2008 University of Florida Research and Extension and Florida A&M University Extension Combined Plan of Work

I. Plan Overview

1. Brief Summary about Plan Of Work

Florida is a unique tropical state whose climate draws thousands of people to relocate here each year. The population has now reached almost 20 million. Because of the climate and year-round activities Florida also attracts nearly 53 million tourists annually. Both populations are extremely diverse in age, ethnic background and economic level which can lead to complex issues and barriers that must be addressed.

Florida is a major gateway between the world and the rest of the United States. The mild climate and huge volume of imports make Florida susceptible to many uninvited diseases, pests, plants and other elements that can be detrimental to Florida's environment and quality of life. The Florida land grant college, the Institute of Food and Agricultural Sciences (IFAS) works hard to monitor possible hazards that could become potential problems far into the future. Teaching, Research and Extension work together to monitor problems identified in other parts of the world that could eventually become issues here. They search for solutions and methods of communication that keep us on the cutting edge from the initial identification of a potential problem to the ultimate outcome of finding the best management practices that will protect Florida's people and environment.

IFAS has also developed multiple methods of identifying critical need areas that already exist within the state. Grassroots, strategic planning, the use of advisory committees, and formal meetings with industry are just a few of the ways that IFAS identifies the needs and issues that must be solved. As the state becomes more populated and complex, the structure of the land grant college has been modified to meet these needs. It is through the close interaction between UF/IFAS, the 67 counties, and the networking through multi-state and integrated collaborations worldwide that best management practices are identified, tested and then provided as solutions to problems Florida citizens deal with on a daily basis.

Florida is a unique and diverse agricultural state. The Sunshine State, with over 280 different crops being produced, is second only to California in agricultural diversity. This diversity assures that agriculture provides stability to Florida's economy. We consistently rank in the top 10 states nationally with farm cash receipts. Our farmers by and large do not benefit from Federal Farm Programs that raise other states' farm cash receipts. Florida's 44,000 farms are primarily family farms that manage more than 10 million acres of land. This, combined with commercial forestland, accounts for about 75 percent of the state's 35 million acres that are managed as some form of agricultural and natural resource enterprise.

Farmers operate in a classic supply and demand market and are more price-takers than price-makers. Even though agriculture has a $54 billion impact on Florida's economy, there are sectors that have not prospered. In general, Florida's farmers were not participants in the economic boom of the 1990's. The economic pressure on our farmers has caused them to turn to IFAS for help in building profitability back into the agricultural operations. IFAS and FAMUs 1890 landgrant college serves as the research and development arm for this diverse and broad-based industry. Small, limited resources and new farmers just establishing a farm learn about and can utilize the same technology that larger farmers utilize. This access to research and technology transfer through the extension function is because of IFAS, FAMU and their land grant mission (Cockrell, 2003, Florida Farm Bureau, FAIR Report).

Institute of Food and Agricultural Science

Florida's governing body for higher education created the Institute of Food and Agricultural Sciences in April 1964, by reorganizing UFs College of Agriculture, School of Forestry, Agricultural Experiment Station, and the Cooperative Extension Service into a single unit. Today, UF/IFAS includes Extension in each of the state's 67 counties, the Agriculture Experiment Station with 13 research and education centers located throughout Florida, the College of Agricultural and Life Sciences, the School of Forest Resources and Conservation, the Center for Tropical Agriculture, portions of the College of Veterinary Medicine, the Florida Sea Grant Program and the International Program for Food, Agriculture and Natural Resources.

UF/IFAS Research and the Florida Cooperative Extension (comprised of UF/IFAS Extension and FAMU/CESTA Extension) provide Floridians with science-based research and life-long learning programs in cooperation with county and state governments, and the United States Department of Agriculture.

Extension

From its inception, as intended, the Florida Cooperative Extension has extended research-based knowledge to communities across the state to solve problems. Extension continues to analyze and synthesize the results of university research and put that information in the hands of the public to improve the quality of life in Florida and does this through a variety of mechanisms and relationships. The most obvious of these is the continued partnership with county governments and the shared responsibility with counties to keep in place viable educational programs at the local level. Local needs often drive Extension's program and these needs frequently require resources from disciplines beyond those encompassed in Extension's university home in the Institute of Food and Agricultural Sciences.

Extension in Florida is defined by the cooperative efforts of Florida A&M University (FAMU) and the University of Florida (UF). The universities operate under a memorandum of agreement which creates the "Center for Coordinated Agricultural Programs (CCAP). This agreement encompasses research, teaching and extension. The CCAP council meets annually to discuss project funding and other matters related to academic programs. Outside of this agreement FAMU extension and UF extension conduct programs in counties under the same

parameters as outlined in the state statute 1004.37. There is no funding mechanism in the state university system to allocate funding to faculty with contact hours with non-enrolled or informal students.

The organizational structure of Extension is complex but very effective in engendering support from its most important partners. The core of extension program remains as its original conception. It is based on the delivery of university based research to the citizens of the state of Florida. The responsibility of the Dean for Extension is to coordinate the activities of the Extension faculty to engage in the production and delivery of educational programs. In the past, Florida has done this through 83 design teams that supported "state major programs (SMPs)', in-service training, publications, collaborative programming and county operations. Following a long-range strategic planning effort in 2003-2004 and an external review of the Extension organizational structure, Florida Extension has moved towards a more focused structure composed of 7 major goals that more clearly identifies the formal ties between research and Extension and is based on prioritizing the needs of the stakeholders at all levels including grassroots. These seven teams have been developed around the goals of CSREES, the University of Florida, and IFAS and FAMU/Extension. Membership on the teams include both UF/IFAS and FAMU faculty and staff, as well as stakeholders and others who can provide knowledge needed to problem solve in the areas of focus.

The administrative team that manages this effort consists of the State Extension Dean and Director, the 1890 Administrator, 5 state program leaders, 5 district directors, County Extension Directors, the Program Development and Evaluation Center and other support personnel.

The seven major goal areas include:

To enhance and maintain agricultural and food systems

To maintain and enhance Florida's environment

To develop responsible and productive youth through 4-H and other youth programs

To create and maintain Florida friendly landscapes: the smart way to grow

To assist individuals and families to achieve economic well-being and life quality

To provide support leading to healthy communities

To promote professional development activities designed to enhance organizational efficiency and effectiveness

Each of these goal areas include three to five focus teams and multiple action teams whose responsibility is to identify (or use problems previously identified) and solve problems in these specific areas of need related to their focus. To this purpose these focus teams are closely integrated with research faculty, and other entities in the problem solving process and the management of change. Goal/Focus teams have been empowered by administration to not only find solutions but to develop state-wide initiatives that lead to better communication and accountability of best management practices and outcomes and to interact with faculty across the state dealing with problems related to individual focus teams.

Extension has actively tried to serve the state by utilizing the resources of other colleges and schools on the campus as well as nationally and internationally to provide educational programs to the public. Faculty are encouraged to become involved in both multi-state and integrated activities with research to improve programs while reducing the need for fiscal and human resources.

Extension has developed a website, http://solutionsforyourlife.com, to provide these solutions 24/7 for Florida's clientele. For additional information, see http://extadmin.ifas.ufl.edu/

Research

The UF/IFAS research mission is to invent, discover and develop knowledge to enhance the people and economy of Florida. Faculty members pursue fundamental and applied research that furthers understanding of natural and human systems. Research is supported by state and federal appropriated funds and supplemented by grants and contracts. IFAS research expenditures in the 2002-2003 year exceeded $129 million.

The Florida Agricultural Experiment Station administers and supports research programs in UF/IFAS. The research program was created by federal legislation known as the Hatch Act, a follow-up to the Morrill Act that established US land-grant universities. The ultimate achievement of research is its contribution of new knowledge to the welfare of people. Within the UF/IFAS research organization the scope of research can be interpreted to include a broad range of activities that are related to agriculture and natural resources; the interrelationships among all people as suppliers of inputs and users of these products; the effects of agricultural and natural resource industries on people through environmental interfaces; and the social welfare of people as consumers.

The research programs support approximately 350 full-time equivalent faculty members in 20 academic departments on UFs Gainesville campus and at 13 research and education centers around the state many of them holding joint appointments in Extension and Teaching. There are more than 700 active IFAS research projects across the state. There is no formula funding within the state university system for this research component.

For additional information, see http://research.ifas.ufl.edu/

Research and Education Centers

There are 13 Research and Education Centers in the state. These are the facilities that house state faculty (research, teaching and extension)

and some multi-county agents.
Citrus Research and Education Center
Everglades Research and Education Center
Florida Medical Entomology Lab
Ft. Lauderdale Research and Education Center
Gulf Coast Research and Education Center
Indian River Research and Education Center
Mid-Florida Research and Education Center
North Florida Research and Education Center
Range Cattle Research and Education Center
Southwest Florida Research and Education Center
Subtropical Agricultural Research Station
Tropical Research and Education Center
West Florida Research and Education Center
Gainesville campus Departments.
Agricultural and Biological Engineering
Agricultural Education and Communication
Agronomy
Animal Sciences
Entomology and Nematology
Environmental Horticulture
Family, Youth, and Community Sciences
Fisheries and Aquatic Sciences
Food and Resource Economics
Food Science and Human Nutrition
School of Forest Resources and Conservation
University of Florida Herbarium
Horticultural Sciences
Microbiology and Cell Science
Plant Pathology
Plant Molecular and Cellular Biology
Soil and Water Science
Statistics
Veterinary Medicine
Wildlife Ecology and Conservation
Recognized Centers of Excellence
Agricultural Law Center
Center for Aquatic and Invasive Plants
Interdisciplinary Center for Biotechnical Research
Center for Cooperative Agricultural Programs
Energy Extension Service
Florida Organics Recycling Center for Excellence
Florida Sea Grant
Center for Distribution and Retailing
International Agricultural Trade and Policy Center
Center for Nutritional Sciences
Center for Organic Agriculture
Center for Remote Sensing
Center for Renewable Chemicals and Fuels
The Center for Subtropical Agroforestry
Center for Tropical Agriculture
Tropical and Subtropical Agriculture Research (T-STAR)
UF Juice and Beverage Center

CountyOperations

Florida Extension has divided the state's 67 counties into five geographic Extension Districts. A "District Extension Director, (DED)" is responsible for an average of 70+ county extension faculty, their duties include hiring, assisting in programming and evaluation for all County Extension Faculty in each respective district. DEDs work with County Extension Directors (CEDs) and county agencies, commodity groups and local government relations. In addition DEDs take on leadership roles in statewide programming including topics of Internationalizing Extension, Information Technology, Natural Resource programming, Community Development programming, Leadership Development and Local Government Relations. Two of the DEDs are located on campus; three are housed at UF IFAS Research and Education Centers (RECs) in the Northwest, South Central and South. The DED's work closely with the Extension Program Leaders, UF IFAS Department Chairs and REC Directors, their immediate supervisor is the Associate Dean for Extension.

The Board of County Commissioners (BOCCs), administrators, managers, coordinators and clerks are all critical partners with Florida Cooperative Extension as they make recommendations and decisions related to the local extension financial contribution. In fiscal year (FY) 2006, local finances to fund extension in Florida amounted to $33.5 million (excluding the value of office space and facilities) and show the importance Florida counties place on the existence of the Florida land-grant college at the grassroots level. FY 2002 represented the first time that county government provided the greatest share of operating revenue of the three (federal, state, local) financial partners. There are 379 county faculty positions in the state. Of these 302 are joint paid (state or grant) (60% state / 40% county on average). County Extension Faculty receive paychecks from UF and from County Government, this process gives the Counties an increased ownership of these positions. In 2006, seventy-two county positions were 100% county paid. In many instances, county government has agreed to fully fund positions until such time that the University can provide the resources to pay a percentage. Approximately 26 joint positions are vacant as of this writing, due to normal retirements and resignations, each year it is becoming increasingly difficult to recruit qualified candidates to fill open positions. Starting salaries for new faculty are among the highest in the nation, county extension faculty are eligible for promotion that parallels the UF tenure and promotion system. In Florida there is no state mandated relationship between county government and the University to operate an Extension program in the respective counties. The Florida Statute sets forth that each county must annually determine the extent of participation in Extension programs. There is also no mandated formula between the University and counties with regard to staffing levels in county offices, although 42 of the counties operate under a formal memorandum of understanding (MOU). The legislation does state that county agents who are jointly paid for by the state are officially employees of the university. Every other aspect of the relationship between the University and the Counties is a matter of discussion and mutual agreement

Program Areas

Agriculture and Horticulture

Commercial Agricultural and Horticultural Programs: Florida has 42,500 commercial farms, utilizing 10 million acres. Florida producers continue to provide a wide array of agricultural products that are safe and dependable. Due to Florida's diversity in climatic conditions, ranging from tropical in the South to temperate in the North, and soil types (7 soil types), more than 250 commodities are produced. In 2005, Florida ranked 10th in the nation with total cash receipts of over $6.9 billion. Florida ranks 1st in citrus (oranges, grapefruit, and tangerines), snap beans, fresh market tomatoes, cucumbers, squash, peppers, and watermelons; 2nd in greenhouse and nursery products, sweet corn, and strawberries and 4th in honey production.

Florida producers utilize a little more than 10 million or about 30% of the state's 35 million acres for agriculture production. Commercial forests account for about 37% of the states acreage, national and state forests account for about 10%, and urban/suburban/industrial account for the remaining 22.4%. Of the 42,500 commercial farms, 6300 had sales exceeding $100,000. The average farm size was a little less than 235 acres. Florida is the 11th leading state in net farm income.

Obviously as the population continues to increase there will be continued stress on natural resources. Demands for water in some counties may well exceed local water resource availabilities. Continued urban growth will force traditional agricultural and forestry lands to be rezoned for urban uses. Land-extensive agriculture will be replaced in part by high-value specialty fruits, vegetables and nursery products. Agricultural sectors will continue to feel impacts of emerging product forms; shifting consumer preferences; heightened environmental, health and safety concerns; and changing lifestyles. Alternative crops, value-added products, global competition, new processing technologies, and biotechnology will stimulate change and increase opportunities for growth.

Most farms in Florida are family owned and operated with the exception of sugarcane. The present value of field crops is in excess of $189 million (corn, cotton, peanut, soybean, tobacco, wheat, and hay). Sugarcane has a receipt value greater than $432 million.

As of January 1, 2006 there were 1.71 million head of cattle on farms and ranches in Florida, including 926,000 head of beef cows and 137,000 head of milk cows. Florida ranked 9th nationwide in the number of chickens on farms in the year 2004. Florida's poultry farmers maintained an average of 11.3 million layers and produced almost 78.5 million broilers. Florida ranked 1st in total foliage sold with sales of 476 million. The total value of our nursery and greenhouse ornamental industry was $3 billion. Total value including landscape industries and retail industries was $15 billion.

In addition, there are numerous small acreages of specialty and minor crops.
Urban Horticultural Programs: The current population of Florida is just under 17 million according to the 2002 census. Continued growth will alter and stress our agricultural and natural resource industries. Demands for water in some counties may well exceed local water resource availability. As a result, UF/IFAS/Extension has a commitment to urban horticultural programs. The programs have a tremendous amount of diversity.
Master Gardener Programs: Since 1979, Cooperative Extension agents in Florida counties have maximized resources using a "learn and return" program developed in Washington: the Florida Master Gardener Program. By providing education-based instruction methods incorporated with the latest scientific research, the program capitalizes on the desire of Florida citizens to learn more about horticulture in exchange for a predetermined number of volunteer hours returned to the individual county.
Florida Master Gardeners are University of Florida-trained volunteer teachers. Master Gardeners provide research-based information to Floridians about gardening-America's most popular pastime. Their information about planning and maintaining urban, suburban, and rural landscapes emphasizes environmental stewardship.
The state does not require Florida counties to have the program. Rather, each individual county extension office determines the focus and structure of the program. The volunteers execute a variety of outreach tasks as determined by the program leader (usually the consumer horticultural agent). Duties include: answering horticultural questions over the phone, in person or through the media; participating in public service projects; giving educational programs; supporting youth activities, performing soil sample evaluations and assisting in field research. The ultimate end to all these activities is to extend the vision of the UF/IFAS - protecting and sustaining natural resources and environmental systems, enhancing the development of human resources, and improving the quality of human life through the development of knowledge in agriculture, human and natural resources and making that knowledge accessible.
During 2006, Florida Master Gardener Volunteers assisted horticulture agents in developing and promoting noncommercial horticulture ultimately increasing environmental action and awareness in 52 counties. Statewide more than 3,765 volunteers contributed 3,396,694 hours to local county horticulture extension educational programs providing $7,155,566 worth of services to citizens of Florida.
FloridaYard and Neighborhoods Program (FYN): The FYN Program was developed to address serious problems of pollution and disappearing habitats by enlisting homeowners in the battle to save our natural environment. This program provides special educational and outreach activities directed at the community to help residents reduce pollution and enhance their environment by improving home and landscape management and is funded by the UF/IFAS/ Extension, United State Department of Agriculture, the Water Management Districts, the National Estuary Program, Environmental Protection Agency, The Florida Department of Environmental Protection, Homeowner Associations, and city and county governments. The objectives of the program are to reduce storm water runoff, decrease non-point source pollution, conserve, water, enhance wildlife habitat, and create beautiful landscapes. Currently, 43 counties have active programs. These programs involve individual homeowners, homeowner associations, builders, landscapers, and condominium associations.
In addition to the above programs, urban horticultural agents are also involved with programs such as ‘Build Green and Profit’, Hurricane Preparedness and Disaster Management, and Botanical Gardens.
Major Issues:
The tremendous diversity of clientele, commodities, size of operation, and sophistication of operations and producers within the state.
Perception of ‘us versus them’ (ag. vs. urban) yet some if not all of the issues pertaining to the program area overlap: water quality, quantity, allocation; pest management (plant, animal, and human); urban rural interface and land-use issues; global competitiveness; food safety, quality and technologies; and public policy.
Rural/urban land-use issues and Florida’s sustainability with respect to agriculture and its natural resources and associated industries.
With the high volume of fresh market fruits and vegetables, food safety issues are a major concern.
Economic viability is a major concern for producers locally and within the global community.
Water quality and quantity is one of the main issues facing Florida producers. The incorporation and adoption of best management practices by all agricultural producers insures water quality and quantity.
The adoptions of best management practices for the green industries including ornamentals, landscape design and maintenance industries, and municipalities. The use of science based research by local and state agencies in establishing rules will be critical.
Support for programs comes from external sources that may or may not provide support for the programs of highest priority.
Local, regional or state-wide programming. How do we effectively interface the expertise available at a specific locale or region to meet statewide needs and vice versa?

