

# Role of the Institute of Food and Agricultural Sciences in the Production of a Wholesome Food Supply

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To understand the role of the University of Florida's Institute of Food and Agricultural Sciences (UF/IFAS) in the production of a wholesome food supply, one need only look at the organization's mission and vision statements which were developed as a part of a strategic planning process known as *Florida 2000 and Beyond* (Anon., 1995).

## MISSION

"To develop knowledge in agricultural, human, and natural resources, and to make that knowledge accessible to sustain and enhance the quality of human life."

## VISION

"The vision for UF/IFAS is to increase and strengthen the knowledge base and technology for:

EXPANDING the profitability of global competitiveness and sustainability of the food, fiber, and agricultural industries of Florida.

PROTECTING and SUSTAINING natural resource and environmental systems.

ENHANCING the development of human resources.

IMPROVING the quality of human life."

In order to implement the mission and vision in response to Florida's rapid socio-economic, technological and environmental changes, UF/IFAS has established nine initiatives. These initiatives represent specific interdisciplinary program areas and are included in the UF/IFAS annual budget request as critical issues to be funded as partnership programs with other agencies or private entities. These initiatives are:

### Environmentally Compatible Pest Control

As new exotic pest, environmental restrictions, and the loss of traditional control methods increase, agriculture and urban pest management will become more difficult threatening the \$6.0 billion agricultural

industry and urban environments. Integrated Pest Management (IPM) programs will target crop protection, urban pest management, and the protection of natural areas.

### Food Safety and Quality

Research and education programs will identify critical issues affecting the safe production, processing, and marketing of seafood and other meats, and vegetables. These programs will protect and enhance the economic viability of Florida food industries and provide for increased consumer safety and satisfaction.

### Sustainable Water Resources

In order to protect the state's water resources from agriculture operations and urban development, Best Management Practices (BMPs) will be developed for water quality protection, water conservation, urban and rural nutrient and pesticide management, exotic pest management, soil subsidence reduction, and wetland restoration.

### Sustainable Food and Agricultural Production Systems

Increasing food and fiber needs must be met with our current resource base. UF/IFAS programs will improve production efficiencies of farms, ranches, forest, nurseries, and groves while maintaining environmental compatibility. These efforts will require multi-disciplinary efforts among production agriculture, businesses, and human and natural resources.

### Animal Health and Environmental Toxicology

The public demand for a safe and wholesome food supply has never been greater. However, microbial agents like *E. coli* and *Salmonella* have been found in food of animal and plant origin and caused numerous human and food borne illnesses. Hazard analysis and critical control point (HACCP) programs are being developed to provide on farm and ranch training to make certain that food is disease and residue free when marketed.

### Youth and Family Development

Research and education programs will focus on parenting, resource management and nutrition, in an effort to reduce the number of low birth weight infants, improve nutrition and health and to reduce juvenile

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crime, school drop out rates and violent crime rates among teenagers.

#### **Developing Sustainable Rural Communities**

Rural communities need assistance to develop alternative, sustainable sources of economic activity in order to prevent further decline in rural economies. The program will concentrate on economic development through alternative enterprises, community development, and the development of community leadership.

#### **Expanded Quality Educational Experiences**

UF/IFAS will expand the opportunity for all Floridians to receive a high quality educational experience both on the central Gainesville campus and at other UF locations throughout the state. UF/IFAS is concentrating on increased availability of formal and informal programs through distance learning technologies, increased traditional classroom situations throughout the state, expanded multi-cultural experiences, interdisciplinary curricula, and improved recruiting and instruction.

#### **Agricultural and Natural Resource Policy**

Decisions and rules regarding land use rights, water allocation, and natural resource allocation among competing interests are rapidly evolving. These decisions affect all citizens including the food, agriculture and natural resource based industries; rural, urban, and coastal homeowners, developers and the tourist industry. However, little attention has been given to what the costs actually are nor to the resulting socio-economic effect. Research and education programs will inform policy makers on the economic impacts of agriculture and natural resource policies and regulations.

