result of the training.
4. Sixty-six percent plan to make additional changes to forest management practices.
5. Respondents indicate that the course will save landowners more than \$13 million and earn them a total of \$6 million.

Wildlife Management

Conducted farm pond clinics, workshops and training sessions and provided technical assistance on management of aquatic weeds and toxic algae to landowners, real estate developers, forest industry personnel, pesticide applicators, government agency personnel, biologists, and environmental groups in multiple states. This included control of the new invasive exotic beach vitex (*Vitex rotundifolia*), and aquatic weed management to protect resources for the endangered wood stork. There were 90 programs and activities conducted with 985 individuals participating. A total of 931 people reported increased knowledge with 463 planning to adopt practices and 292 actually adopting practices. Pesticide applicators from South Carolina, North Carolina, and Georgia received 5-8 hours of Continuing Certification Hours.

Fire Ant Research & Extension Program

Participants/Collaborators: Principal Investigator -- Dr. Paul M. Horton, Clemson University, Clemson, South Carolina.

Other states and agencies include: USDA/ARS/CMAVE, Gainesville, Florida; USEPA,OPP/BPPD, Arlington, VA; US Army Environmental Center, Aberdeen, MD; US Army Center for Health Prevention and Preventative Medicine, Aberdeen, MD; TRADOC, Ft. Monroe, VA; SCARNG Environmental Office, Columbia, SC; Pest Management Office, Fort Jackson, SC; Texas Agricultural Experiment Station and Texas Agricultural Extension Service, Texas A & M University System; The University of Georgia Cooperative Extension Service, Athens, GA; LSU Agricultural Center, Baton Rouge, LA; University of Arkansas Cooperative Extension Service; University of Tennessee Agricultural Extension Service; Alabama Cooperative Extension Service, Auburn University; Pest Control and Urban Entomology, University of Florida, Gainesville, FL.

Statement of Problem Prompting Research Initiative: The imported fire ant (IFA) is a non-native, invasive, insect species having no naturally occurring enemies or control agents in North America. It has become an important medical, social, agricultural and economic pest in every county in South Carolina. Current practical management technology is limited primarily to chemical control. Environmentally-friendly management decisions can only be

made based upon sound knowledge of the economic, ecological, social, and biological components of this insect. The South Carolina Legislature specifically stated their intent for us to link the resources provided by their 1998 PSA funding with the USDA/ARS and the other states in the Southern Legislative Conference Imported Fire Ant Task Force Initiative (SLC TF), as full partners.

Accomplishments and Results to Date: In an SLC Cooperative project with USDA/ARS, IFA colonies located in two separate sites on the Clemson University campus were inoculated with *Thelohania solenopsae*, a protozoan microsporidia in the summer of 1998. These sites have been continually monitored to determine survivability and potential control of IFA by *Thelohania solenopsae*. Brazilian phorid flies, *Pseudacteon tricuspis* have been released in three widely separated sites. One test site is near Clemson and a second at Myrtle beach, SC. These tests are also to examine the survivability and control potential of these parasitoids on IFA, and to compare their effects with similar tests being installed in other southern IFA-infested states.

A pilot IFA-Integrated Pest Management program with funding from DoD, EPA and Industry was initiated as a model DoD IFA management scheme for use on other southern military bases. In this pilot two test sites were installed on Ft. Jackson, SC and McIntire ANG airbase in June, 2000 and have been monitored since then. This pilot is a fully integrated program which incorporates GIS/GPS mapping and the integrated use of selected chemical management techniques designed to supplement and enhance the release and establishment of the two biocontrol agents (*Thelohania* and *Triscupis*). As of October 2000, both the phorid flies and the microsporidian were found to have survived, reproduced and spread into new colonies locally on these two sites in the midland region of South Carolina. As a result of this success this pilot is being used as a model for the establishment of even larger IFA Management programs on three other military installations in the southern US. The SC tests will continue to be monitored over the next several years.

More than 35 training programs and production meetings were held throughout the state to teach IFA management techniques to more than 1260 agents, farmers and homeowners. Twenty-five research/demonstration sites have also been installed.

The Clemson University IFA Team joined with the extension and research personnel of 9 other land grant universities in a project to develop and publish a comprehensive and up-to-date extension bulletin on IFA management in urban areas. The title of the publication is "Managing Imported Fire Ants in Urban Areas." More than 40,000 copies of this 18 page publication were printed and distributed during the past 12 months.

This project is providing guidance and coordination for the CU PSA-IFA Program being

conducted by 15 other scientific teams. These efforts are developing customized management strategies, and will ultimately reduce IFA to levels below economic thresholds, provide greater protection and enhancement for native species throughout the ecosystem, reduce the use of harsher chemical strategies, and significantly reduce the IFA as a threat to South Carolinians.

E. MULTISTATE EXTENSION ACTIVITIES

Extension faculty and staff are currently involved in six multistate activities. The overall purpose of these programs is to foster interdepartmental, interdisciplinary, and intercampus communication and collaboration in the southern states. In addition, these programs will increase coordination and expansion of efforts in conducting educational programs throughout the southern region.

The Virtual Small Fruit Center is creating more visible and active focal points for stakeholders within and outside the university for research, Extension, and outreach activities related to small fruit production, handling, processing, marketing and consumption. South Carolina is partnering with the states of North Carolina and Georgia on this program.