Family and Consumer Sciences
Family and Consumer Sciences Extension programs are designed to empower individuals, families and communities to solve problems and address issues related to quality of life in Florida and focus on a broad spectrum of issues affecting Floridians that can be addressed through educational programs.
The Family and Consumer County faculty represent 26% of all Florida county faculty. Currently there are 77 FTEs at the county level devoted to programming in FCS. At the state level the situation is quite different since state specialists wit

Estimated Number of Professional FTEs/SYs total in the State.

Year	Extension		Research	
	1862	1890	1862	1890
2008	32.5	8.2	0.0	0.0
2009	32.7	8.5	0.0	0.0
2010	33.0	9.0	0.0	0.0
2011	33.5	9.2	0.0	0.0
2012	33.8	9.5	0.0	0.0

II. Merit Review Process

1. The Merit Review Process that will be Employed during the 5-Year POW Cycle

- Internal University Panel
- Expert Peer Review

2. Brief Explanation

Prior to the initiation of any research project or extension program that will be wholly, or in part, funded by federal formula funding, the designated review coordinator (or, in the case of some multi-institutional, regional or multi-state projects, the administrative advisor) will call for a peer review of the proposed research or extension project. A minimum of three peer scientists (i.e., individuals qualified by their status in the same discipline, or a closely related field of science) will be selected to read and provide written comments to the appropriate administrator on the proposed project. The focus goal team made up of focus team leaders will read and provide written comments to the appropriate administrator on proposed programs (focus areas).

The terms of reference for the reviewers will focus their attention on questions of the quality of the proposed science, technical feasibility of the research or extension program, the validity of the approach, and the likelihood for completing the stated objectives. Other equally important comments will include relevance to the state's priorities, the degree of integration between extension and research (as appropriate), responsiveness to stakeholders identified critical need areas, and the accuracy of any claims for multi-disciplinary, multi-institutional and multi-state collaboration.

Peer and Merit reviewers may be selected from the same campus or from another institution or organization at the discretion of the research and/or Extension dean(s), or by their delegated authority. Consideration will be given to the expenses associated with the reviewing individual proposal in the selection of reviewers. Additional consideration will be given to appointing reviewers who are without any apparent conflicts of interest and who are without personal or professional bias. Consideration may also be given in selecting reviewers that can protect confidential business information. The anonymity of the reviewers will not be preserved except in very special circumstances.

Peer and Merit reviewers may be selected from the same campus or from another institution or organization at the discretion of the research and/or Extension dean(s), or by their delegated authority. Consideration will be given to the expenses associated with the reviewing individual proposal in the selection of reviewers. Additional consideration will be given to appointing reviewers who are without any apparent conflicts of interest and who are without personal or professional bias. Consideration may also be given in selecting reviewers that can protect confidential business information. The anonymity of the reviewers will not be preserved except in very special circumstances.

Reviewers will be asked to present their findings in either paper or electronic format, and records of the reviewers comments will be preserved for the life of the project, or for a period of three years in the event that a project is not initiated. Document storage of all materials related to the Peer and Merit Review will be paper and/or electronic.

III. Evaluation of Multis & Joint Activities

1. How will the planned programs address the critical issues of strategic importance, including those identified by the stakeholders?

Planned programs address the critical issues of strategic importance in several ways including integration between research and Extension and through collaboration and cooperation between states and regions.
Following each five year long range planning cycle which involves input by stakeholders from the grassroots to the state and national level, critical needs are identified, priortized and separated into manageable focus areas. Critical issues requiring research are provided to research for further discussion and action.
In Extension goal teams are developed around these critical need areas. Critical issues are further divided into three to five focus teams related to each goal area. Presently Extension has a total of seven goal areas and 28 focus teams. These focus teams lead the statewide effort to find and implement solutions to the critical issues. These teams include facutly with research, teaching and Extension appointments. Both UF/IFAS and FAMU/CESTA faculty are included on these teams as well as some ag commodity and industry representatives.
Besides obtaining critical need issues from Extension research also works closely with stakeholders, regulatory agencies and international agencies to monitor other issues and critical needs that have been revealed as problems or potential. Projects are then developed that may be state, regional, national or international in composition.
Extension uses the scientic based results of research as they plan programs. Extension also works with other states in developing multi-state programs. One highlight are the yearly multi-state meetings held in the panhandle area of Florida between Florida, Alabama and Georgia. Several other states have expressed a desire to be involved. As can be seen, all of Florida's Extension programs and many research projects related directly to critical issues identified by stakeholders.

2. How will the planned programs address the needs of under-served and under-represented populations of the State(s)?

As part of the strategic plan Extension identifies under-served and under-represented clientele. Issues are identified both by these populations and by organizations and services that work with and for them. Through this process Florida is aware of whether these issues are county specific or state-wide. Focus teams are provided with all of this information before they begin to design state-wide programs. Target audiences are identified as part of this process and special emphasis is placed on including under-served and under-represented populations.

3. How will the planned programs describe the expected outcomes and impacts?

In Extension, as part of the program planning process state outcomes and impacts are developed by Extension focus teams to be used by all Extension faculty across the state. This allows for the collection of data that can be state aggregated. Outcomes and impacts may be measured and described in a multitude of ways. Some outcomes are obtained through qualitative or quantitative measures. Case studies identify others. Some outcomes are provided through observation.

Research identifies potential outcomes at the time the research project is developed and approved. For both Extension and research the expected outcomes and impacts described based on the critical issue that has been identified.

4. How will the planned programs result in improved program effectiveness and/or efficiency?

The planned programs as they relate to integrated and multi-state activities result in improved program effectiveness and efficiency thorugh:

The development of better solutions through the integration of research and extension
A broader knowledge base
A wider network of human resources
A wider more diverse audience reached
Less time spend by individual faculty in developing and implementing programs

IV. Stakeholder Input

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

- Targeted invitation to selected individuals from general public
- Targeted invitation to non-traditional stakeholder groups
- Targeted invitation to traditional stakeholder groups
- Targeted invitation to traditional stakeholder individuals
- Survey of the general public
- Survey of traditional stakeholder individuals
- Survey of selected individuals from the general public
- Survey of traditional stakeholder groups
- Use of media to announce public meetings and listening sessions
- Targeted invitation to non-traditional stakeholder individuals

Brief explanation.

The strategic planning committee and the Extension and Research advisory committees help to identify ways to encourage participation in long range planning. The strategic planning committee was composed of county and state faculty with research, extension and teaching appointments. There was also professional staff included who have experience in strategic planning. This committee laid out a list of stakeholders and stakeholder groups who needed to participate. The research advisory committee also includes agriculture commodity and industry leaders who were able to provide additional input.
District directors, county extension directors and educational research and extension center directors from around the state were also asked to provide names of stakeholders or organizations that needed to be included in identifying critical issues.
The entire process used by Florida for the Extension Strategic Plan can be found at http://pdec.ifas.ufl.edu

2(A). A brief statement of the process that will be used by the recipient institution to identify individuals and groups stakeholders and to collect input from them

1. Method to identify individuals and groups

- Use Advisory Committees
- Use External Focus Groups
- Open Listening Sessions
- Use Internal Focus Groups
- Needs Assessments
- Use Surveys

Brief explanation.

Involving People in Long-range Planning
Florida Extension under went a long-range planning process that covered the period 2004-2007, a series of listening sessions were conducted with a variety of individuals and groups. Participants of these listening sessions will be asked to help translate Extension's purpose, vision and strategy into tangible future results. In support of that task, listening sessions will be conducted with the following groups:
1. Target audiences of Extension programs (both current and potential).This group of ultimate users must find relevance in our products and services or they will not use them. One way to insure relevance of purpose and direction of our educational programs is to ask those for whom such programs are targeted.
2. Extension advisory committees. Individual committee members who understand both the Extension program development process and the needs and concerns of their community can be a most valuable asset. In addition, their involvement in planning can foster greater commitment to programs they help develop.
3. Research, Teaching and Extension faculty. One of the long-standing missions of the land-grant university is to enhance economic well-being and quality of life of those the university is charged to serve. Keeping people abreast of current and emerging research and the educational experiences resulting from adaptations of that research is crucial to this mission.
4. Stakeholders of local, state and national priorities. Stakeholders (external and internal) play a key role in providing financial and other support for Extension programs. Listening sessions provide an opportunity to both obtain their input and make them aware of effective programs and changes/challenges that may impact Extension.
County Listening Sessions

The input from targeted audiences, stakeholders and County Extension Advisory Committees will be collected through listening sessions conducted within each county and sponsored by the County Extension Advisory Committee. Local citizens who are knowledgeable of the community—its important features, changes impacting it and what the community values—will be invited to participate in their county's listening session. The purpose of each listening session is to develop a community vision2 that begins with answers to the following questions:

1. What do we value about our community?
2. What trends and issues are impacting what we value?
3. If current directions persist, is this where we want to go? If not, are there local resources that can best address each trend or issue?
4. Of those issues and/or concerns that can best be addressed through the expertise of Extension educators, what priority should be placed on each issue or concern?

2(B). A brief statement of the process that will be used by the recipient institution to identify individuals and groups who are stakeholders and to collect input from them

1. Methods for collecting Stakeholder Input

- Survey specifically with non-traditional groups
- Survey of traditional Stakeholder individuals
- Meeting with traditional Stakeholder groups
- Meeting specifically with non-traditional groups
- Meeting with traditional Stakeholder individuals
- Meeting with the general public (open meeting advertised to all)
- Survey of selected individuals from the general public
- Survey of traditional Stakeholder groups

Brief explanation

Every four years, the Florida Cooperative Extension Service develops a long range plan. The purpose of this plan is to help prepare for the challenges and changes facing the people of Florida over the next four years. It also is a time for Extension to reflect upon our purpose, vision, and strategies for carrying out our mission. By examining our past while looking to the future, we can better determine how well-prepared we are in helping people cope with the changing world.

One step of the planning process is to ask stakeholders, county extension advisory committees, traditional and potential audiences and Extension faculty to come together and help translate Extension's purpose, vision, and strategies into tangible future programs that address economic, environmental and life quality issues facing individuals, families and youth, and communities in this county. Attention also focuses on how such issues affect those involved in the food and agricultural system and natural resources and the environment in which we live and work. This process included an external review conducted by administrators from other land grant universities, county listening sessions, customer satisfaction surveys, open meetings open to all, and calls for meetings in communities made up of non-traditioanl individuals. The information generated during this listening session is used by the county Extension faculty and the county Extension advisory committee in developing long-range objectives and action plans to guide our educational programs for future years.

Research surveys traditional stakeholder groups and also holds informational meetings with traditional and non-traditional stakeholder infividuals and groups in order to gather pertinent information. Both Extension and research have ongoing advisor committees made up of a wide diversity of members who provide and/or identify information related to critical issues affecting the state of Florida.

3. A statement of how the input will be considered

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

Brief explanation.

Both Extension and Research use the information obtained through stakeholder input to identify criticial need priorities. In the most recent long range planning Extension identified over 800 need specific needs. Some of these were county specific and some require state-wide attention. Emerging issues also become obvious. Once priorities are identified administration and faculty are able to identify needs as short term, intermediate and long term.
Once needs are identified both research and Extension are able to redirect programs as needed. For example over the past few years it became obvious that a department dealing with poultry was no longer needed however almost every county identified needs related to community development and sustainability.
Priorities also identify the need for additional faculty and staff in specific areas where research or educational programs are required. These needs affect the budget and are taken into consideration as increase revenue is requested..
Input collected will be used to:
Identifying emerging issues
Redirect Extension programs as critical issues change
Redirect research programs as critcal areas evolve and change
Set new priorities based on findings

V. Planned Program Table of Content

V(A). Planned Program (Summary)

1. Name of the Planned Program

Animals and their Systems--research

2. Brief summary about Planned Program

Reproduction performance
Nutrient utilization in animals
Animal physiological Process

3. Program existence : Intermediate (One to five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 301 10% Reproductive Performance of Animals
- 302 20% Nutrient Utilization in Animals
- 303 10% Genetic Improvement of Animals
- 304 10% Animal Genome
- 305 10% Animal Physiological Processes
- 307 20% Animal Management Systems
- 311 10% Animal Diseases
- 312 10% External Parasites and Pests of Animals

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

The primary mission of the IFAS statewide animal sciences program in the area of research is to provide critical information needed to assist the livestock industries of Florida to achieve efficient production by contributing to the solution of livestock production problems through research. This mission is accomplished through the integration of research both at the University of Florida and research facilities such as the Department of Animal Sciences, the Range Cattle Research and Education Center (Ona), the North Florida Research and Education Center (Marianna), the Subtropical agricultural Research Station, USDA-ARS (Brooksville) and the sixty-seven county extension facilities. Research in the area of animals includes issues related to animal production and protection. Included in this area but not inclusive are:

Reproduction Performance

The advancement in vitro embryo technologies are still quite inefficient due to associated problems with early embryonic loss, large offspring syndrome, and postnatal mortality . The purpose of one project in Florida is twofold: 1) to devise rapid methods for assessing viability in preimplantation bovine embryos for increased survival; and 2) determine how in vitro culture conditions effect the expression of Insulin-like Growth Factor (IGF) family members.

Nutrient utilization in animals

Management practices, diets fed and shortened dry periods are being evaluated in several projects involving dairy cows. The purpose of one of the studies is to examine the effectiveness of available technology, feeding management, and short dry periods to improve the feed intake of dairy cows around calving. The purpose is to improve their intake of feed, reduce their health problems and allow high milk production after calving. The project also examines whether it is possible to speed-up the dry-off of mammary tissue by using estrogen at the time of dry-off and thereby reduce the standard 60-day dry period in half.

2. Scope of the Program

- Multistate Integrated Research and Extension
- Multistate Research
- Integrated Research and Extension
- In-State Research

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Research will uncover critical information needed to assist the livestock industries of Florida to achieve efficient production by contributing to the solutions of livestock production problems .

2. Ultimate goal(s) of this Program

Some goals include:
Examine the effectiveness of available technology, feeding management, and short dry periods to improve the feed intake of dairy cows around calving.
Improve their intake of feed, reduce their health problems and allow high milk production in cows after calving
Decrease early embryonic loss, large offspring syndrome, and postnatal mortality in meat and milk animals
Understand how the equine GnRH receptor can tolerate continuous

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	0.0	0.0	32.5	0.0
2009	0.0	0.0	33.0	0.0
2010	0.0	0.0	33.5	0.0
2011	0.0	0.0	34.0	0.0
2012	0.0	0.0	34.2	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Conduct research experiments
Partnering

2. Type(s) methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
• Group Discussion • One-on-One Intervention • Workshop • Education Class • Demonstrations	• Web sites • Newsletters

3. Description of targeted audience

residents of Florida interested in animals and animal science. This includes Growers//Ranchers

Producers/packaging
General public
Government officials
Scientists

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	0	0	0	0
2009	0	0	0	0
2010	0	0	0	0
2011	0	0	0	0
2012	0	0	0	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 : 1 **2009 :** 1 **2010 :** 1 **2011 :** 1 **2012 :** 1

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	130	0
2009	135	0
2010	140	0
2011	145	0
2012	150	0

V(H). State Defined Outputs

1. Output Target

- {NO DATA ENTERED}

{NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED}

V(I). State Defined Outcome

1. Outcome Target

Develop BMPs related to animals and their systems
Develop technology related to animals and their systems
Add knowledge that increases the value of animals and their systems
Increase knowledge in the area of animal diseases

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :	2009 :	2010 :	2011 :	2012 :
0	0	0	0	0

3. Associated Knowledge Area(s)

- 301 - Reproductive Performance of Animals
- 302 - Nutrient Utilization in Animals
- 303 - Genetic Improvement of Animals
- 304 - Animal Genome
- 305 - Animal Physiological Processes
- 307 - Animal Management Systems
- 311 - Animal Diseases
- 312 - External Parasites and Pests of Animals

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Appropriations changes
- Competing Public priorities
- Populations changes (immigration,new cultural groupings,etc.)
- Government Regulations
- Competing Programatic Challenges
- Economy
- Natural Disasters (drought,weather extremes,etc.)
- Public Policy changes

Description

Florida is a state located in the tropics. Natural disasters such as tropical storms and hurricanes are common annual occurrences in this state. Severe weather conditions such as droughts frequently led to large-scale fires. Florida also has other weather extremes such as floods leading to large scale damage especially along the coastal regions.

Floridahas three international shipping ports: Miami, Jacksonvilleand Tampa. These cities all have international airports. Along with this we have over 53 million tourists visiting from around the world. It has been estimated that this international influx into Floridahas made us the entry point of one new invasive pest, plant or disease each week. Any of this could be an external factor affecting land-grant research outcomes.

Changes may occur because of:
The loss of test sites from storm damage
An invasive species that requires priority
Changes in public priorities
Changes in state, county and federal appropriations
Changes in governmental regulations

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

1. Evaluation Studies Planned

- After Only (post program)
- During (during program)
- Case Study
- Comparison between locales where the program operates and sites without program intervention
- Before-After (before and after program)
- Time series (multiple points before and after program)
- Retrospective (post program)

Description

Florida IFAS/research understands the importance of evaluating projects to provide scientifically accurate information and recommendations. Accepted research guidelines and procedures are followed.

2. Data Collection Methods

- Telephone
- Mail
- Structured
- Tests
- Case Study
- Observation
- Journals
- On-Site
- Unstructured
- Portfolio Reviews
- Sampling
- Whole population

Description

Florida IFAS/research uses acceptable forms of qualitative and quantitative data collection methods.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Assist Individuals and Families to Achieve Economic Well-being and Life Quality

2. Brief summary about Planned Program

In the program designed to assist individuals and families to achieve economic well-being and life quality the following areas must be considered:
Personal and Family Well-being
Financial Management and Economic Well-being
Nutrition Food Safety and Health
Housing and Environment
Non-profit Organizations, Leadership and Volunteer Development

3. Program existence : Intermediate (One to five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 112 5% Watershed Protection and Management
- 136 5% Conservation of Biological Diversity
- 602 5% Business Management, Finance, and Taxation
- 603 5% Market Economics
- 604 5% Marketing and Distribution Practices
- 608 5% Community Resource Planning and Development
- 701 5% Nutrient Composition of Food
- 703 5% Nutrition Education and Behavior
- 712 5% Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxins
- 723 5% Hazards to Human Health and Safety
- 724 5% Healthy Lifestyle
- 801 5% Individual and Family Resource Management
- 802 5% Human Development and Family Well-Being
- 803 5% Sociological and Technological Change Affecting Individuals, Families and Communities
- 804 5% Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures
- 805 5% Community Institutions, Health, and Social Services
- 806 5% Youth Development
- 901 5% Program and Project Design, and Statistics
- 902 5% Administration of Projects and Programs
- 903 5% Communication, Education, and Information Delivery

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Situation StatementFlorida is a rapidly growing state with a very diverse population. Many Floridians face special needs and issues that must be addressed. People are living longer – but not planning adequately for retirement, a time when costs for medical services and living assistance can be significant. Florida has the highest percentage of residents over the age of 65 in the nation. Lifestyle related chronic illnesses, such as diabetes, obesity, and circulatory diseases are on the rise. Poor food choices create health and developmental related problems for people of all ages, and are of critical concern for young mothers and their infants. Florida is one of the top 10 states nationwide in the incidence of food-borne diseases. Of these, about half are attributed to food service operations. Health care costs are increasing more rapidly than other costs, and many people are without healthcare

insurance.Personal indebtedness, especially credit card debt is at an all-time high and savings at an all-time low. Although the state and nation is moving toward automation and a cashless society, many Floridians, especially low income families and recent emigrants from third-world nations do not use any type of banking service; most are poor managers of their finances. More than one-fourth of Florida's adults have difficulty making accurate change in a financial transaction. Low-to-moderate income families are finding it difficult to find affordable housing. During the ten-year period of 1992-2002 housing costs increased from 20.2 percent to 35 percent of an average household income. The structural integrity of residences or ability to withstand hurricanes and other severe weather conditions is now becoming an important concern of Floridians. Also, the indoor air quality of a residence can affect the health of its residents, especially those with respiratory problems such as asthma, a major problem with children in Florida.Florida's families are diverse and include teenage parents, single parents, duel earner families, stepparents, grandparents raising grandchildren, and traditional two-parent families. Single parents head almost one-third of the families. With 57 percent of the women with children under the age of 6 and 66 percent of those with children 6 to 17 employed there is a critical need for affordable, quality childcare.Extension uses unpaid volunteers to expand its outreach programs. The volunteers contribute to the development of their communities and provide social capital through the development of their leadership capabilities and cooperative work. They generate cross-community channels of communication and receive training that benefits both the individuals and their communities.