Because these initiatives integrate the functions of research, teaching, and extension so effectively, their existence reflects the strongest traditions of the Morrill Act of 1862 which established the Land Grant University system and later the Agricultural Experiment Stations through the Hatch Act of 1887 and the last of the triad, the Cooperative Extension Service, established in 1914 by the Smith-Lever Act. The UF/IFAS system has expanded through the establishment of a diverse and wide-spread system with faculty located at the main campus in Gainesville, at Research and Education Centers (RECs) throughout the state and county extension offices in each of Florida's 67 counties (Figure 1). Under this arrangement approximately 40 % of the faculty are located at the statewide RECs, but are tenured within their disciplinary department on the Gainesville campus.

The unique organizational feature of UF/IFAS is the close integration with a single organization of the

functions of research, extension, and teaching to meet the needs of the state in agriculture, human, and natural resources. This organizational structure was envisioned by Dr. E.T. York in 1964 with the establishment of UF/IFAS. As Figure 2 indicates, UF/IFAS has 645.5 FTEs of faculty effort; however, by spreading this effort through split assignments UF/IFAS is able to have 340 faculty involved in teaching activities, 565 in research, and 242 in extension. There are also an additional 245 county extension faculty. Thus, one can easily see that the value and unique role of UF/IFAS is the complementary faculty effort, thus maximizing efficiency, as opposed to competitive activities, among the functions of research, extension, and teaching. Faculty, students, and statewide clientele benefit from the integration of these functions within an individual faculty appointment. For example, research efforts provide up-to-date information to solve customer driven problems through the extension program. Likewise, the research effort receives the benefit of feedback from the extension program on the nature of emerging problems upon which to focus new research efforts. The teaching program benefits from a diverse pool of human capital that possesses the latest research information. Undergraduate students benefit from direct contact with faculty expertise and a greater efficiency of delivery. Graduate students benefit from faculty-directed hands-on research training and from financing derived from sponsored research efforts.

#### **SUMMARY**

As the state's Land Grant University, the University of Florida and UF/IFAS represent an ongoing investment in Florida's agriculture human and natural resources. Programs are conducted statewide within the context of a vision for expanding the profitability, global competitiveness, and sustainability of Florida agriculture protecting and sustaining natural resource and environmental systems in Florida, and enhancing the development of Florida's human resources (Koukas et al., 1997). This unique capability allows UF/IFAS to provide a service in partnership with Florida's sister agencies, as well as Federal and private entities.

#### **LITERATURE CITED**

- Anonymous, 1995. Institute of Food and Agricultural Sciences. Univ. of Florida, Gainesville, FL.
- Koukas, P., D. Mulkey, and H. Cothran. 1997. University of Florida Institute of Food and Agricultural Sciences: An Investment in Florida's Agricultural, Human, and Natural Resources. University of Florida. Gainesville, FL.