The Regional Forestry Position is a liaison of the southern land-grant universities and the USDA Forest Service - Southern Region. The Forester is responsible for increasing coordination and regional level technology transfer, information dissemination, and educational activities. Working closely within the Extension System and the USDA Forest Service, the Forester identifies opportunities and works with natural resource professionals to address them. South Carolina is one of thirteen southern states cooperating in this effort.

The Water Quality Position is increasing coordination and cooperation among EPA, state environmental agencies, USDA-CSREES, and Cooperative Extension. This position is also responsible for identifying and providing related Extension educational materials to EPA and others as appropriate and communicate research, and other educational needs of Extension audiences to EPA and other appropriate organizations. South Carolina is one of eight participating states on this position.

The Orchard Floor Management program provides leadership and direction to orchard and vineyard floor management in South Carolina, North Carolina, and Georgia. Specifically the program is used to evaluate orchard and vineyard floor management programs and provide support to county faculty through publications, field days, on-farm demonstrations, and inservice trainings.

South Carolina receives multistate input in the development of the yearly Pest Management Handbook. Specialists from Georgia and North Carolina provide current pesticide information for various sections of the handbook.

South Carolina is an active partner in the Southern Legislative Conference Imported Fire Ant (IFA) Extension/Research Program. This effort between federal, regional, state, and private sectors is essential to ensure that current and emerging IFA management technologies are effectively evaluated for regional effectiveness, and rapidly implemented where appropriate. This is especially important with candidate biological control agents whose survivorship and

impact may be influenced by the climate, soils, topography, and native fauna/flora which vary widely throughout the southeast region.

The Environmental Housing Issues Affecting the South program which was proposed for 2001, was not developed due to the lack of subject matter specialist support for this area.

**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 Clemson University
State South Carolina

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>Virtual Small Fruit Center</u>	<u>\$12,948</u>	<u>\$35,738</u>	<u>\$28,590</u>	<u>\$37,364</u>	<u>\$38,298</u>
<u>Regional Forestry Position</u>	<u>6,150</u>	<u>6,122</u>	<u>5,747</u>	<u>4,845</u>	<u>4,966</u>
<u>Regional Water Quality Position (EPA)</u>	<u>10,463</u>	<u>4,700</u>	<u>5,232</u>	<u>----</u>	<u>----</u>
<u>Orchard Floor Management</u>	<u>14,500</u>	<u>15,000</u>	<u>7,500</u>	<u>15,078</u>	<u>15,455</u>
<u>Pest Management Handbook</u>	<u>----</u>	<u>16,942</u>	<u>9,511</u>	<u>10,000</u>	<u>10,500</u>
<u>Fire Ant Program..</u>	<u>30,000</u>	<u>15,000</u>	<u>15,067</u>	<u>----</u>	<u>----</u>
<u>*Environmental Housing Issues Affecting the South</u>	<u>----</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
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Total	<u>\$74,061</u>	<u>\$93,502</u>	<u>\$71,647</u>	<u>\$67,287</u>	<u>\$69,219</u>

Form CSREES-REPT (2/00) _____
Director

03/01/03 *Environmental Housing Issues Affecting the South program which
Date was to begin in 2001 was not developed due to the lack of subject
matter specialist support for this area.

F. INTEGRATED RESEARCH AND EXTENSION ACTIVITIES

As required by the AREERA Act of 1998, Agriculture and Forestry Research Program and the Cooperative Extension Service at Clemson University have integrated their efforts to foster knowledge development and transfer for the citizens of South Carolina. The process of involving the integration of research and Extension efforts are as follows:

A critical element for successful integration efforts is the joint appointment of faculty in both research and Extension. This is done both at the administrative and specialist levels. For example, the Dean and Director of Research has a 25% Extension appointment, while the Dean and Director of Extension has a 25% research appointment. Similarly, the four associate deans for the College of Agriculture, Forestry, and Life Sciences have joint appointments in both research and Extension. These associate deans coordinate research and Extension programs. These joint appointments provide the foundation for a strong working relationship and better understanding of the process involved in research-Extension integration. To accomplish the five GPRA goals in FY 2002, 11 initiative teams were utilized. Each team had faculty and staff drawn both from research and Extension. However, in 2002 these initiative teams were not provided with appropriated monies for program development due to budgetary constraints.

A marketing program is being initiated with the support of both research and Extension to provide publicity for our joint programs and activities. In addition, programs are jointly conducted by both research and Extension faculty at our Research and Education Centers. Each center has a specific program focus where both research and Extension faculty collectively work together to identify problems, develop solutions to address the problems and then develop a mechanism to transfer appropriate solutions and/or recommendations to the citizens of the state.

**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 Clemson University
State South Carolina

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>Enhancement of Applied Research and Extension Activities</u>	<u>\$433,517</u>	<u>\$401,595</u>	<u>\$306,720</u>	<u>\$439,279</u>	<u>\$450,261</u>
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_____	_____	_____	_____	_____	_____
Total	<u>\$433,517</u>	<u>\$401,595</u>	<u>\$306,720</u>	<u>\$439,279</u>	<u>\$450,261</u>

Form CSREES-REPT (2/00)

Director

03/01/03
Date

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