2. Scope of the Program

- Multistate Extension
- Integrated Research and Extension
- In-State Extension
- Multistate Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

For the economically disadvantage, a large majority of the elderly, and many families the quality of life in Florida needs to improve. Research has confirmed that providing education and support services to families significantly reduces many problems such as child abuse, debt, and bad eating habits. Reducing and/or improving these issues can result in better health physcially and financially, a better outlook on life and more functional family units.

2. Ultimate goal(s) of this Program

Improved delivery of Extension programs.
Improved practices to strengthen individuals, couples, and families.
Improved knowledge and skills of professionals who work with individuals, couples, and families.

Improved procedures and techniques to manage debt
Improved procedures and techniques to manage income.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	63.2	1.2	0.0	0.0
2009	63.5	1.5	0.0	0.0
2010	63.9	1.9	0.0	0.0
2011	64.0	2.0	0.0	0.0
2012	64.0	2.2	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Conduct workshops and meetings
Deliver services
Develop products, curriculum, resources
Provide training
provide counseling
Make assessments
work with the media
develop partnerships

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
• Other 1 (telephone calls) • One-on-One Intervention • Group Discussion • Workshop • Education Class • Demonstrations	• Public Service Announcement • Web sites • Newsletters • TV Media Programs • Other 1 (radio)

3. Description of targeted audience

Childcare Operations
Individual and Family Service Operations

Includes all for profit business or industries.
Individuals that own property or have established legal residency in the state of Florida.
Includes all personnel that are supervised by IFAS.
Finance, Insurance, and Real Estate Operations
Adults
Families
Youth
Administrators of Education
Administrators of Social, Human Resource and Income Maintenance Programs
Florida Based Non-governmental Organizations

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	700000	9000000	0	0
2009	700000	9000000	0	0
2010	700000	9000000	0	0
2011	700000	9000000	0	0
2012	700000	9000000	0	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 **2009 :**0 **2010 :** 0 **2011 :**0 **2012 :** 0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	30
2009	0	35
2010	0	40
2011	0	45
2012	0	50

V(H). State Defined Outputs

1. Output Target

- {NO DATA ENTERED}

{NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED}

V(I). State Defined Outcome

1. Outcome Target

Number of program participants that indicate satisfaction with Extension's information
Number of program participants that are satisfied with Extension's services.
Family members will learn strategies to prepare for the changes they face over the course of the family life cycle (e.g., marriage, parenting, retirement, etc.)
Individuals will develop the skills needed to manage stress effectively, thereby improving their personal health and relationships.
Individuals will learn the knowledge and skills necessary to attain strong, healthy family relationships
Participants will develop effective communication skills.
Participants will encourage curiosity, exploration and development of problem solving skills in a safe environment.

Participants will use positive techniques for guiding children's/teen's behavior.
Participants will develop safe/healthy learning environments for children/youth.
Participants will balance work and family.
Participants will increase their knowledge in subject matter and confidence in teaching.
Participants will encourage curiosity, exploration and development of problem solving skills in a safe environment for children in their care.
Participants will increase knowledge and skills of social and emotional development for children in their care.
Participants will learn teaching methods and how to prepare learning materials for various audiences.

Number of program participants who indicate satisfaction with Extension's information
Number of program participants who increase knowledge about positive lifestyle changes.
Number of program participants who report intent to make one or more positive lifestyle changes.
Number of program participants who report one or more positive lifestyle changes.
Number of program participants who increase knowledge about health indicators.
Number of program participants who improve one or more health indicators.
Number of program participants who increase knowledge about recommended food handling practices.
Number of program participants who report intent to adopt one or more recommended food handling practices.
Number of program participants who report adopting one or more recommended food handling practices.
Number of program participants who pass food manager certification exam.
Number of program participants who increase knowledge of food resource management.
Number of program participants who report intent to adopt one or more food resource management practices.
Number of program participants who report having an adequate monthly food supply.
Number of program participants that indicate satisfaction with Extension's information
Number of program participants that are satisfied with Extension's services.
Number of participants purchasing homes
Number of participants that understood housing financial documents
Number of participants completing required home ownership classes
Number of families that developed a spending plan.
Number of families with improved financial condition
Number of participants resolved credit problem
Number of participants that adopt one or more energy efficiency practices
Number of participants that adopt one or more practices for home safety
Number of participants that maintain appropriate homeowners insurance
Number of participants that adopt one or more home maintenance practices
Number of participants that understand building codes and regulations related to home maintenance or renovations
Number of participants adopting one or more low-impact development principles
Number of non-profits that use Extension's information
Number of non-profit organizations that indicate that Extension information solved a problem or answered a question.
Number of non-profit organizations that are satisfied with Extension's services.
Number of new volunteers
Number of organizations using best management practices for volunteer development.
Number of volunteers identified and recruited (I)
Number of volunteers selected and screened (S)
Number of volunteers oriented with extension (O)
Number of volunteers trained (T)
Number of volunteers utilized (U)
Number of volunteers recognized for accomplishments (R)
Number of volunteers evaluated (E)
Number of CBOs with marketing plans
Number of organizations with a strategic plan
Number of organizations increasing membership
Number of organizations increasing public initiatives

Number of public policy programs offered

Number of organizations increasing public policy programs

2. Outcome Type : Change in Action Outcome Measure

2008 : 1	**2009 :** 1	**2010 :** 1	**2011 :** 1	**2012 :** 0

3. Associated Knowledge Area(s)

- 112 - Watershed Protection and Management
- 136 - Conservation of Biological Diversity
- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 608 - Community Resource Planning and Development
- 701 - Nutrient Composition of Food
- 703 - Nutrition Education and Behavior
- 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxins
- 723 - Hazards to Human Health and Safety
- 724 - Healthy Lifestyle
- 801 - Individual and Family Resource Management
- 802 - Human Development and Family Well-Being
- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
- 804 - Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures
- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development
- 901 - Program and Project Design, and Statistics
- 902 - Administration of Projects and Programs
- 903 - Communication, Education, and Information Delivery

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Public Policy changes
- Economy
- Appropriations changes
- Competing Public priorities
- Government Regulations
- Competing Programatic Challenges

Description

Florida is a state located in the tropics. Natural disasters such as tropical storms and hurricanes are common annual occurrences in this

state. Severe weather conditions such as droughts frequently led to large-scale fires. We also have other weather extremes such as floods leading to large scale damage especially along the coastal regions.
Florida is a state with constant demographic changes. The influx of immigrants, elderly, increasing birthrates and changing demographics that occur because of natural disasters such as hurricanes can change population demographics quickly.
Dwindling resources can have an effect on public priorities that directly affect dollars earmarked for individual and family educational programs.
Changes in state, county and federal appropriations can also affect the outcomes.

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

1. Evaluation Studies Planned

- Comparisons between program participants (individuals,group,organizations) and non-participants
- Comparison between locales where the program operates and sites without program intervention
- Time series (multiple points before and after program)
- Before-After (before and after program)
- Retrospective (post program)
- Case Study
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- After Only (post program)
- During (during program)

Description

The Florida land-grant college understands the value of evaluation in our annual program plan. Methods of evaluation are included as part of the annual faculty activity plan of work and report of accomplishment process (unifas). This information is collected as part of the logic model used in our Florida system and will be available for the CSREES reports of accomplishment on a yearly basis.

2. Data Collection Methods

- Whole population
- Observation
- Structured
- On-Site
- Mail
- Case Study
- Sampling
- Telephone
- Unstructured
- Tests

Description

The Florida land-grant colleges use acceptable forms of qualitative and quantitative data collection methods.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Create and Maintain Florida Friendly Landscapes: The Smart Way to Grow

2. Brief summary about Planned Program

In order to create and maintain Florida friendly landscapes Florida Extension teaches how to "grow smart" through educational programs in the areas of:
Commercial horticulture/urban forestry services
Residential landscapes
Florida Yards and Neighborhoods (FYN)

3. Program existence : Intermediate (One to five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 101 5% Appraisal of Soil Resources
- 102 5% Soil, Plant, Water, Nutrient Relationships
- 112 5% Watershed Protection and Management
- 133 5% Pollution Prevention and Mitigation
- 201 5% Plant Genome, Genetics, and Genetic Mechanisms
- 204 5% Plant Product Quality and Utility (Preharvest)
- 205 5% Plant Management Systems
- 206 5% Basic Plant Biology
- 211 5% Insects, Mites, and Other Arthropods Affecting Plants
- 212 5% Pathogens and Nematodes Affecting Plants
- 213 5% Weeds Affecting Plants
- 216 5% Integrated Pest Management Systems
- 405 5% Drainage and Irrigation Systems and Facilities
- 602 5% Business Management, Finance, and Taxation
- 603 5% Market Economics
- 604 5% Marketing and Distribution Practices
- 608 5% Community Resource Planning and Development
- 610 5% Domestic Policy Analysis
- 723 5% Hazards to Human Health and Safety
- 802 5% Human Development and Family Well-Being

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

The state of Florida includes 19 million residents, 58 million annual visitors, a unique ecology and climate, and a wide range of plant material grown year round. Frequently the residents, visitors and property managers have unrealistic expectations. These expectations may encourage customers to use landscape maintenance practices that have negative impacts on Florida's environment. Many of these people are dependent on professional horticulture service providers to make decisions regarding the landscape management of their properties.The professional horticulture services industry in Florida has a tremendous economic impact. According to the 2002 FNGA/IFAS Economic Impact Study this industry generates $7.6 billion per year in estimated revenues. This industry also employs more than 120,000 people who make thousands of horticulture and pest management decisions daily. A large and growing portion of this work force is Hispanic.IFAS/Extension research and science-based educational programs can provide the green industry with best management practices and skills necessary to create and manage landscapes

with reduced risk to the environment.
Florida has just over 5 million acres of lawns, many of which are in close proximity to water bodies. To reduce non-point source pollution and preserve these water resources and natural areas, it is critical that lawns and landscapes are managed with an environmental emphasis. Development of Best Management Practices (BMPs) for lawns and landscapes is one way to achieve this. How fertilizer is handled, stored, and applied and how water is used in the landscape can have a large effect on reduction of non-point source pollution. These principles should be followed by commercial horticulture services as well as homeowners.
Many Florida residents - new, permanent, and temporary - share misperceptions about proper landscape care. Some Green Industry/Development professionals also have inaccurate conceptions about Florida-friendly landscaping practices. Faced with Florida's diverse and often unfamiliar conditions, well-meaning individuals often waste water, fertilizers, pesticides, and energy through inappropriate landscape designs and improper landscape practices. These existing practices can contribute to the degradation of the environment through runoff, leaching, and misuse of resources.

2. Scope of the Program

- Multistate Integrated Research and Extension
- Integrated Research and Extension
- Multistate Extension
- In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

People will be motivated by workshops and other educational activities to learn/change
Information on best practices related to healthy landscapes show that these approaches work well for these target audiences
Changes suggested in activities related to this program will improve quality of life for participants

2. Ultimate goal(s) of this Program

Improved procedures and techniques for managing professional horticulture operations
Improved procedures and techniques for managing Florida landscapes.
Improved procedures and techniques for handling and using agricultural chemicals, fuels, and other products.
Improved compliance with local, state, and federal regulations.

Use of BMPs for managing Florida landscapes.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	70.0	0.5	0.0	0.0
2009	70.2	0.5	0.0	0.0
2010	70.5	0.5	0.0	0.0
2011	70.9	0.5	0.0	0.0
2012	70.9	0.5	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Conduct workshops and meetings
Deliver services

Develop products, curriculum, resources
Provide training
provide counseling
Make assessments
work with the media
develop partnerships

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	**Indirect Methods**
• Education Class • Other 1 (telephone calls) • One-on-One Intervention • Workshop • Demonstrations • Group Discussion	• Other 1 (radio) • TV Media Programs • Billboards • Public Service Announcement • Web sites • Newsletters

3. Description of targeted audience

Homeowners
Adult Volunteers
Youth
Youth Volunteers
Administrators of Environmental Quality
County Government
Other Pubic Administrators
County Faculty and Staff
State Faculty and Staff

Individuals that own property or have established legal residency in the state of Florida.
Includes the executive, legislative, judicial, administrative and regulatory activities of Federal, State, local, and international governments.
Includes all personnel that are supervised by IFAS.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	5000000	6000000	0	0
2009	5000000	6000000	0	0
2010	5000000	6000000	0	0
2011	5000000	6000000	0	0
2012	5000000	6000000	0	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 **2009 :**0 **2010 :** 0 **2011 :**0 **2012 :**0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	25
2009	0	30
2010	0	35
2011	0	40
2012	0	45

V(H). State Defined Outputs

1. Output Target

- {NO DATA ENTERED}

{NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED}

V(I). State Defined Outcome

1. Outcome Target

Number of horticulture professionals that use appropriate irrigation practices.
Number of horticulture professionals that use appropriate plant care practices.
Number of horticulture professionals that use appropriate turf grass practices
Number of horticulture professionals that use appropriate soil management practices
Number of horticulture professionals that use integrated pest management strategies
Number of horticulture professionals that use appropriate landscape diagnostic techniques
Number of horticulture professionals that use chemical equipment appropriately
Number of horticulture professionals that use chemicals as recommended by the manufacturer
Number of horticulture professionals that receive pesticide certification
Number of horticulture professionals that receive pesticide renewal certification

Number of horticulture operations that use effective human resource practices
Number of horticulture operations that use basic business management skills. (ie. Accurate record keeping, Financial statements and analysis, Appropriate credit management strategies, Appropriate tax management strategies)
Number of agricultural operations that use appropriate information technology
Number of residents that water efficiently
Number of residents that fertilize appropriately
Number of residents that mulch
Number of residents that use practices to attract wildlife
Number of residents that control pests responsibly
Number of residents that recycle yard wastes
Number of residents that reduce stormwater runoff
Number of residents that protect the waterfront
Number of residents that design landscapes and choose plants appropriately (“Right Plant Right Place”)
Number of educational activities conducted by volunteers

2. Outcome Type : Change in Condition Outcome Measure

2008 :	**2009 :**	**2010 :**	**2011 :**	**2012 :**
30	30	30	30	0

3. Associated Knowledge Area(s)

- 101 - Appraisal of Soil Resources
- 102 - Soil, Plant, Water, Nutrient Relationships
- 112 - Watershed Protection and Management
- 133 - Pollution Prevention and Mitigation
- 201 - Plant Genome, Genetics, and Genetic Mechanisms
- 204 - Plant Product Quality and Utility (Preharvest)
- 205 - Plant Management Systems
- 206 - Basic Plant Biology
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 216 - Integrated Pest Management Systems
- 405 - Drainage and Irrigation Systems and Facilities
- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 608 - Community Resource Planning and Development
- 610 - Domestic Policy Analysis
- 723 - Hazards to Human Health and Safety
- 802 - Human Development and Family Well-Being

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Competing Programatic Challenges
- Appropriations changes
- Natural Disasters (drought,weather extremes,etc.)
- Public Policy changes
- Government Regulations
- Economy
- Competing Public priorities

Description

Florida is a state located in the tropics. Natural disasters such as tropical storms and hurricanes are common annual occurrences in this state. Severe weather conditions such as droughts frequently led to large-scale fires. We also have other weather extremes such as floods leading to large scale damage especially along the coastal regions.

Florida also has three international shipping ports: Miami, Jacksonville and Tampa. These cities all have international airports. Along with this we have over 53 million tourists visiting from around the world. It has been estimated that this international influx into Florida has made

us the entry point of one new invasive pest, plant or disease each week. Any of this could be an external factor affecting land-grant outcomes.

Changes in state, county and federal appropriations can also affect the outcomes.

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

1. Evaluation Studies Planned

- During (during program)
- Before-After (before and after program)
- Case Study

Description

The Florida land-grant college understands the value of evaluation in our annual program plan. Methods of evaluation are included as part of the annual faculty activity plan of work and report of accomplishment process (unifas). This information is collected as part of the logic model used in our Florida system and will be available for the CSREES reports of accomplishment on a yearly basis.