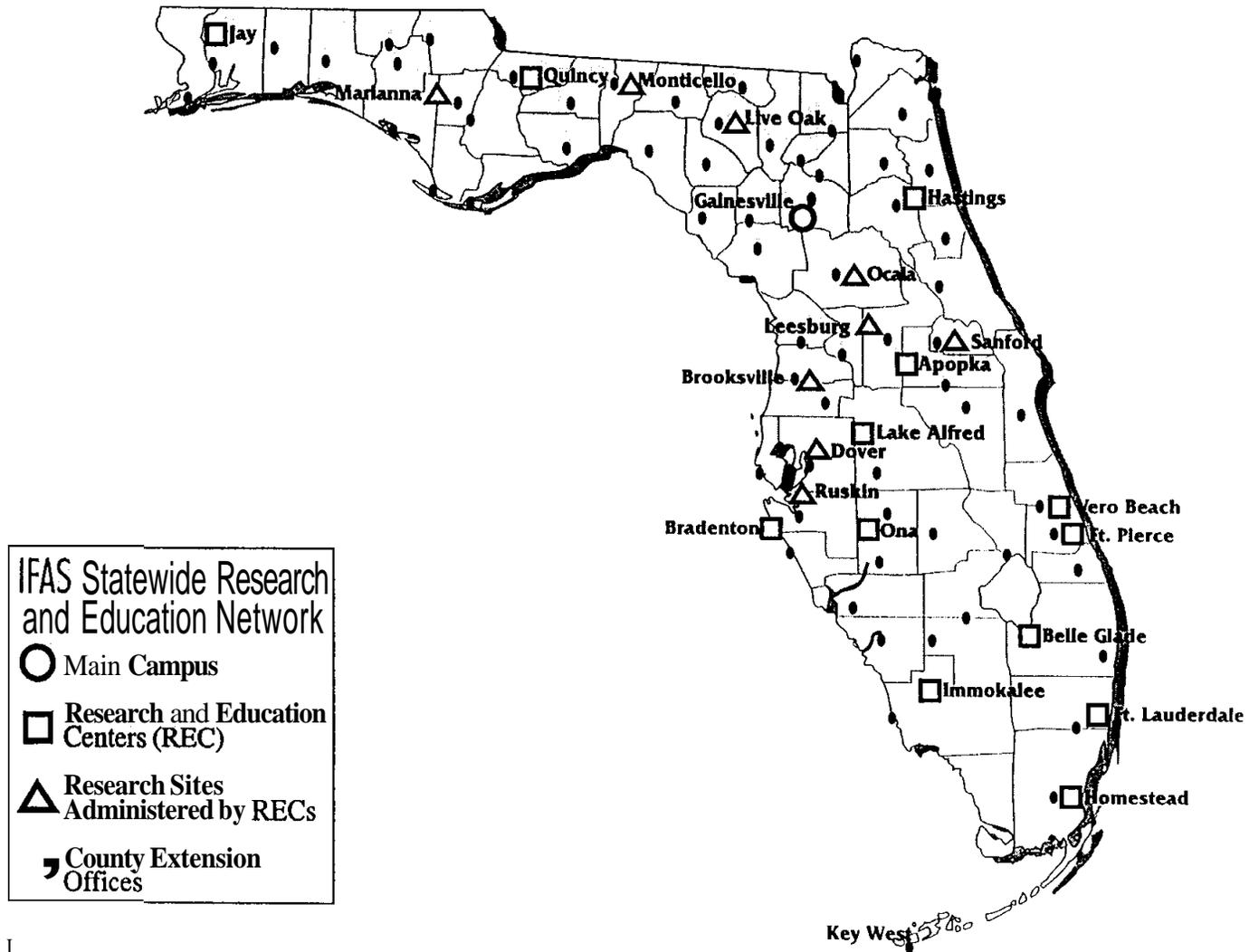
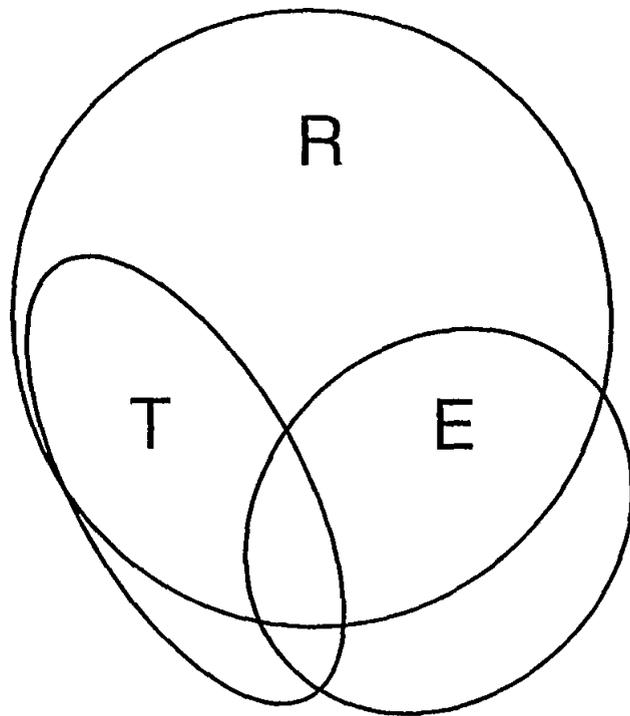


FIGURE 1

Figure 1. The UF/IFAS faculty located at the main campus in Gainesville, at Research and Education Centers (RECs) throughout the state, and county extension offices in each of Florida's 67 counties.

## 1995-96 UF/IFAS Faculty Effort Distribution



	FTEs Allocated	Faculty Assigned
Research	390.0	565
Teaching	118.5	340
Extension*	138.0	242
TOTAL	646.5	

\* Excludes 248 FTE county faculty.

FIGURE 2

**Figure 2. Numbers and distribution of UF/IFAS faculty among teaching, research, and extension assignments for 1995-1996.**