2. Data Collection Methods

- On-Site
- Observation
- Telephone
- Sampling
- Mail
- Other (online)
- Whole population
- Unstructured
- Case Study
- Structured
- Portfolio Reviews
- Tests

Description

The Florida land-grant colleges use acceptable forms of qualitative and quantitative data collection methods.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Developing Responsible and Productive Youth Through 4-H and Other Youth Programs

2. Brief summary about Planned Program

Developing responsible and productive youth through 4-H and other youth programs relates specifically to areas including:
Life skills developed in youth through subject matter experience
Organizational strategies and learning environment to support youth programs
Volunteer development and systems to support youth

3. Program existence : Intermediate (One to five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 806 100% Youth Development

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Situation StatementIn an increasingly complex and competitive world market, the human capital of the United States is an important resource. Young people under 18 years represent 28.3% of the population in the United States and over 33% in Florida.Each day America's youth decide how they will spend their waking hours when not in school. For many, these hours harbor both risk and opportunity. For some, particularly those supervised by adults, the out-of-school hours offer opportunities to be with friends, play sports, pursue interests, and engage in challenging activities. But for many home alone, the out-of-school hours present serious risks for substance abuse, crime, violence, and sexual activity. Time spent alone is not the crucial contributor to high risk. Rather it is what young people do during that time, where they do it, and with whom that leads to positive or negative consequences.Positive youth development provides opportunities for youth to feel safe, secure, respected, intellectually stimulated, and engaged in their community. Positive youth development occurs from an intentional process that promotes positive outcomes for young people by providing opportunities, relationships, and support. Youth development takes place in families, peer groups, schools, neighborhoods and communities. 4-H Youth Development uses experiential, research-based educational opportunities that help youth become competent, caring, confident, connected, and contributing citizens of character.Research indicates that regular participation in extracurricular activities during adolescence can lead to long-term payoffs. Recent studies indicate that youth spending time in positive youth programs, such as 4-H, are less likely to become involved in high risk behaviors, have higher school attendance and grades, better conflict management practices and better work habits. Additional research studies have shown that when young people have safe, structured, supervised and healthy activities in which to participate, they are less likely to become involved in the high-risk, unhealthy behaviors (such as substance abuse, crime, violence, and sexual activity) that can delay or derail positive development, and they are more likely to obtain a broad range of competencies. In addition, studies find that teens who are consistently involved in extracurricular activities are likely to go on to attend college, leading to increased lifetime earnings. Involved youth are also more likely as adults to vote in national and local elections, and to volunteer in community and religious organizations. This truly makes the concept of civic engagement real.Recent surveys of 4-H members in Florida have shown that 4-H equips and trains the youth with leadership and communication skill, offers community service, and builds a network of people that the youth can later utilize.Reports from 97% of Florida counties have prioritized three areas for youth programming: developing life skills and career awareness, creating constructive learning environments for youth (organizational design and development), and enhancing adult support system for youth (volunteer development).The Florida 4-H program is committed to providing inclusive and positive youth development programs that target the following outcomes for young people:
Youth are physically and emotionally safe;
Youth develop and maintain positive relationships;
Youth develop a sense of belonging, in an inclusive environment;
Youth develop personal competencies for self-reliance, independence and autonomy;

Youth grow and contribute as active citizens through service and leadership; and
Youth develop marketable, productive skills and competencies for work and family life.
In summary, Florida IFAS/Extension 4-H will utilize positive youth development program standards identified through research and practice to enhance the knowledge, well-being, quality of life, and civic engagement of youth by focusing on:
Life Skills Developed in Youth Through Subject Matter Experience
Organizational Strategies and Learning Environments to Support Youth Programs, and
Volunteer Development and Systems to Support Youth.

2. Scope of the Program

- In-State Extension
- Multistate Integrated Research and Extension
- Integrated Research and Extension
- Multistate Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Youth will be motivated by workshops, projects and other educational activities to learn/change
Volunteers will learn to provide effective and efficient guidance to youth
Changes suggested in activities related to this program will increase knowledge and experience for Florida youth involved in 4-H and other land-grant college activities.

2. Ultimate goal(s) of this Program

Develop Communication Skills
Develop Decision-making, problem-solving and Critical Thinking Skills
Develop Improved Competencies of Goal-setting, Planning and Organizing
Develop Positive Relationship Skills with Others
Develop Leadership Skills
D

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	83.2	1.5	0.0	0.0
2009	83.5	1.9	0.0	0.0
2010	83.9	2.0	0.0	0.0
2011	84.0	2.2	0.0	0.0
2012	84.2	2.4	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Conduct workshops and meetings
Deliver services
Develop products, curriculum, resources
Provide training
provide counseling
Make assessments
work with the media
develop partnerships

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	**Indirect Methods**
• Demonstrations • Group Discussion • Education Class • Workshop • Other 1 (telephone calls) • One-on-One Intervention	• Other 1 (radio) • Web sites • Newsletters • TV Media Programs • Public Service Announcement

3. Description of targeted audience

Adults
Families
Youth
County Government
Administrators of Social, Human Resource and Income Maintenance Programs
Administrators of Education
Florida Based Non-governmental Organizations
Non-Florida Based Non-governmental Organizations
County Faculty and Staff
Administrators
State Faculty and Staff

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	350000	5000000	230000	0
2009	350000	5000000	230000	0
2010	350000	5000000	230000	0
2011	350000	5000000	230000	0
2012	350000	5000000	230000	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 **2009 :**0 **2010 :** 0 **2011 :**0 **2012 :**0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	30
2009	0	35
2010	0	40
2011	0	45
2012	0	50

V(H). State Defined Outputs

1. Output Target

- {NO DATA ENTERED}

{NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED}

V(I). State Defined Outcome

1. Outcome Target

Number of Youth demonstrating/ reporting moderate levels of attainment of communication skills.
Number of youth demonstrating/ reporting moderate levels of attainment/standard on public presentations.
Number of youth demonstrating/ reporting moderate levels of attainment on intrapersonal communication skills.
Number of youth demonstrating/reporting moderate levels of attainment with acquiring, processing, and interpreting data.
Number of youth demonstrating and reporting moderate levels of attainment in problem solving skills.
Number of youth demonstrating/ reporting moderate levels of attainment regarding wise use of resources.
Number of youth demonstrating/ reporting moderate levels of skill attainment in decision-making.
Number of youth demonstrating/reporting moderate levels of goal-setting skills.
Number of youth demonstrating/ reporting moderate levels of skill in time management.
Number of youth demonstrating/reporting moderate levels of skill attainment in planning and organizing.
Number of youth demonstrating practices/ reporting moderate to high levels of respect for diversity.
Number of youth demonstrating/ reporting moderate to high levels of attainment in peer collaboration.
Number of youth demonstrating/ reporting moderate to high levels of teamwork or group cooperation.
Number of youth demonstrating/ reporting moderate to high levels of respect and consideration for others.
Number of youth and adults demonstrating/reporting adopting best practices for effective youth-adult partnerships.
Number of youth demonstrating/reporting teaching / helping others.
Number of youth demonstrating/reporting leading and group facilitation skills.
Number of youth demonstrating/reporting leadership skills associated with serving as officers in community or school based clubs, committees, and, councils
Number of youth demonstrating/ reporting moderate levels of civic governance and community decision-making.
Number of youth reporting hours of community service
. Number of youth demonstrating/ reporting moderate levels of volunteer service.
Number of youth demonstrating/ reporting moderate levels of attainment regarding interview skills.
Number of youth demonstrating/ reporting moderate levels of attainment regarding resume skills.
Number of youth demonstrating/ reporting moderate levels of knowledge of career choices.
Number of youth demonstrating/ reporting moderate levels of attainment on positive self attitudes.
Number of youth demonstrating/ reporting moderate levels of confidence to try new things and feelings of safety.
Number of youth demonstrating/ reporting positive practices of character and ethical principles.
Number of youth demonstrating/ reporting moderate levels of attainment in respect and consideration for others.
Number of youth demonstrating/ reporting moderate to high level of attainment regarding new friendships.
Number of youth demonstrating/ reporting moderate levels of conflict resolution skill attainment.
Number of youth demonstrating / reporting positive choices among friends.
Number of youth demonstrating/ reporting moderate levels of knowlege of ecological systems.

Number of youth demonstrating/ reporting moderate levels of knowledge of biological principles.
Number of youth demonstrating/ reporting moderate levels of attainment of knowledge/practices in environmental stewardship and conservation principles.
Number of youth demonstrating/ reporting moderate levels of knowledge of agricultural production
Number of youth demonstrating/ reporting moderate levels of conservation practices.
Number of youth demonstrating/ reporting moderate levels of attainment of practices in animal care management
Number of youth demonstrating/reporting moderate to high levels of safe and ethical animal care.
Number of youth demonstrating/ reporting moderate to high ability level to judge and select quality animals.
Number of youth demonstrating moderate to high level of ability in animal exhibition/showmanship.
Number of youth demonstrating/ reporting moderate to high levels of knowledge, skill or practices for healthy food choices, preparation and/or safety.
Number of youth demonstrating/reporting moderate to high level of knowledge or skills in child care and development practices.
Number of youth demonstrating/reporting moderate to high levels of knowledge and skills in clothing construction, care, and selection
Number of youth demonstrating/reporting moderate to high level of financial literacy and money management skills.
Number of youth demonstrating/reporting moderate level of knowledge of consumer rights and responsibilities.
Number of youth demonstrating/ reporting moderate levels of attainment of knowledge, skills or practices for personal safety.
Number of youth demonstrating/ reporting moderate levels of attainment of knowledge, skills or improved practices of healthy food choices, food preparation or food safety.
Number of youth demonstrating/ reporting increased levels of positive activities promoting physical health and well-being.
Number of youth demonstrating/report/apply moderate to high level of knowledge of the scientific inquiry process.
Number of youth demonstrating/reporting moderate to high level of ability related to acquiring, processing and interpreting data.
Number of youth demonstrating/ reporting moderate to high levels of attainment in computer technology skills.
Number of youth demonstrating/reporting moderate to high levels of knowledge of biological principles of living organisms.

Number of program participants that indicate satisfaction with Extension's information
Number of program participants that are satisfied with Extension's services.
Number of hours of training/certification, of 4-H faculty and staff

Number of new 4-H participants resulting from marketing efforts

Volunteers reporting 4-H program provides awareness of opportunities and events
Youth reporting 4-H program provides awareness of opportunities and events
Number of Chartered 4-H Clubs
Number of youth involved in more than one 4-H event.
Volunteers reporting 4-H offers opportunities to meet youth interests
Youth reporting 4-H offers opportunities to meet interests
Volunteers reporting 4-H provides a supportive environment
Youth indicating 4-H has made a positive difference
Volunteers indicating 4-H has made a positive difference
Youth indicating satisfaction with 4-H curriculum
Volunteers indicating satisfaction with 4-H curriculum
Youth involved in 4-H more than one year
Volunteers involved in 4-H more than one year
Youth reporting 4-H provides a safe place for learning and growing
Youth reporting 4-H provides a supportive environment
Youth reporting 4-H provides opportunities to meet people of other cultures and ethnic backgrounds
Volunteers reporting 4-H provides a safe place for learning and growing
Youth reporting 4-H program provides awareness of opportunities and events
Volunteers reporting 4-H program provides awareness of opportunities and events
Number of new 4-H participants resulting from marketing efforts

Standards for affirmative action exceeded in youth club (etc.) participation by county.
Youth reporting 4-H provides opportunities to meet people of other cultures and ethnic backgrounds
Volunteers reporting 4-H provides opportunities to meet people of other cultures and ethnic backgrounds
Number of hours of training/certification, of 4-H faculty and staff
Number of program participants that indicate satisfaction with Extension's information
Number of program participants that are satisfied with Extension's services.
Number of volunteers
Number of new volunteers
Number of volunteers retained
Number of volunteers identified and recruited (I)
Number of volunteers selected and screened (S)
Number of volunteers oriented with extension (O)

2. Outcome Type : Change in Condition Outcome Measure

2008 : 25	**2009 :** 25	**2010 :** 25	**2011 :** 25	**2012 :** 25

3. Associated Knowledge Area(s)

- 806 - Youth Development

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Description

Florida is a state located in the tropics. Natural disasters such as tropical storms and hurricanes are common annual occurrences in this state. Severe weather conditions such as droughts frequently led to large-scale fires. We also have other weather extremes such as floods leading to large scale damage especially along the coastal regions. All of these can have a direct and indirect impact on youth programs.

Because of limited resources in Florida and continuing devolution youth programs can always be affected by changing public and governemental priorities. These can include appropriations. Natural and national disasters can also affect the number of volunteers available to work with youth.
Changes in state, county and federal appropriations can also affect the outcomes related to youth.

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

1. Evaluation Studies Planned

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- During (during program)
- Time series (multiple points before and after program)
- Case Study
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- Comparison between locales where the program operates and sites without program intervention

Description

The Florida land-grant college understands the value of evaluation in our annual program plan. Methods of evaluation are included as part of the annual faculty activity plan of work and report of accomplishment process (unifas). This information is collected as part of the logic model used in our Florida system and will be available for the CSREES reports of accomplishment on a yearly basis.

2. Data Collection Methods

- Sampling
- Whole population
- Mail
- Telephone
- On-Site
- Structured
- Unstructured
- Case Study
- Observation
- Portfolio Reviews
- Tests

Description

The Florida land-grant colleges use acceptable forms of qualitative and quantitative data collection methods.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Economics, Markets and Policy--research

2. Brief summary about Planned Program

Economics of Agricultural production and farm management
Marketing and distribution practices
International trade and development

3. Program existence : Intermediate (One to five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 601 10% Economics of Agricultural Production and Farm Management
- 603 20% Market Economics
- 604 20% Marketing and Distribution Practices
- 605 10% Natural Resource and Environmental Economics
- 606 10% International Trade and Development
- 607 10% Consumer Economics
- 609 10% Economic Theory and Methods
- 610 10% Domestic Policy Analysis

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Economic development generally refers to targeted programs designed to enable people to raise overall per capita incomes or to improve circumstances for specific disadvantaged populations. The emphasis of the area is the enhancement of people's capacity to acquire and manage re-sources effectively, understand markets and policy related to these elements. Presently, economic transitions underway in rural Florida result in pockets of economic disadvantage. Public and private managers must cope with the costs of economic change and must be able to influence both the pattern and pace of growth. Insights are sometimes obtained from problem-solving work in other locations that may be applicable in Florida. Rural economic development, in-ternational development, economic impact analysis, domestic policy analysis and agricultural labor subject matter are also of interest. Some specific areas where Hatch research is taking place in IFAS include:

Economics of Agricultural Production and Farm Management

Citrus remains the most important crop produced in Florida. Florida citrus producers face a number of challenges including increased foreign competition, adoption of new technology including mechanical harvesting, and threats from invasive pests. This intent of one project in this area is to provide economic analysis of the issues confronting Florida including assessment of the competitive position of the citrus industry.

Marketing and Distribution Practices

Understanding more about the factors that influence consumers' subjective perceptions about food consumption will allow agribusinesses, agricultural producers, and policy makers to respond more effectively to consumer concerns. One Hatch project is designed to improve our understanding of the effects of consumer tastes and preferences, including food safety, on Florida agriculture.

International Trade and Development

International trade and development of new markets is important to Florida's agricultural industries. This includes the understanding and development of policy necessary for improved development of international trade. One project seeks to evaluate how the relative economic size of Caribbean Basin countries will condition their ability to realize the full economic benefits of trade liberalization and integration efforts in the Western Hemisphere.

2. Scope of the Program

- In-State Research
- Multistate Integrated Research and Extension
- Multistate Research
- Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Improvements provided by these research projects will improve the quality of life for Florida residents
Improvements provided by these research projects will improve markets and policies for Florida stakeholders involved in international sales of Florida agricultural products
Information provided by these research projects will improve the economic well-being of Florida residents

2. Ultimate goal(s) of this Program

Provide economic analysis of issues confronting Florida stakeholders including assessment of the competitive position of Florida crops in the international market place.
Research factors that influence consumers' subjective perceptions about food consumption that will allow agribusiness, ag producers, and policy makers to respond more effectivley to consumer and producer concerns
Understand and develop policy necessary for improved development of international trade

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	0.0	0.0	12.0	0.0
2009	0.0	0.0	12.4	0.0
2010	0.0	0.0	12.8	0.0
2011	0.0	0.0	13.0	0.0
2012	0.0	0.0	13.1	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Conduct Research Experiments
Partnering on an international level

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
• Demonstrations • Education Class • Workshop • One-on-One Intervention • Group Discussion	• Newsletters • Web sites

3. Description of targeted audience

international:
Agribusiness
producers
policy makers (county, state, regional, national, international

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	0	0	0	0
2009	0	0	0	0
2010	0	0	0	0
2011	0	0	0	0
2012	0	0	0	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 : 1 **2009 :** 1 **2010 :** 1 **2011 :** 1 **2012 :** 1

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	50	0
2009	55	0
2010	60	0
2011	65	0
2012	70	0

V(H). State Defined Outputs

1. Output Target

- {NO DATA ENTERED}

{NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED}

V(I). State Defined Outcome

1. Outcome Target

Develop BMPs related to marketing and distribution practices
Add to the growing field of theory related to agricultural economics and marketing
Develop technology to improve economic analysis
Increase theory and practice related to international economics and marketing

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :	2009 :	2010 :	2011 :	2012 :
0	0	0	0	0

3. Associated Knowledge Area(s)

- 601 - Economics of Agricultural Production and Farm Management
- 603 - Market Economics
- 604 - Marketing and Distribution Practices
- 605 - Natural Resource and Environmental Economics
- 606 - International Trade and Development
- 607 - Consumer Economics
- 609 - Economic Theory and Methods
- 610 - Domestic Policy Analysis

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Economy
- Appropriations changes
- Competing Programatic Challenges
- Natural Disasters (drought,weather extremes,etc.)
- Government Regulations
- Public Policy changes

Description

Florida is a state located in the tropics. Natural disasters such as tropical storms and hurricanes are common annual occurrences in this state. Severe weather conditions such as droughts frequently led to large-scale fires. Florida also has other weather extremes such as floods leading to large scale damage especially along the coastal regions.

Florida has three international shipping ports: Miami, Jacksonville and Tampa. These cities all have international airports. Along with this we have over 53 million tourists visiting from around the world. It has been estimated that this international influx into Florida has made us the entry point of one new invasive pest, plant or disease each week. Any of this could be an external factor affecting land-grant research outcomes.

Changes may occur because of:
The loss of test sites from storm damage
An invasive species that requires priority
Changes in public priorities
Changes in state, county and federal appropriations
Changes in governmental regulations
Loss of public or private funding opportunities
Changes in international policy or trade agreements

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

1. Evaluation Studies Planned

- Retrospective (post program)
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- Case Study
- After Only (post program)
- Comparison between locales where the program operates and sites without program intervention
- Time series (multiple points before and after program)
- Before-After (before and after program)
- Comparisons between program participants (individuals,group,organizations) and non-participants
- During (during program)

Description

Florida IFAS/research understands the importance of evaluating projects to provide scientifically accurate information and recommendations. Accepted research guidelines and procedures are followed.

2. Data Collection Methods

- Structured
- Case Study
- Unstructured
- Tests
- Whole population
- Sampling
- Portfolio Reviews
- Mail
- Journals
- Telephone
- On-Site
- Observation

Description

Florida IFAS/research uses a variety of acceptable forms of qualitative and quantitative data collection methods.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Enhance and Maintain Agricultural and Food Systems

2. Brief summary about Planned Program

Planned programs relate to:
Agricultural profitability and sustainable use of enviromental resources;
Awareness of agriculture's importance to an economy that ranges from local to global
Processing, distribution, safety and security of food systems
Plant, animal and human protection
Safety for agricultural operation and equipment
Some of the major commodity areas found in Florida include:
Agronomic row crops
Animal sciences and forages
Aquaculture
Citrus
Forestry
Fruits and Vegetables
Ornamentals and Turf
Small Farms and Alternative Enterprises (including small crop profitability)
Sugarcane and Rice
Small animal production (including goat)

Florida's agriculture and natural resources industry comprises a wide array of economic activities. This industry represents numerous value-added stages, including production, processing, wholesale distribution, retailing, and associated inputs and services. Some of the major production groups are fruits and vegetables, livestock, meat and dairy, forestry, environmental horticulture, seafood, and sugar. In addition, a variety of input and service businesses provide critical supporting roles. In 2003, the agriculture and natural resource industry generated over 50.8 billion dollars of output or sales impacts, $27.6 billion in exports, $2.6 billion in tax contributions and 756,993 jobs that provided $25.1 billion in labor income.

These economic benefits are felt at local, state and international levels. In some rural counties, agriculture is the largest component of the economy. Much of Florida's agricultural produce is exported outside the state, contributing to a $1.5 trillion national agricultural economy. In addition to economic contributions, these industries provide the state with various non-monetary benefits, such as wildlife habitat, aquifer recharge areas and areas of open space. These environmental attributes also support the state's large eco-tourism industry. Surveys indicate that over 50 percent of Florida visitors engage in some form of nature-related activity.

According to Lyons (2006), a large and growing number of Floridians are unaware of the numerous contributions of the state's agricultural industry. Rapid population growth places increasing pressures on land, water and environmental quality. As a consequence, the agricultural sector continues to be challenged for resources including land, water, labor, and other farm inputs.

Food processing, service, preparation, and distribution are all vital activities that support the people of Florida and the state's agricultural industry. New and value-added product development contributes to a viable market for Florida products and provides for the array of products consumers expect. Effective distribution systems also enhance the state's ability to compete effectively in the domestic and global marketplace.

Food safety and security are critical components of a sustainable industry. According to the Centers for Disease Control and Prevention (CDC), there are over 250 known different foodborne diseases. These diseases are caused by viruses, chemicals, toxins, and fungi, as well as bacteria which are the major source of illness. In the United States, where the food supply is one of the safest in the world, it is estimated that there are 76 million incidences of

foodborne illness and approximately 5,000 deaths yearly.

These issues surrounding safety and security span the entire food sector, ranging from consumers to the food service and processing industries. Increasingly, food safety and security are a focus of government, industry, media and consumer awareness. The need for accurate, easy to understand, accessible information is paramount to the success of the entire industry and the health and welfare of the entire population.

Plant, animal, and human protection is becoming increasingly important as Florida's urban areas continue to grow rapidly and the more isolated farm population shrinks. The extension community is helping to provide this protection through partnerships across the continuum from farmers to households, including researchers, extension agents, agricultural producers, Master Gardeners, and Doctors of Plant Medicine. The mechanism for delivery is integrated pest management (IPM), the effective management of pests by using a variety of options that minimize risks to human health and the environment, e.g., pest resistant cultivars, selected growing practices, commercial natural enemies, antagonist microorganisms, and biorational pesticides. Available pest management options are diverse but virtually all of them rely on timely and accurate pest identification and diagnosis. The use of IPM is particularly challenging in Florida because of the climate and global agricultural markets that cause the state to be susceptible to the accidental or intentional introduction of invasive pests. To assure that IPM action is rapid and appropriate, the University of Florida, Institute of Food and Agricultural Sciences (IFAS) has established plant and animal pest diagnostic clinics and networks, such as Florida Plant Diagnostic Network (FPDN) and the Distance Diagnostic and Identification Information System (DDIS) that collaborate with Southern Plant Diagnostic Network (SPDN) and the Florida Department of Agriculture and Consumer Services (FDACS). When pesticides are used as a pest management option, the UF/IFAS Pesticide Safety Education Program (PSEP) provides training and information to applicators on safe, environmentally sound pesticide application practices, personal safety, and regulations. PSEP also assists applicators in meeting state and federal certification and licensing requirements to use pesticides in Florida.

3. Program existence : Intermediate (One to five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 104 5% Protect Soil from Harmful Effects of Natural Elements
- 111 5% Conservation and Efficient Use of Water
- 132 5% Weather and Climate
- 133 5% Pollution Prevention and Mitigation
- 136 5% Conservation of Biological Diversity
- 141 5% Air Resource Protection and Management
- 201 5% Plant Genome, Genetics, and Genetic Mechanisms
- 204 5% Plant Product Quality and Utility (Preharvest)
- 205 5% Plant Management Systems
- 211 5% Insects, Mites, and Other Arthropods Affecting Plants
- 212 5% Pathogens and Nematodes Affecting Plants
- 213 5% Weeds Affecting Plants
- 214 5% Vertebrates, Mollusks, and Other Pests Affecting Plants
- 216 5% Integrated Pest Management Systems
- 307 5% Animal Management Systems
- 315 5% Animal Welfare/Well-Being and Protection
- 402 5% Engineering Systems and Equipment
- 405 5% Drainage and Irrigation Systems and Facilities
- 502 5% New and Improved Food Products
- 603 5% Market Economics

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Situation StatementThe scope of challenges facing agriculture and natural resource industries of Florida fall into four primary areas: 1) economic well-being, 2) environmental issues, 3) quality, safety and security issues, and 4) civic engagement.Economic Well-Being:

Declining profitability due to stable or falling commodity prices and increasing cost of production.
Liberalized trade agreements that reduce tariffs and subsidies can benefit both foreign and domestic producers by having greater access to markets.
Resource limitations resulting from
Land loss due to urban sprawl,
Increased water consumption due to population growth,
Restricted use of farm inputs due to environmental concerns, and
Reduced availability of labor due to a growing reliance on migrant labor.
New and innovative products and processing technologies must be developed for the industry to remain competitive and to adequately meet the rising expectations of consumers.
Environmental issues:Public concern over the following environmental issues has translated into increasingly stringent and costly environmental regulations on certain agricultural practices that can adversely affect a firm’s economic viability in the short run and sustainability in the longer run.
Water quality, as impacted by agricultural production practices, such as fertilizer and pesticide residue leaching and runoff, and management of waste from livestock and aquaculture production,
Water availability as impacted by production-related surface and groundwater withdrawals,
Conservation of the state's natural resource base, including land for production, wildlife habitat, green space, and fresh and saltwater recreation.
Quality, Safety and Security Issues:
A heightened awareness by agricultural producers and processors concerning safe production practices such as chemical residues, biological safety concerns, and personal hygiene practices.
Continued development of modern processing, distribution and storage, technologies and the use of improved handling practices that prevent unnecessary food losses while simultaneously ensuring high quality and safety standards;
Availability of a wide range of wholesome foods that meet the needs of an increasingly unhealthy population;
At the retail sector, adequate packaging and labeling so that consumers have reliable information to optimize their food choices;
Development and implementation of food safety and security programs that protect the nation’s food supply, and;
Providing adequate information to the state and country’s farm laborers who support agriculture to help them avoid dangers from equipment and exposure to farm chemicals that pose a number of potential risks to their health and safety.
Civic Engagement:Awareness of agriculture and natural resources and their contribution to the state's economic, environmental, and social well-being. Agricultural awareness efforts can create an informed voting public so that wise choices can be made that benefit Florida's citizens and visitors. The scope of these issues includes:
Educating the public regarding the role and importance of agriculture in Florida’s economy, the stewardship of natural resources, and the relationship between agricultural production and food availability.
Keeping legislators up-to-date on industry concerns, such as pesticide regulations, worker protection standards, immigration, and international trade.
Providing public interest groups and the media with objective information regarding the contributions of the agricultural industry,
Developing information and programs that educate the industry regarding new information on such topics as Best Management Practices, regulatory legislation, and technological advancements.
Assisting the industry to promote the numerous benefits of agriculture.

2. Scope of the Program

- Multistate Integrated Research and Extension
- Multistate Extension
- Integrated Research and Extension
- In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

People will be motivated by workshops and other educational activities to learn/change
Information on best practices shows that these approaches work well for these target audiences
Changes suggested in activities related to this program will improve quality of life for participants

2. Ultimate goal(s) of this Program

Goals for Agricultural Profitability and the Sustainable Use of Environmental Resources
Improved procedures and techniques for managing agricultural operations
Improved procedures and techniques to increase revenue from agricultural practices

Improved procedures and techniques to reduce costs from agricultural practices
Improved management systems, procedures, and/or techniques to conserve water
Improved management systems, procedures, and/or techniques to improve water quality
Improved compliance with local, state, and federal regulations.
Improved delivery of Extension programs.

Goals for Awaren

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	98.2	3.0	0.0	0.0
2009	99.0	3.0	0.0	0.0
2010	99.2	3.5	0.0	0.0
2011	99.8	3.5	0.0	0.0
2012	99.8	3.6	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Conduct workshops and meetings
Deliver services
Develop products, curriculum, resources
Provide training
provide counseling
Make assessments
work with the media
develop partnerships

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
• One-on-One Intervention • Other 1 (telephone calls) • Group Discussion • Demonstrations • Education Class • Workshop	• Public Service Announcement • Other 1 (radio) • Newsletters • TV Media Programs • Web sites

3. Description of targeted audience

Producers
Commodity Associations
Owners/Operators
Managers/Supervisors
Workers/Laborers
Allied Industry Representatives
Small Farmers

Government/Regulatory
County government
State government
Federal government
Tribal government
International governing bodies
Harvesting/Packing/Processing/Distribution
Harvesters/Packers
Processors
Distributors/Transporters
Retailers
Importers/Exporters
Youth
4H(K-12)
Other Youth
Youth Educators
Extension Faculty
Extension Faculty

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	380000	6000000	0	0
2009	380000	6000000	0	0
2010	380000	6000000	0	0
2011	380000	6000000	0	0
2012	380000	6000000	0	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 **2009 :**0 **2010 :** 0 **2011 :**0 **2012 :**0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	90
2009	0	95
2010	0	100
2011	0	105
2012	0	110

V(H). State Defined Outputs

1. Output Target

- {NO DATA ENTERED}

{NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED}

V(I). State Defined Outcome

1. Outcome Target

Indicators for Agricultural Profitability and the Sustainable Use of Environmental Resources

Indicator

Number of agricultural operators that use appropriate human resource management techniques to improve worker efficiency
Number of agricultural operations that use appropriate business management skills. (ie. Accurate record keeping, Financial statements and analysis, Appropriate credit management strategies, Appropriate tax management strategies)
Number of agricultural operations that use appropriate production technology
Number of agricultural operations that improve product margins
Number of agricultural operations increasing yield
Number of agricultural operations improving product quality
Number of agricultural operations using value added processes
Number of agricultural operations that use alternative enterprises
Number of agricultural operations that have reduced input costs
Number of agricultural operations that utilize efficient irrigation equipment
Number of agricultural operations that utilize efficient irrigation methods
Number of agricultural operations that utilize appropriate equipment
Number of agricultural operations that utilize best management practices for fertilizers, pesticides and water management.
Number of Agricultural operators that understand and comply with local, state, and federal regulations.
Number of program participants that are satisfied with the information received by Extension
Number of program participants that indicate Extension information solved a problem
Number of program participants that are satisfied with Extension's services.

Indicators for Awareness of Agricultures Importance to an Economy that Ranges from Local to Global

Indicator

Number of program participants that indicate information is up-to-date and accurate
Number of program participants that indicate information was delivered in time to use it
Number of program participants that indicate information is relevant to their situation
Number of program participants that indicate information is easy to understand
Number of program participants that indicate they used Extension information to solve a problem
Number of program participants that indicate Extension information solved a problem
Number of program participants that are satisfied with Extension's services.
Number of participants recognizing the significance of Florida agriculture and natural resources to the economy
Number of participants recognizing the leading agriculture and natural resources commodities in their local area
Number of participants recognizing the significance of Florida agriculture and natural resources to the environment
Number of participants recognizing the effects of policy decisions on agriculture and natural resources
Number of policy makers increasing knowledge of Florida's agriculture and natural resource industries

Indicators for Processing, Distribution, Safety and Security of Food Systems

Number of program participants that indicate information is up-to-date and accurate
Number of program participants that indicate information was delivered in time to use it

Number of program participants that indicate information is relevant to their situation
Number of program participants that indicate information is easy to understand
Number of program participants that indicate they used Extension information to solve a problem
Number of program participants that indicate Extension information solved a problem
Number of program participants that are satisfied with Extension's services.
Number of processing operations that are aware of required adequate manufacturing practices
Number of operations that are capably of conducting effective traceback and recall operations.
Number of operations that have appropriate HACCP and/or GAPs programs in place
Number of operations that are aware of import/export regulations and awareness of regulations involving the Bio terrorism Act of 2002.
Number of operations that regularly conduct training for employees on quality related manufacturing activities
Number of operations that regularly conduct training for employees on safety related manufacturing activities
Number of transportation operations utilize effective transportation practices
Number of operations that can conduct effective traceback and recall operations.
Number of operations that are aware of import/export regulations and awareness of regulations involving the Bio terrorism Act of 2002.
Number of operation that regularly conduct training for employees on safety related manufacturing activities
Number of operations that regularly conduct training for employees on quality related manufacturing activities
Number of operations that are aware of import/export regulations and awareness of regulations involving the Bio terrorism Act of 2002.
Number of operations that have HACCP and/or GAPs programs in place

Indicators for Plant, Animal and Human Protection

Number of program participants that indicate information is up-to-date and accurate
Number of program participants that indicate information was delivered in time to use it
Number of program participants that indicate information is relevant to their situation
Number of program participants that indicate information is easy to understand
Number of program participants that indicate they used Extension information to solve a problem
Number of program participants that indicate Extension information solved a problem
Number of program participants that are satisfied with Extension's services.
Number of agricultural operations that can identify pest species
Number of agricultural operations that use diagnostic services
Number of agricultural operations that use appropriate monitoring and sampling techniques
Number of agricultural operations that use appropriate pest management
Number of agricultural operations that correctly implement diagnostic results
Number of agricultural operations that can correctly interpret diagnostic results
Number of agricultural operations that use Integrated Pest Management (IPM)
Number of participants that successfully complete licensure or re-licensure certification
Number on farm operators that understand and use appropriate techniques for agricultural chemicals, fuels, and other products.
Number of equipment operators that participate in equipment safety workshops
Number of equipment operators that routinely inspect farm equipment
Number of owner/operators that have an emergency response plan
Number of owner/operators that provide access to equipment manuals
Number of agricultural operations that have reduced costs associated with pesticide applications
Number of employers that provide protective safety equipment workshops
Number of employers that provide incentives for using protective safety equipment
Number of employers that have formal disciplinary procedures for not using safety equipment
Number of equipment operators that understand and use protective safety equipment
Number of agricultural operations that comply with phytosanitary procedures
Number of applicators who understand and use pesticides according to the label.

2. Outcome Type : Change in Condition Outcome Measure

2008 :	2009 :	2010 :	2011 :	2012 :
6	6	6	6	6

3. Associated Knowledge Area(s)

- 104 - Protect Soil from Harmful Effects of Natural Elements
- 111 - Conservation and Efficient Use of Water
- 132 - Weather and Climate
- 133 - Pollution Prevention and Mitigation
- 136 - Conservation of Biological Diversity
- 141 - Air Resource Protection and Management
- 201 - Plant Genome, Genetics, and Genetic Mechanisms
- 204 - Plant Product Quality and Utility (Preharvest)
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 214 - Vertebrates, Mollusks, and Other Pests Affecting Plants
- 216 - Integrated Pest Management Systems
- 307 - Animal Management Systems
- 315 - Animal Welfare/Well-Being and Protection
- 402 - Engineering Systems and Equipment
- 405 - Drainage and Irrigation Systems and Facilities
- 502 - New and Improved Food Products
- 603 - Market Economics

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Populations changes (immigration,new cultural groupings,etc.)
- Competing Programatic Challenges
- Economy

Description

Florida is a state located in the tropics. Natural disasters such as tropical storms and hurricanes are common annual occurrences in this state. Severe weather conditions such as droughts frequently led to large-scale fires. We also have other weather extremes such as floods leading to large scale damage especially along the coastal regions.

Florida also has three international shipping ports: Miami, Jacksonville and Tampa. These cities all have international airports. Along with

this we have over 53 million tourists visiting from around the world. It has been estimated that this international influx into Florida has made us the entry point of one new invasive pest, plant or disease each week. Any of this could be an external factor affecting land-grant outcomes.

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

1. Evaluation Studies Planned

- After Only (post program)
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- Time series (multiple points before and after program)
- Retrospective (post program)
- Before-After (before and after program)
- Case Study
- Comparison between locales where the program operates and sites without program intervention
- Comparisons between program participants (individuals,group,organizations) and non-participants
- During (during program)

Description

The Florida land-grant college understands the value of evaluation in our annual program plan. Methods of evaluation are included as part of the annual faculty activity plan of work and report of accomplishment process (unifas). This information is collected as part of the logic model used in our Florida system and will be available for the CSREES reports of accomplishment on a yearly basis.

2. Data Collection Methods

- Telephone
- Case Study
- On-Site
- Whole population
- Tests
- Sampling
- Structured
- Portfolio Reviews
- Observation
- Journals
- Unstructured
- Mail

Description

The Florida land-grant colleges use acceptable forms of qualitative and quantitative data collection methods as specified by the Institutional Regulation Board (IRB) and the Southern Association Accreditation Board.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Families, Youth. and Communities--research

2. Brief summary about Planned Program

Youth Development

3. Program existence : Intermediate (One to five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 802 100% Human Development and Family Well-Being

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

A major strength of the area of families, youth and communities is the diversity of disciplines that operate in collaborative and complementary ways to address issues of importance to individuals, families, and communities. This diversity allows human development to be considered from a broad perspective, giving consideration to the key contextual setting in which people are embedded. These contextual factors include fami-lies, neighborhoods, schools, communities, and extra-community linkages. These elements form the conceptual foundation for the research that takes place in this area.

Youth Development
Some IFAS faculty focus their Hatch research on youth development issues such as crime and violence prevention in public schools. This research has led to the development of a safe school survey and school climate survey model for Florida schools, an analysis of school crime and violence data quality systems, longitudinal stud-ies on trends of youth crime and violence, and research on youth risk prevention program effectiveness. Other youth development research has focused on investigating partnerships that adults and youth form, for the purpose of addressing the goals of a local organization, community, or government entity.
Florida youth and adults expand and learn leadership skills through partnerships that promote community volunteerism, more specifically, engagement in civic governance. The research examines the knowledge, attitudes and skills of youth and adults regarding willingness to be involved in partnerships and how they apply leadership skills in partnerships for community governance.

2. Scope of the Program

- Integrated Research and Extension
- Multistate Research
- Multistate Integrated Research and Extension
- In-State Research

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Through research human development can be considered from a broad perspective, giving consideration to the complex systems in which humans are embedded. These complex systems include families, neighborhoods, schools, communities, the state, the nation and the world.

2. Ultimate goal(s) of this Program

decrease crime and violence in youth populations

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	0.0	0.0	0.4	0.0
2009	0.0	0.0	0.5	0.0
2010	0.0	0.0	0.6	0.0
2011	0.0	0.0	0.7	0.0
2012	0.0	0.0	0.8	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

N/A

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
• Group Discussion • Education Class • Demonstrations • One-on-One Intervention • Workshop	• Web sites • Newsletters

3. Description of targeted audience

Families
Family support groups
Schools
community leaders
Businesses (public and private_

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	0	0	0	0
2009	0	0	0	0
2010	0	0	0	0
2011	0	0	0	0
2012	0	0	0	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 **2009 :**0 **2010 :** 0 **2011 :**0 **2012 :** 0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	20	0
2009	25	0
2010	30	0
2011	35	0
2012	40	0

V(H). State Defined Outputs

1. Output Target

- {NO DATA ENTERED}

{NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED}

V(I). State Defined Outcome

1. Outcome Target

Find solutions to problems related to human development and family well-being

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :0 **2009 :** 0 **2010 :** 0 **2011 :**0 **2012 :** 0

3. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)
- Competing Public priorities
- Appropriations changes
- Economy
- Government Regulations
- Natural Disasters (drought,weather extremes,etc.)
- Public Policy changes

Description

Florida is a state located in the tropics. Natural disasters such as tropical storms and hurricanes are common annual occurrences in this state. Severe weather conditions such as droughts frequently led to large-scale fires. Florida also has other weather extremes such as floods leading to large scale damage especially along the coastal regions.

Florida has three international shipping ports: Miami, Jacksonville and Tampa. These cities all have international airports. Along with this we have over 53 million tourists visiting from around the world. It has been estimated that this international influx into Florida has made us the entry point of one new invasive pest, plant or disease each week. Any of this could be an external factor affecting land-grant research outcomes. All of these can cause disruption in families that impact research on youth.

Changes may occur because of:
Displacement of subjects
Problem with changing populations because of economy impacts
Chaos and disorder caused by natural and national disasters
Loss of computer systems and data collections

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

1. Evaluation Studies Planned

- During (during program)
- Case Study
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Time series (multiple points before and after program)
- Before-After (before and after program)
- After Only (post program)
- Retrospective (post program)

Description

Florida IFAS/research understands the importance of evaluating projects to provide scientifically accurate information and recommendations. Accepted research guidelines and procedures are followed.

2. Data Collection Methods

- Whole population
- Unstructured
- Structured
- On-Site
- Portfolio Reviews
- Observation
- Case Study
- Tests
- Sampling
- Telephone
- Journals
- Mail

Description

Florida IFAS/Research uses a variety of acceptable forms of qualitative and quantitative data collection methods.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Food and Non-Food Products: Development, Processing, Quality, and Delivery--research

2. Brief summary about Planned Program

Post-harvest/post production
Food and Agriculture
New and Improved Food Processing Technologies
New and Improved Non-Food Products and Processes

3. Program existence : Intermediate (One to five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 501 20% New and Improved Food Processing Technologies
- 502 20% New and Improved Food Products
- 503 20% Quality Maintenance in Storing and Marketing Food Products
- 504 5% Home and Commercial Food Service
- 511 15% New and Improved Non-Food Products and Processes
- 512 20% Quality Maintenance in Storing and Marketing Non-Food Products

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

This area addresses the needs in the development, processing, quality and delivery of food and non-food products. In this area Hatch research projects have been conducted in both areas. Some examples include:

Postharvest/Post Production
Research in this area address the needs of the foli-age and floriculture market chain. Currently the best interior evalu-ation facilities in the US are located within IFAS and IFAS has the only department with a program nationally addressing whole plant longevity on a broad scale. Major emphasis is placed on research to improve the performance of fresh cut flowers for the consumer.

Food and Agriculture
Florida ranks as a major agricultural state and often leads the nation in the production of a wide variety of agricultural commodities. Before reaching the consumer, each product moves through a unique marketing channel often involving grading, processing, packaging, transporting, international trade, wholesaling and retailing. The provision of inputs and services to the agricultural sector also involves significant economic activ-ity. Agricultural businesses must cope with increased regulatory pressure, shifting consumer preferences regarding food safety and environmental protection as well as dealing with emerging oppor-tunities through biotechnology. Agribusiness, farm management and production economics, marketing, international trade and competition, and consumer economics are among the subject matter that is the concern of Florida IFAS research.

New and Improved Food Processing Technologies
Value-added by-products research requires strong product utilization and processing industry support to maintain industry prominence in International markets. By-products research allows development of processing and utilization schemes to profitably deal with waste utilization, rather than pay disposal costs.

New and Improved Non-Food Products and Processes
Genetic manipulations to improve ethanol production in Z. mobilis are complicated by enzymes that prevent introduction of foreign DNA into the bacteria. The purpose of some projects in this area is to determine the factors that limit the efficiency of transfer of foreign genes into Z. mobilis and to produce new strains which will be more amenable to genetic engineering which may be used to enhance their fuel ethanol

production.

2. Scope of the Program

- Multistate Research
- Integrated Research and Extension
- In-State Research
- Multistate Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Improvements provided by these research projects will improve the quality of life for Florida residents
Improvements provided by these research projects will improve the development, processing, quality and delivery of food and non-food products
Information provided by these research projects will improve the economic well-being of Florida residents and agricultural industries

2. Ultimate goal(s) of this Program

Improve and better understand unique marketing channels that include grading, processing, packaging, transporting, international trade, wholesaling and retailing.
Understand and identify regulatory pressure, shifting consumer preferences regarding food safety and environmental protection as well as dealing with emerging oppor-tunities through biotechnology
Identify and improve value-added by-products through strong product utilization and processing industry support to maintain industry prominence in International markets

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	0.0	0.0	11.5	0.0
2009	0.0	0.0	12.0	0.0
2010	0.0	0.0	12.4	0.0
2011	0.0	0.0	12.8	0.0
2012	0.0	0.0	12.9	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Conduct research experiments
Partner
Work with stakeholders in processing areas to create and construct research facilities

2. Type(s) methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
• Group Discussion • Demonstrations • Workshop • Education Class	• Newsletters • Web sites

• One-on-One Intervention	

3. Description of targeted audience

State, national and international stakeholders affected by food and non-food developing, processing, quality and delivery. These may include but are not limited to:
producers
regulatory bodies
consumer groups

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	0	0	0	0
2009	0	0	0	0
2010	0	0	0	0
2011	0	0	0	0
2012	0	0	0	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 : 1 **2009 :** 1 **2010 :** 1 **2011 :** 1 **2012 :** 1

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	20	0
2009	25	0
2010	30	0
2011	35	0
2012	40	0

V(H). State Defined Outputs

1. Output Target

- {NO DATA ENTERED}

{NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED}

V(I). State Defined Outcome

1. Outcome Target

Develop improved food processing technologyies

Develop new food products
Develop better methods of food harvesting, processing, storage and marketing of food products
Develop better methods of food safety including in the area of bioterrorism

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 0	**2009 :** 0	**2010 :** 0	**2011 :** 0	**2012 :** 0

3. Associated Knowledge Area(s)

- 501 - New and Improved Food Processing Technologies
- 502 - New and Improved Food Products
- 503 - Quality Maintenance in Storing and Marketing Food Products
- 504 - Home and Commercial Food Service
- 511 - New and Improved Non-Food Products and Processes
- 512 - Quality Maintenance in Storing and Marketing Non-Food Products

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Public Policy changes
- Natural Disasters (drought,weather extremes,etc.)
- Government Regulations
- Competing Public priorities
- Populations changes (immigration,new cultural groupings,etc.)
- Appropriations changes
- Economy
- Competing Programatic Challenges

Description

Florida is a state located in the tropics. Natural disasters such as tropical storms and hurricanes are common annual occurrences in this state. Severe weather conditions such as droughts frequently led to large-scale fires. Florida also has other weather extremes such as floods leading to large scale damage especially along the coastal regions.

Florida has three international shipping ports: Miami, Jacksonville and Tampa. These cities all have international airports. Along with this we have over 53 million tourists visiting from around the world. It has been estimated that this international influx into Florida has made us the entry point of one new invasive pest, plant or disease each week. Any of this could be an external factor affecting land-grant research outcomes.

Changes may occur because of:
The loss of test sites from storm damage
An invasive species that requires priority
Changes in public priorities
Changes in state, county and federal appropriations
Changes in governmental regulations
Loss of public or private funding opportunities

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

1. Evaluation Studies Planned

- Before-After (before and after program)
- Case Study
- Time series (multiple points before and after program)
- During (during program)
- Retrospective (post program)
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- After Only (post program)

Description

Florida IFAS/research understands the importance of evaluating projects to provide scientifically accurate information and recommendations. Accepted research guidelines and procedures are followed.

2. Data Collection Methods

- Structured
- Mail
- Whole population
- Observation
- Journals
- Portfolio Reviews
- On-Site
- Case Study
- Tests
- Sampling
- Telephone
- Unstructured

Description

Florida IFAS/research uses a variety of acceptable forms of qualitative and quantitative data collection methods.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Healthy Communities

2. Brief summary about Planned Program

Healthy communities are developed by:
Addressing the urban/rural interface
Broad-based citizen participation and active communities
Economic diversity
Community Preparedness

3. Program existence : Intermediate (One to five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 608 20% Community Resource Planning and Development
- 610 20% Domestic Policy Analysis
- 723 10% Hazards to Human Health and Safety
- 724 5% Healthy Lifestyle
- 802 10% Human Development and Family Well-Being
- 803 10% Sociological and Technological Change Affecting Individuals, Families and Communities
- 805 5% Community Institutions, Health, and Social Services
- 806 5% Youth Development
- 902 5% Administration of Projects and Programs
- 903 10% Communication, Education, and Information Delivery

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Situation StatementThere are hundreds of municipalities in Florida, ranging from Islandia with 5 residents to the Greater Miami area with well over one million. Each Florida community has its own history and special flavor, as well as plans and hopes. The citizens of any community have the goal of working together to improve the quality of their lives and increase their opportunities.For communities to grow, they must have the active interest and involvement of citizens in the form of a rich civic life. In this way, citizens come together to discuss and debate the needs and directions for their community. Then, once the decisions are made, citizens must come together to make and execute their plans. Another requirement for growth and opportunity is a robust economy. In Florida, a significant basis for such an economy is the natural environment, in terms of natural resources and natural beauty. Together, these account for much of Florida's overall economy in the forms of tourism, industry, recreation and agriculture. Most communities in Florida are looking to one or more of these areas as sources of economic growth.As much as citizens and leaders might desire to have vibrant, cooperative communities, the skills needed to achieve this must be learned. Communities need guidance and expertise. They need support and information.Hanging over all plans and achievements, however, is the possibility of disaster. In the last ten years or so, Florida has sustained major natural disasters, including devastating hurricanes and drought. These disasters have challenged --- and in one case, leveled --- communities. A hurricane or tornado can cause irreparable damage to a community, and a severe drought can change the economic welfare of an entire region.The past two years have made all Floridians aware of other threats to the stability of our communities. Every community must now have some response ready in case of an intentional attack. These attacks can take many forms, including bombings and the introduction of disease agents.Central to the life of our communities are the lives of their citizens, and that means working for their safety in the everyday hazards they face in their homes and workplaces. Florida's natural environment and large agricultural sector expose Florida citizens to a wide range of personal hazards or the possibility of creating hazards for others. As concerned as we are about large-scale emergencies, Floridians are much more likely to face death or injury through equipment or situations they encounter

everyday.Whatever our communities are confronted with, Extension must be ready to play its role. Through its reputation for community involvement and quality information, Extension has special capabilities that can assist communities in valuable ways during good times and bad.

2. Scope of the Program

- Multistate Integrated Research and Extension
- In-State Extension
- Integrated Research and Extension
- Multistate Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

People will be motivated by workshops and other educational activities to learn/change related to community issues.
Changes suggested in activities related to this program will improve quality of life for participants

2. Ultimate goal(s) of this Program

Improved delivery of Extension programs.
Improved procedures and techniques for managing population growth
Improved procedures and techniques to resolve conflict

Florida citizens participate more fully and effectively in the decision making that affect their communities
Florida citizens mobilize human and fiscal resources to address the issues that affect their communities

Improved procedures and techniques to retain and expand businesses

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	8.2	0.5	0.0	0.0
2009	8.5	0.5	0.0	0.0
2010	8.8	0.5	0.0	0.0
2011	9.0	0.5	0.0	0.0
2012	9.1	0.5	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Conduct workshops and meetings
Deliver services
Develop products, curriculum, resources
Provide training
provide counseling
Make assessments
work with the media
develop partnerships

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	**Indirect Methods**
• Group Discussion • Workshop • Other 1 (telephone calls) • Education Class • One-on-One Intervention • Demonstrations	• Other 1 (radio) • Public Service Announcement • Web sites • Newsletters • TV Media Programs

3. Description of targeted audience

Business and Industry

All Businesses

Florida Residents

Adults

Families

Youth

Government and Regulatory Agencies

County Government

Other Pubic Administrators

Non-governmental Organizations

FloridaBased Non-governmental Organizations

Non-Florida Based Non-governmental Organizations

UF\IFAS Faculty and Staff

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	42000	2800000	0	0
2009	42000	2800000	0	0
2010	42000	2800000	0	0
2011	42000	2800000	0	0
2012	42000	2800000	0	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 **2009 :**0 **2010 :**0 **2011 :**0 **2012 :**0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	5
2009	0	6
2010	0	7
2011	0	8
2012	0	9

V(H). State Defined Outputs

1. Output Target

- {NO DATA ENTERED}

{NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED}

V(I). State Defined Outcome

1. Outcome Target

Number of program participants that indicate satisfaction with Extension's information
Number of program participants that are satisfied with Extension's services.
Number of businesses that use appropriate human resource management techniques to improve worker efficiency
Number of businesses that use basic business management skills. (ie. Accurate record keeping, Financial statements and analysis, Appropriate credit management strategies, Appropriate tax management strategies)
Number of businesses that use appropriate information technology
Number of businesses using appropriate marketing strategies
Number of groups facilitated

Number of alliances and coalitions built
Number of leadership and community development trainings received
Number of groups/organizations formed
Number of issue based campaigns initiated
Number of groups/organizations formed
Amount of human, fiscal, and other resources mobilized
Number of communities that have economic development plans that include business and retention programs.
Number of communities that have business and retention programs.
Number of jobs retained.
Number of new jobs created by existing businesses.
Number of businesses that complete an enterprise zone application.
Number of policies adopted that are viewed by the business community as business-friendly (e.g., one-stop permitting).
Number of programs available that foster local economic development (e.g., micro-loan programs).
Number of new business sectors located in a community
Job growth in the base sectors (i.e., firms that export goods and services outside the community).
Number of businesses that create and adopt a business plan.
Number of people that understand/utilize business financial statements
Customer satisfaction ratings over time
Employee retention rates over time
Financial ratios over time (e.g., PM, TAT, ROA, EM, ROE, ROI)

2. Outcome Type : Change in Action Outcome Measure

2008 : 10	**2009 :** 10	**2010 :** 10	**2011 :** 10	**2012 :** 0

3. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development
- 610 - Domestic Policy Analysis
- 723 - Hazards to Human Health and Safety
- 724 - Healthy Lifestyle
- 802 - Human Development and Family Well-Being
- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development
- 902 - Administration of Projects and Programs
- 903 - Communication, Education, and Information Delivery

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Competing Public priorities
- Appropriations changes
- Government Regulations
- Competing Programatic Challenges
- Natural Disasters (drought,weather extremes,etc.)
- Populations changes (immigration,new cultural groupings,etc.)
- Public Policy changes
- Economy

Description

Florida is a state located in the tropics. Natural disasters such as tropical storms and hurricanes are common annual occurrences in this state. Severe weather conditions such as droughts frequently led to large-scale fires. We also have other weather extremes such as floods leading to large scale damage especially along the coastal regions. All of these can have serious effects on Florida communities.

Changing government regulations and population changes can impact outcomes of Extension programs. For example the increased urban building in rural counties is impacting population changes that are causing new challenges that may require different programming priorities. Communities are also
susceptible to changes in the economy which can change and increase competing public priorities.
Changes in state, county and federal appropriations can also affect the outcomes of Extension programs in the area of healthy communities.

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

1. Evaluation Studies Planned

- During (during program)
- Comparison between locales where the program operates and sites without program intervention
- After Only (post program)
- Before-After (before and after program)
- Retrospective (post program)
- Case Study
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- Time series (multiple points before and after program)

Description

The Florida land-grant college understands the value of evaluation in our annual program plan. Methods of evaluation are included as part of the annual faculty activity plan of work and report of accomplishment process (unifas). This information is collected as part of the logic model used in our Florida system and will be available for the CSREES reports of accomplishment on a yearly basis.

2. Data Collection Methods

- Telephone
- Portfolio Reviews
- Sampling
- Structured
- Journals
- Case Study
- Observation
- Tests
- Unstructured
- Whole population
- On-Site
- Mail

Description

The Florida land-grant colleges use acceptable forms of qualitative and quantitative data collection methods.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Human Nutrition, Food Safety, and Human Health--research

2. Brief summary about Planned Program

Human health
Requirements and function of nutrients and other food components
Food safety

3. Program existence : Intermediate (One to five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 702 20% Requirements and Function of Nutrients and Other Food Components
- 703 20% Nutrition Education and Behavior
- 712 20% Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxins
- 721 10% Insects and Other Pests Affecting Humans
- 722 10% Zoonotic Diseases and Parasites Affecting Humans
- 723 20% Hazards to Human Health and Safety

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Research in this area can be divided into three broad categories: food science, human nutrition and human health. Research in the area of human nutrition, food safety, and human health and well-being addresses problems and opportunities important to the food industry and quality of life in Florida and throughout the world. Research projects in the area of human nutrition involve many of the commodities important in Florida, including seafood and aquaculture products, citrus, fresh fruits and vegetables, and dairy products. Other research areas include food safety and microbiology issues, food processing and new method development, quality and sensory aspects of foods, and composition and chemistry of foods. Research in the area of human nutrition addresses basic and applied aspects of human nutrition in efforts to improve the health and wellness of Floridians and the world population, and includes studies on gene regulation, immu-nity, and women's health. Research areas include the function and biochemistry of micronutrients, the role of water-soluble vitamins in the health of various populations, the effects of phytochemicals and nutrient supplements on health, and the development of education programs for improved nutrition and health. Some Hatch projects include the following areas:

Human Health:

Mosquito-borne pathogens present a significant health risk to Florida residents, domestic animals and wildlife. This project helps identify periods when the risk of disease transmission is unusually high in Florida.

Requirements and Function of Nutrients and Other Food Components

Folate is a vitamin with important health implications. Impaired folate status has been associated with increased risk for birth defects, vascular disease, cancer, and cognitive dysfunction. Studying the relationship between folate status, genetic make-up and chronic disease risk may provide clues for improving human health that can be translated into nutrition education programs for the public.

2. Scope of the Program

- Multistate Research
- Multistate Integrated Research and Extension
- In-State Research
- Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Improvements provided by these research projects will improve the quality of life for Florida residents through a better understanding of requirements and functions of nutrients and other food components
Improvements methods identified by research projects will reduce outbreaks of food pathogens and increase food safety.
Information provided by these research projects will improve the physical well-being of Florida residents

2. Ultimate goal(s) of this Program

Research in the area of human nutrition, food safety, and human health and well-being addresses problems and opportunities important to the food industry and quality of life in Florida and throughout the world

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	0.0	0.0	21.7	0.0
2009	0.0	0.0	22.0	0.0
2010	0.0	0.0	22.5	0.0
2011	0.0	0.0	23.0	0.0
2012	0.0	0.0	23.2	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Conduct Research Experiments
Partnering

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
• Group Discussion • One-on-One Intervention • Education Class • Workshop • Demonstrations	• Newsletters • Web sites

3. Description of targeted audience

Food Industry
General public
regulatory agencies

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	0	0	0	0
2009	0	0	0	0
2010	0	0	0	0
2011	0	0	0	0
2012	0	0	0	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :1 **2009 :**1 **2010 :** 1 **2011 :**1 **2012 :** 1

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	15	0
2009	20	0
2010	25	0
2011	30	0
2012	35	0

V(H). State Defined Outputs

1. Output Target

- {NO DATA ENTERED}

{NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED}

V(I). State Defined Outcome

1. Outcome Target

Develop requirements and data related to function of nutrients and other food components
Develop BMPs related to nutritional behavior
Develop BMPs for protecting foods from contamination both natural and bioterrorist
Develop data to decrease the negative affects insects and other pests can have on humans
Develop research and BMPs that can protect humans from hazards and increase safety

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :0 **2009 :** 0 **2010 :** 0 **2011 :**0 **2012 :** 0

3. Associated Knowledge Area(s)

- 702 - Requirements and Function of Nutrients and Other Food Components
- 703 - Nutrition Education and Behavior
- 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxins

- 721 - Insects and Other Pests Affecting Humans
- 722 - Zoonotic Diseases and Parasites Affecting Humans
- 723 - Hazards to Human Health and Safety

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Appropriations changes
- Public Policy changes
- Natural Disasters (drought,weather extremes,etc.)
- Competing Programatic Challenges
- Competing Public priorities
- Populations changes (immigration,new cultural groupings,etc.)
- Government Regulations
- Economy

Description

Florida is a state located in the tropics. Natural disasters such as tropical storms and hurricanes are common annual occurrences in this state. Severe weather conditions such as droughts frequently led to large-scale fires. Florida also has other weather extremes such as floods leading to large scale damage especially along the coastal regions.

Florida has three international shipping ports: Miami, Jacksonville and Tampa. These cities all have international airports. Along with this we have over 53 million tourists visiting from around the world. It has been estimated that this international influx into Florida has made us the entry point of one new invasive pest, plant or disease each week. Any of this could be an external factor affecting land-grant research outcomes.

Changes may occur because of:
The loss of test sites from storm damage
An invasive species that requires priority
Changes in public priorities
Changes in state, county and federal appropriations
Changes in governmental regulations
Loss of public or private funding opportunities

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

1. Evaluation Studies Planned

- Retrospective (post program)
- Case Study
- During (during program)
- Before-After (before and after program)
- Time series (multiple points before and after program)
- Comparison between locales where the program operates and sites without program intervention
- After Only (post program)

Description

Florida IFAS/research understands the importance of evaluating projects to provide scientifically accurate information and recommendations. Accepted research guidelines and procedures are followed.

2. Data Collection Methods

- Case Study
- Sampling
- On-Site
- Tests
- Structured
- Unstructured
- Whole population
- Portfolio Reviews
- Telephone
- Journals
- Observation
- Mail

Description

Florida IFAS/research uses a variety of acceptable forms of qualitative and quantitative data collection methods.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Maintain and Enhance Florida's Environment

2. Brief summary about Planned Program

Maintaining and enhancing Florida's environment looks specifically at:
Water resources
Conservation and sustainable use of freshwater and terrestrial natural resources and ecosystems
Environmental education
Conservation and sustainable use of coastal and marine natural resources and ecosystems

3. Program existence : Intermediate (One to five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 102 5% Soil, Plant, Water, Nutrient Relationships
- 103 5% Management of Saline and Sodic Soils and Salinity
- 104 5% Protect Soil from Harmful Effects of Natural Elements
- 111 5% Conservation and Efficient Use of Water
- 112 5% Watershed Protection and Management
- 131 5% Alternative Uses of Land
- 132 5% Weather and Climate
- 133 5% Pollution Prevention and Mitigation
- 134 5% Outdoor Recreation
- 135 5% Aquatic and Terrestrial Wildlife
- 136 5% Conservation of Biological Diversity
- 141 5% Air Resource Protection and Management
- 216 5% Integrated Pest Management Systems
- 403 5% Waste Disposal, Recycling, and Reuse
- 605 5% Natural Resource and Environmental Economics
- 608 5% Community Resource Planning and Development
- 610 5% Domestic Policy Analysis
- 723 5% Hazards to Human Health and Safety
- 803 5% Sociological and Technological Change Affecting Individuals, Families and Communities
- 804 5% Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Situation StatementFlorida depends heavily on a healthy and sustainable environment. For example, freshwater is a critical resource for agriculture, industry, natural systems, tourism, and the health and convenience of all Floridians. From another view, Florida is a saltwater state. Its estuarine, coastal and marine systems stretch further than all the other Atlantic states from Georgia to New England, and they produce over $5 billion in fisheries and wildlife resources each year, buffer coastal areas from storms, absorb pollutants and provide amenities for coastal settlement, trade and tourism, including over 1 million boaters and divers per year. Terrestrial and freshwater flora and fauna also contribute significantly to Florida’s economy and the quality of life enjoyed by residents and tourists. People recognize the value of their environment. For example, prevention of water pollution, protecting the marine environment, and conservation of wildlife habitat and endangered species were rated as high priority educational issues by 72%, 64% and 50% of respondents to a 1999 survey. As shown by this survey, there is an opportunity and

need to inform and educate Floridians about their environment.The sustainability and health of Florida's environment is under pressure from a range of human activities. For example, Florida's water supply is currently sufficient, but experts predict that the 700 new residents arriving in Florida each day will increase demand to 9.3 billion gallons per day by 2020. This increase will put severe pressure on the state's water and other natural resources. The number of people living in Florida also increases potentially damaging inputs that enter coastal waters via watersheds and runoff. For example, household pesticide use is one factor that leads to five of Florida's estuaries being among the ten U.S. estuaries most threatened by pesticides. Historical losses of 50% of the salt marsh, 60% of the seagrass, and 85% of the mangroves in some of Florida's estuaries also need to be repaired. In addition, Florida ranks third among states in the number of plants and animals federally listed as being in danger of becoming extinct, and half of all Florida's non-marine vertebrates are declining in number. Successful management of these threats will require raised awareness, widespread distribution of useful information, suitable skills, and the demonstration of alternative behaviors that can ensure the quality and quantity of Florida's natural resources.The overall objective of this Goal is to sustain or enhance Florida's environment by increasing relevant knowledge and by motivating citizens, professionals, and agency personnel to take actions that reduce impacts on these valuable resources. The primary impact of this work will be increased efforts to apply sustainable management in Florida. This impact hinges on promoting increased awareness and understanding of ecological, economic, social and management principles and processes among citizens, professionals, and agency personnel. Tangible results include an increased involvement of citizens in monitoring and management, an increased use of key ecological concepts in discussions held by state and federal management agencies, and an increased awareness and use of adaptive and participative management. Programs that improve the skills and resources available to environmental educators also represent critical elements in achieving these objectives.

2. Scope of the Program

- Integrated Research and Extension
- Multistate Extension
- Multistate Integrated Research and Extension
- In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

People will be motivated by workshops and other educational activities to learn/change
Information on best practices shows that these approaches work well for these target audiences
Changes suggested in activities related to this program will improve quality of life for participants

2. Ultimate goal(s) of this Program

Increased understanding of Florida's coastal and marine environment.
Increased skills related to reducing impacts from human activity on Florida's coastal and marine environment.
Improved procedures and techniques to reduce environmental impact from human activity.
Improved compliance with local, state, and federal regulations.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	33.0	1.0	0.0	0.0
2009	33.2	1.0	0.0	0.0
2010	33.5	1.0	0.0	0.0
2011	33.9	1.0	0.0	0.0
2012	33.9	1.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Conduct workshops and meetings
Deliver services
Develop products, curriculum, resources
Provide training
provide counseling
Make assessments
work with the media
develop partnerships

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
• Group Discussion • Workshop • Demonstrations • Education Class • One-on-One Intervention • Other 1 (telephone calls)	• Newsletters • TV Media Programs • Public Service Announcement • Web sites • Other 1 (radio)

3. Description of targeted audience

Recreation Service Operations
Construction Operations
Agricultural Operations
Landscape and Horticultural Service Operations
Homeowners
Adults
Adult Volunteers
Renters
School Age Youth
Youth Volunteers
Administrators of Education
County Government
Administrators of Environmental Quality

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	300000	1100000	0	0
2009	300000	1100000	0	0
2010	300000	1100000	0	0
2011	300000	1100000	0	0
2012	300000	1100000	0	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 **2009 :**0 **2010 :** 0 **2011 :**0 **2012 :** 0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	30
2009	0	35
2010	0	40
2011	0	45
2012	0	50

V(H). State Defined Outputs

1. Output Target

- {NO DATA ENTERED}

{NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED}

V(I). State Defined Outcome

1. Outcome Target

Field trials
classroom enrichment

2. Outcome Type : Change in Condition Outcome Measure

2008 :10 **2009 :** 10 **2010 :** 10 **2011 :**10 **2012 :** 0

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 103 - Management of Saline and Sodic Soils and Salinity

- 104 - Protect Soil from Harmful Effects of Natural Elements
- 111 - Conservation and Efficient Use of Water
- 112 - Watershed Protection and Management
- 131 - Alternative Uses of Land
- 132 - Weather and Climate
- 133 - Pollution Prevention and Mitigation
- 134 - Outdoor Recreation
- 135 - Aquatic and Terrestrial Wildlife
- 136 - Conservation of Biological Diversity
- 141 - Air Resource Protection and Management
- 216 - Integrated Pest Management Systems
- 403 - Waste Disposal, Recycling, and Reuse
- 605 - Natural Resource and Environmental Economics
- 608 - Community Resource Planning and Development
- 610 - Domestic Policy Analysis
- 723 - Hazards to Human Health and Safety
- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
- 804 - Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

1. Outcome Target

Participants implementing BMPs
Clientele increasing knowledge
Participants using Improved irrigation systems and technology
Increased crop yields
Participants implementing BMPs
Clientele increasing knowledge
Number of participants that understand the economic impact of Florida's coastal and marine environment
Number of participants that understand the ecological impact of human activity on Florida's coastal and marine environment
Number of participants that understand the social and management principles related to Florida's coastal and marine environment
Number of participants that improve competencies related to the economic impact of Florida's coastal and marine environment
Number of participants that improve skills related to the ecological impact of human activity on Florida's coastal and marine environment
Number of participants that improve social and management principles competencies related to Florida's coastal and marine environment
Number of participants that implement recommended practices related to improving Florida's coastal and marine environment
Number of participants that understand federal regulations related to coastal and marine environment
Number of participants that understand state regulations related to coastal and marine environment
Number of participants that understand local regulations related to coastal and marine environment

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 0	**2009 :** 0	**2010 :** 0	**2011 :** 0	**2012 :** 0

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 103 - Management of Saline and Sodic Soils and Salinity
- 104 - Protect Soil from Harmful Effects of Natural Elements
- 111 - Conservation and Efficient Use of Water
- 112 - Watershed Protection and Management
- 131 - Alternative Uses of Land
- 132 - Weather and Climate
- 133 - Pollution Prevention and Mitigation
- 134 - Outdoor Recreation
- 135 - Aquatic and Terrestrial Wildlife
- 136 - Conservation of Biological Diversity
- 141 - Air Resource Protection and Management
- 216 - Integrated Pest Management Systems
- 403 - Waste Disposal, Recycling, and Reuse
- 605 - Natural Resource and Environmental Economics
- 608 - Community Resource Planning and Development
- 610 - Domestic Policy Analysis
- 723 - Hazards to Human Health and Safety
- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
- 804 - Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Appropriations changes
- Competing Public priorities
- Government Regulations
- Public Policy changes
- Economy
- Competing Programatic Challenges

Description

Florida is a state located in the tropics. Natural disasters such as tropical storms and hurricanes are common annual occurrences in this state. Severe weather conditions such as droughts frequently led to large-scale fires. We also have other weather extremes such as floods leading to large scale damage especially along the coastal regions.

Florida also has three international shipping ports: Miami, Jacksonville and Tampa. These cities all have international airports. Along with this we have over 53 million tourists visiting from around the world. It has been estimated that this international influx into Florida has made us the entry point of one new invasive pest, plant or disease each week. Any of this could be an external factor affecting land-grant outcomes.

Changes in state, county and federal appropriations can also affect the outcomes.

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

1. Evaluation Studies Planned

- Time series (multiple points before and after program)
- Before-After (before and after program)
- Case Study
- After Only (post program)
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- Retrospective (post program)
- During (during program)
- Comparisons between program participants (individuals,group,organizations) and non-participants

Description

The Florida land-grant college understands the value of evaluation in our annual program plan. Methods of evaluation are included as part of the annual faculty activity plan of work and report of accomplishment process (unifas). This information is collected as part of the logic model used in our Florida system and will be available for the CSREES reports of accomplishment on a yearly basis.

2. Data Collection Methods

- Case Study
- Tests
- Telephone
- Unstructured
- Structured
- Portfolio Reviews
- Sampling
- Journals
- Mail
- Observation
- Whole population
- On-Site

Description

The Florida land-grant colleges use acceptable forms of qualitative and quantitative data collection methods.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Natural Resources and Environment--research

2. Brief summary about Planned Program

Landscape and Turf-grass management
Landscape conservation and ecology
Consumer horticulture--people, plants and environment
Natural resources and environment
Soil, plant, water and nutrient relationships
Forestry
Management and range resources

3. Program existence : Intermediate (One to five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 101 20% Appraisal of Soil Resources
- 102 10% Soil, Plant, Water, Nutrient Relationships
- 111 10% Conservation and Efficient Use of Water
- 121 10% Management of Range Resources
- 122 10% Management and Control of Forest and Range Fires
- 132 10% Weather and Climate
- 133 10% Pollution Prevention and Mitigation
- 134 10% Outdoor Recreation
- 135 10% Aquatic and Terrestrial Wildlife

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Florida's population growth and associated pressure on land, water, and natural resources of Florida in order to sustain the natural systems pose difficult choices. Research in the area of natural resources and environment addresses the use of soil, water, forest and range resources, natural resources and air and helps to provide factual information and direction. These projects can range from aquatic life to the conservation and efficient use of water within the environment. Some research areas of interest include:

Landscape and Turf-grass Management - pro-vides research that will ensure the successful establishment of landscape plants and turf-grass without polluting the environment or wasting resources. These projects range from the proper use of fertil-izer in the landscape to the fate of pesticides on golf courses.
The Environmental Horticulture Program addresses the use of ornamental plants and turf-grasses for home and commercial land-scapes and for beautification in the home and office. Today, teach-ing, research and extension programs blend current day recommen-dations with the need to maintain and enhance our environment and preserve our natural resources. Florida faces many challenges in the future with efficient water use and prevention of runoff, produc-tion of a broad range of plant material for distribution world-wide and the need for highly qualified individuals to fill critical industry jobs.

Landscape Conservation and Ecology – Florida, by virtue of its size, diversity, geographic location and multiple climatic zones

provides unique opportunities for modeling a sustainable horticul-tural industry in subtropical and tropical regions throughout the world. The components of the success of this model are develop-ment of appropriate propagation and production techniques and introduction of new plants to the industry. Research to develop micropropagation techniques has led to rapid availability of sea oats and wetland plants for beach and landscape restoration. An ad-ditional component, invasive plant evaluation, is being addressed for existing plants and new plant introductions.

Consumer Horticulture-People, Plants and the Envi-ronment – research has been identifying and producing environmentally sound landscape and gardening practices for the citizens of Florida in order to sustain the natural beauty and protect the natural resources of Florida, and to promote quality of life for residents and tourists.

Natural Resources and Environment: Florida's population growth and associated pressures on land, water, and natural systems pose difficult policy choices for public officials. Environmental and resource problems and policies affect agriculture and Florida's rural communities. The need for research increases as the competition between agricultural and nonagricultural users of land and water in-tensifies. These conflicting issues are clearly part of the management challenge in commercial agriculture. Natural resource and environ-mental economics, including marine economics, are the primary subject matter for research projects in this area.

Soil, Plant, Water and Nutrient Relationships

Both Pb and arsenic contamination in soils and groundwater has been a concern for the public due to the extensive contamination and toxicity to humans. Some studies in this area were conducted to determine the feasibility of using chemical (P-induced Pb immobilization) and biological (plant-based phytoextraction) methods in cleaning up metal contaminants soils and groundwater.

Forestry

Agroecosystems, especially small-scale produc-tion systems in the southeastern United States, are challenged as never before with natural resource management problems. According to USDA Census of Agriculture (2002), 88 percent of farms in Florida are considered small farms (annual sales less than $250,000), 84 percent of which are individually or family owned; but they constitute 56 percent of total agricultural income in the state. Similarly, out of the 6.6 million hectares (16.3 million acres) of forestlands in Florida, 52 percent are non-industrial private lands. Clearly, small farms and timber operations are significant drivers of the state's economy. These small-scale operations are under increasing pressures – if not threats – caused by various changes. The increasing impact of a rapidly urbanizing landscape on the wildland-urban interface creates significant changes in ecosystem characteristics such as increased fire danger, changes in water drainage patterns leading to soil erosion and flooding, and fragmentation of wildlife habitat. Agricultural non-point source pollution is a significant cause of stream and lake contamina-tion and prevents attainment of water quality goals in the Clean Water Act. The problem of phosphorus (P) loss from soil is a major concern in fertilized agricultural and forestry enterprises, particularly in coarse-textured, poorly drained soils of the south-east, where drainage water ultimately mixes with surface water. The potential for P loss from fertilized pastures resulting in water quality degradation is a particularly serious issue. Faced with these consequences of rapid land-use changes, research related to the small-farm com-munity of the Southeast is under pressure identify land manage-ment practices that are economically and ecologically sustainable. Integrated systems such as agroforestry that provide economic advantages of diversified production as well a&

2. Scope of the Program

- In-State Research
- Multistate Integrated Research and Extension
- Multistate Research

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Improvements provided by these research projects will improve the quality of life for Florida residents
Improvements provided by these research projects will improve the environment
Information provided by these research projects will improve the economic well-being of Florida residents

2. Ultimate goal(s) of this Program

Improve management recommendation to long-term responses of tree and grass populations under experimental treatments of fire and grazing .

Identify land manage-ment practices that are economically and ecologically sustainable.

Integrated systems such as agroforestry that provide economic advantages of diversified production as well as ecological benefits of mixed systems seem appropriate in this scenario.

Determine the feasibility of using chemical (P-induced Pb immobilization) and biological (plant-based phytoextraction) methods in cleaning up metal contaminants soils and groundwater

Through research identify viable choices related to policy choices concerning pressures on land, water, and natural systems

Identify and produce environmentally sound landscape and gardening practices for the citizens of Florida in order to sustain the natural beauty and protect the natural resources of Florida

Provides unique opportunities for modeling a sustainable horticul-tural industry in subtropical and tropical regions throughout the world.

pro-vides research that will ensure the successful establishment of landscape plants and turf-grass without polluting the environment or wasting resources.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	0.0	0.0	60.5	0.0
2009	0.0	0.0	61.0	0.0
2010	0.0	0.0	61.5	0.0
2011	0.0	0.0	62.0	0.0
2012	0.0	0.0	62.1	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Conduct Research Experiments
Construct Research Facilities
Partnering

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	**Indirect Methods**
• Demonstrations • Workshop • Group Discussion • One-on-One Intervention • Education Class	• Web sites • Newsletters

3. Description of targeted audience

homeowners
producers/growers
policy regulators
visitors to the state

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	0	0	0	0
2009	0	0	0	0
2010	0	0	0	0
2011	0	0	0	0
2012	0	0	0	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 : 1 **2009 :** 1 **2010 :** 1 **2011 :** 1 **2012 :** 1

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	150	0
2009	155	0
2010	160	0
2011	165	0
2012	170	0

V(H). State Defined Outputs

1. Output Target

- {NO DATA ENTERED}

{NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED}

V(I). State Defined Outcome

1. Outcome Target

Develop BMPs
Develop technology that improves the environment and natural resources
Provide research based knowledge in areas related to natural resources and the environment

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :0 **2009 :** 0 **2010 :** 0 **2011 :**0 **2012 :** 0

3. Associated Knowledge Area(s)

- 101 - Appraisal of Soil Resources
- 102 - Soil, Plant, Water, Nutrient Relationships
- 111 - Conservation and Efficient Use of Water
- 121 - Management of Range Resources
- 122 - Management and Control of Forest and Range Fires
- 132 - Weather and Climate
- 133 - Pollution Prevention and Mitigation
- 134 - Outdoor Recreation
- 135 - Aquatic and Terrestrial Wildlife

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Economy
- Competing Public priorities
- Populations changes (immigration,new cultural groupings,etc.)
- Government Regulations
- Appropriations changes
- Natural Disasters (drought,weather extremes,etc.)
- Competing Programatic Challenges
- Public Policy changes

Description

Florida is a state located in the tropics. Natural disasters such as tropical storms and hurricanes are common annual occurrences in this state. Severe weather conditions such as droughts frequently led to large-scale fires. Florida also has other weather extremes such as floods leading to large scale damage especially along the coastal regions.

Florida has three international shipping ports: Miami, Jacksonville and Tampa. These cities all have international airports. Along with this we have over 53 million tourists visiting from around the world. It has been estimated that this international influx into Florida has made us the entry point of one new invasive pest, plant or disease each week. Any of this could be an external factor affecting land-grant research outcomes.

Changes may occur because of:
The loss of test sites from storm damage
An invasive species that requires priority
Changes in public priorities
Changes in state, county and federal appropriations
Changes in governmental regulations
Loss of public or private funding opportunities

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

1. Evaluation Studies Planned

- Retrospective (post program)
- Time series (multiple points before and after program)
- During (during program)
- Comparisons between program participants (individuals,group,organizations) and non-participants
- Comparison between locales where the program operates and sites without program intervention
- After Only (post program)
- Before-After (before and after program)
- Case Study
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.

Description

Florida IFAS/research understands the importance of evaluating projects to provide scientifically accurate information and recommendations. Accepted research guidelines and procedures are followed.

2. Data Collection Methods

- Sampling
- Tests
- Whole population
- Case Study
- Mail
- Telephone
- Observation
- Journals
- On-Site
- Portfolio Reviews
- Structured
- Unstructured

Description

Florida IFAS/research uses acceptable forms of qualitative and quantitative data collection methods.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Plants and Their Systems-research

2. Brief summary about Planned Program

Biological Control of pests affecting plants
Agronomy
Water management and plant nutrition
Biotechnology, plant breeding and new crop development
plant production management
Horticulture
Plant product quality

3. Program existence : Intermediate (One to five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 201 10% Plant Genome, Genetics, and Genetic Mechanisms
- 202 10% Plant Genetic Resources
- 203 10% Plant Biological Efficiency and Abiotic Stresses Affecting Plants
- 204 10% Plant Product Quality and Utility (Preharvest)
- 205 10% Plant Management Systems
- 206 10% Basic Plant Biology
- 211 10% Insects, Mites, and Other Arthropods Affecting Plants
- 212 10% Pathogens and Nematodes Affecting Plants
- 213 10% Weeds Affecting Plants
- 215 10% Biological Control of Pests Affecting Plants

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Plants and their systems include research in the areas of plant production and plant protection. Without plant life there could be no agriculture, and the systematic production and utilization of a major group of plants – a keystone of agriculture. Florida IFAS research is responsible for investigating and reporting finds necessary to ensure that this keystone remains strong, dynamic, relevant and intact. The size and diversity of the domestic industry and the world-wide importance of fruits and vegetables in human nutrition and economic development related to plants in landscape emphasize the need for consolidation of resources to accomplish this purpose. Some areas of research that are included and use Hatch funds are:

Biological Control of Pests Affecting Plants

The use of plant pathogens as bioherbicides has been a feasible method of weed control in several cases. Two registered bioherbicides, Collego and DeVine, are sold in the United States. Development and use of bioherbicides can help to diversify weed control options, supplement chemical herbicides, and provide an alternative to methyl bromide. Several projects studies the development of several bioherbicide agents shown to be effective in small-scale and noncommercial trials.

Agronomy

The main aim of Agronomy research in Florida is to discover, develop, evaluate and disseminate knowledge and information

necessary to support the agronomic-related industries of the State and nation, and to promote and enhance the production and utilization of agronomic commodities and the management of pest plant species for the benefit of society.

Water Management and Plant Nutrition – Research in this area is identifying, developing and disseminating environmentally and economically sound technolo-gies that will increase production and utilization efficiencies
as well as protect or improve environmental quality. Research is providing significant results leading to water conservation in nurseries, land-scapes and on golf courses. New research is addressing the water and fertilizer requirements of turf-grasses and landscape plants.

Biotechnology, Plant Breeding and New Crop Develop-ment – Through research IFAS scientists are striving to develop horticultural characteristics, disease and host/plant resistance through classical genetics and molecular techniques, allowing the creation of marketable products for consumers. Today, the floral biotechnology program is among the leading programs nationally and internationally.

Plant Production Management – Through the work of research plant production management is a source of sound research-based information being made available to the professional horticultural industry, the scientific community and the consumer/student. These projects are viewed as leading in crop production and physiology information and will set an example for the industry in environmen-tally safe practices.

Horticulture
In the area of horticulture, research is solving immediate technical problems facing the fruit and vegetable industries. They are developing new information, materials and techniques to increase the efficiency of production, harvest and post-harvest handling. Their mission is to develop basic information on the genetics, growth, development and senescence of these crops through a continuous reservoir of research in breeding and genetics, biotechnology and molecular biology, biochemistry, and physiology that is at the forefront of knowledge applicable immediately or in the future.

Plant Product Quality
In this area plants such as strawberry cultivars are being developed that improve quality characteristics. This is especially important in Florida where strawberries are an important crop.

2. Scope of the Program

- Multistate Integrated Research and Extension
- Integrated Research and Extension
- Multistate Research
- In-State Research

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Improvements provided by these research projects will improve Plants and their systems
Improvements provided by these research projects will improve the environment
Information provided by these research projects will improve the economic well-being of Florida residents

2. Ultimate goal(s) of this Program

Development and use of bioherbicides can help to diversify weed control options, supplement chemical herbicides, and provide an alternative to methyl bromide

Discover, develop, evaluate and disseminate knowledge and information necessary to support the agronomic-related industries of the State and nation,

Promote and enhance the production and utilization of agronomic commodities and the management of pest plant species for the benefit of

society.

Developing and disseminating environmentally and economically sound technolo-gies related to water management and plant nutrition that will increase production and utilization efficiencies

Develop horticultural characteristics, disease and host/plant resistance through classical genetics and molecular techniques, allowing the creation of marketable products for consumers

Research and develop crop production and physiology information and will set an example for the industry in environmen-tally safe practices.

Research and solve immediate technical problems facing the fruit and vegetable industries including the development of new information, materials and techniques to increase the efficiency of production, harvest and post-harvest handling

Develop new food plant cultivars that have improved quality characteristics.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	0.0	0.0	156.2	0.0
2009	0.0	0.0	156.4	0.0
2010	0.0	0.0	156.8	0.0
2011	0.0	0.0	157.0	0.0
2012	0.0	0.0	157.2	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Conduct Research Experiments
Partnering

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
• Demonstrations • Education Class • One-on-One Intervention • Workshop • Group Discussion	• Newsletters • Web sites

3. Description of targeted audience

Florida citizens with an interest in plants and plant science
May include among others:
growers
producers
general public

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	0	0	0	0
2009	0	0	0	0
2010	0	0	0	0
2011	0	0	0	0
2012	0	0	0	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 : 1 **2009 :** 1 **2010 :** 1 **2011 :** 1 **2012 :** 1

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	200	0
2009	205	0
2010	210	0
2011	215	0
2012	220	0

V(H). State Defined Outputs

1. Output Target

- {NO DATA ENTERED}

{NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED} {NO DATA ENTERED}

V(I). State Defined Outcome

1. Outcome Target

New solutions to critical need areas related to plants and their systems will be developed.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 0 **2009 :** 0 **2010 :** 0 **2011 :** 0 **2012 :** 0

3. Associated Knowledge Area(s)

- 201 - Plant Genome, Genetics, and Genetic Mechanisms
- 202 - Plant Genetic Resources
- 203 - Plant Biological Efficiency and Abiotic Stresses Affecting Plants

- 204 - Plant Product Quality and Utility (Preharvest)
- 205 - Plant Management Systems
- 206 - Basic Plant Biology
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 215 - Biological Control of Pests Affecting Plants

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Government Regulations
- Public Policy changes
- Competing Programatic Challenges
- Natural Disasters (drought,weather extremes,etc.)
- Populations changes (immigration,new cultural groupings,etc.)
- Economy
- Competing Public priorities
- Appropriations changes

Description

Florida is a state located in the tropics. Natural disasters such as tropical storms and hurricanes are common annual occurrences in this state. Severe weather conditions such as droughts frequently led to large-scale fires. Florida also has other weather extremes such as floods leading to large scale damage especially along the coastal regions.

Florida has three international shipping ports: Miami, Jacksonvilleand Tampa. These cities all have international airports. Along with this we have over 53 million tourists visiting from around the world. It has been estimated that this international influx into Floridahas made us the entry point of one new invasive pest, plant or disease each week. Any of this could be an external factor affecting land-grant research outcomes.

Changes may occur because of:
The loss of test sites from storm damage
An invasive species that requires priority
Changes in public priorities
Changes in state, county and federal appropriations
Changes in governmental regulations
Loss of public or private funding opportunities

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

1. Evaluation Studies Planned

- Case Study
- Time series (multiple points before and after program)
- Retrospective (post program)
- Comparison between locales where the program operates and sites without program intervention
- During (during program)
- Comparisons between program participants (individuals,group,organizations) and non-participants
- After Only (post program)
- Before-After (before and after program)
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.

Description

Florida IFAS/research understands the importance of evaluating projects to provide scientifically accurate information and recommendations. Accepted research guidelines and procedures are followed.

2. Data Collection Methods

- Whole population
- Portfolio Reviews
- On-Site
- Structured
- Tests
- Observation
- Telephone
- Unstructured
- Case Study
- Sampling
- Mail

Description

Florida IFAS/research uses acceptable forms of qualitative and quantitative data collection methods.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Promoting professional development activities designed to enhance organizational efficiency and effe

2. Brief summary about Planned Program

Florida Landgrant faculty need the opportunity for personal improvement through planned programs designed to enhance organizational efficiency and effectiveness through participantion in:
Program development, implementation and evaluation
Professional development
Faculty orientation and training
Effective communication and technology use
Personal and organizational health
Administration and leadership

3. Program existence : Intermediate (One to five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 604 10% Marketing and Distribution Practices
- 610 10% Domestic Policy Analysis
- 802 10% Human Development and Family Well-Being
- 803 10% Sociological and Technological Change Affecting Individuals, Families and Communities
- 805 10% Community Institutions, Health, and Social Services
- 806 10% Youth Development
- 901 10% Program and Project Design, and Statistics
- 902 20% Administration of Projects and Programs
- 903 10% Communication, Education, and Information Delivery

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

The UF/IFAS Extension Service (CES) is a large and dynamic organization consisting of local, regional, and state educators, administrators, and support professionals. As such, its personnel needs are diverse, extensive, and changing. This is particularly true at the local level where over 360 (2004) county faculty work across multiple program areas with adults and youth. Like many other organizations, the rate of turnover in CES is a concern as an average of 25-30 new county faculty are hired each year. In addition, a large majority of new CES faculty at both the county and state levels have limited professional experience and academic preparation in the process dimensions that are fundamental to the success of Florida CES (UF/IFAS CES Professional Development Task Force, 1998).Technical, interpersonal, and programming skills are necessary to ensure the effectiveness of Extension program development, delivery, and accountability. An organization with knowledge development and education as its base must have an effective process in place to continually develop its own intellectual capital (Van Buren, 2001). Professional development opportunities that reflect relevant organizational needs will prepare new faculty members to assess customer needs – then develop, deliver, evaluate and revise educational program effort. Veteran professionals will enhance skills in delivering relevant programs for citizens in Florida and elsewhere.

2. Scope of the Program

- In-State Extension
- Integrated Research and Extension
- Multistate Integrated Research and Extension
- Multistate Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

People will be motivated by internal workshops and other educational activities to learn/change
Information on best practices shows that these approaches work well for employees of Florida Extension
Changes suggested in activities related to this program will improve quality of life for Extension faculty and staff

2. Ultimate goal(s) of this Program

Improved delivery of Extension programs.
Improved procedures and techniques to evaluate Extension Programs

Improved communication methods and techniques
Improved Development and Management of Volunteers
Improved faculty and staff satisfaction
Improved procedures and techniques to manage human resources.
Improved procedures and techniques to plan county programs

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	55.2	0.5	0.0	0.0
2009	55.4	0.5	0.0	0.0
2010	55.6	0.5	0.0	0.0
2011	55.8	0.5	0.0	0.0
2012	55.9	0.5	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Conduct workshops and meetings
Deliver services
Develop products, curriculum, resources
Provide training
provide counseling
Make assessments
work with the media
develop partnerships

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
• One-on-One Intervention • Demonstrations • Other 1 (telephone calls) • Workshop • Education Class	• Newsletters • Web sites

• Group Discussion	

3. Description of targeted audience

Administrators

County Faculty and Staff

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	64000	2500000	0	0
2009	64000	2500000	0	0
2010	64000	2500000	0	0
2011	64000	2500000	0	0
2012	64000	2500000	0	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 **2009 :**0 **2010 :** 0 **2011 :**0 **2012 :**0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	10
2009	0	15
2010	0	20
2011	0	25
2012	0	30

V(H). State Defined Outputs

1. Output Target

•

2008 :10 **2009 :**10 **2010 :** 10 **2011 :**10 **2012 :**0

V(I). State Defined Outcome

1. Outcome Target

Number of program participants that indicate information is up-to-date and accurate
Number of program participants that indicate information was delivered in time to use it
Number of program participants that indicate information is relevant to their situation
Number of program participants that indicate information is easy to understand
Number of program participants that indicate they used Extension information to solve a problem

Number of program participants that indicate Extension information solved a problem
Number of program participants that are satisfied with Extension's services.
Number of faculty using appropriate evaluation procedures

Number of faculty with activities planned, implemented and evaluated by volunteers.
Number of faculty with volunteers leading other volunteers.
Number of faculty using effective volunteer development strategies.
Number of faculty using appropriate technology
Number of faculty using appropriate delivery methods
Number of faculty utilizing appropriate marketing methods and techniques
Number of faculty and staff receiving personal growth development
Number of faculty satisfied with their job.
Number of Faculty and Staff with high levels of performance
Number of planning sessions that include advisory members
Number of planning sessions that include governmental officials
Number of planning sessions that include faculty and staff
Number of participants that are satisfied with the information received from Extension
Number of participants that solved a problem using Extension's information.
Number of educational activities that involve multiple faculty/collaborators.
Number of new initiatives funded by grants and contracts
Number of new initiatives funded by county government
Number of new initiatives funded by state government
Number of extension positions

2. Outcome Type : Change in Condition Outcome Measure

2008 : 10	**2009 :** 10	**2010 :** 10	**2011 :** 10	**2012 :** 0

3. Associated Knowledge Area(s)

- 604 - Marketing and Distribution Practices
- 610 - Domestic Policy Analysis
- 802 - Human Development and Family Well-Being
- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development
- 901 - Program and Project Design, and Statistics
- 902 - Administration of Projects and Programs
- 903 - Communication, Education, and Information Delivery

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Public Policy changes
- Economy
- Competing Programatic Challenges
- Natural Disasters (drought,weather extremes,etc.)
- Appropriations changes
- Government Regulations
- Competing Public priorities
- Populations changes (immigration,new cultural groupings,etc.)

Description

Any changes in appropriations could impact Extension profession development activities. Although promoting professional development is important the first line is always providing educational programs in critical need areas to Florida's population.

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

1. Evaluation Studies Planned

- Case Study
- Before-After (before and after program)
- During (during program)
- After Only (post program)
- Time series (multiple points before and after program)

Description

The Florida land-grant college understands the value of evaluation in our annual program plan. Methods of evaluation are included as part of the annual faculty activity plan of work and report of accomplishment process (unifas). This information is collected as part of the logic model used in our Florida system and will be available for the CSREES reports of accomplishment on a yearly basis.

2. Data Collection Methods

- Structured
- On-Site
- Unstructured
- Sampling
- Journals
- Mail
- Observation
- Portfolio Reviews
- Telephone
- Case Study
- Whole population
- Tests

Description

The Florida land-grant colleges use acceptable forms of qualitative and quantitative data collection methods.