Internationalizing University of Florida IFAS Extension
Local Leaders and Extension Faculty Explore Biofuels in Brazil

Pete Vergot III, Ph.D., District Extension Director, University of Florida IFAS Extension, 155 Research Road, Quincy, Florida, USA, Telephone: (850) 875-7137, Fax: (850) 875-7189, Email: pvergot@ufl.edu

Walter T. Bowen, Ph.D., Associate Director, IFAS International Programs
Katherine Allen, Suwannee County Extension Director
John Atkins, Santa Rosa County, Agriculture Agent
Audrey R. Norman, Palm Beach County, County Extension Director
David Holmes, Marion County, County Extension Director
Stan Rosenthal, Leon County, County Agent Forestry
University of Florida IFAS Extension

Abstract
To continue the expansion of Internationalizing Extension at the University (xxxx), a unique Extension Brazil Biofuels study program was developed for teams of county commissioners and county extension faculty of Florida. Five county commissioners and five county extension faculty matched from the same counties and representatives from Extension Administration, Extension International Programs and a Research and Education Center participated in a seven day in-country study tour in the São Paulo State of Brazil. The weeklong study tour to Brazil was developed to see firsthand various components of the biofuels industry in the state of São Paulo. The group was unique in that the members were selected specifically for their interest in the biofuels industry and to advance the Internationalizing of Extension at the university extension system. The contribution of county governments to extension operations in Florida during 2007 was greater than $35 million; clearly they are an important partner in the overall extension and outreach program of extension at the land grant university.

The purpose of this program was to partner county government officials with Extension to gain firsthand knowledge of Biofuels and the challenges associated with local governments facing this issue. The objectives for Internationalizing Extension were to develop partnerships with other extension systems in Central and South America to assist in Internationalizing Extension, assist extension faculty in their development, by enhancing their capacity through firsthand knowledge and experience in other countries and to develop extension partners knowledge of the benefits of Internationalizing Extension in a global society. For this Extension study tour to Brazil which focused on the biofuels industry, the Internationalizing Extension objectives were to develop partnerships with public and private organizations contributing to the biofuels industry, provide the extension faculty and county commission partners with firsthand knowledge of all aspects of the biofuels industry in Brazil, including ethanol production and distribution, biodiesel production and distribution, and possible activities related to cellulosic ethanol.

The group made visits to agricultural fields and talked with producers directly involved in biofuel production and people involved in ethanol production associations for cooperative and
private ethanol production facilities. The group also discussed with university researchers and local officials on relevant research and policies related to creating an enabling environment for biofuels production and distribution.

The county extension faculty and commissioners teams came from five counties representing the many different constituencies and ecosystems found throughout the state of (xxxx). All had an interest in biofuels derived from many different sources of products including; ethanol from cellulose of forest products, biodiesel from oil producing crops, and other energy crops for ethanol such as sugarcane and sweet sorghum. Each commissioner was paired with a county extension faculty member interested in biofuels. Planning sessions were scheduled by the project leaders to prepare the members of the team prior to departure. This was the first international experience for many of the participants. Extension covered all trip expenses with special funds. The group was exposed to many facets of ethanol production including agriculture research universities, a sugarcane association, a private research and extension facility, a conglomerate getting into the ethanol plant business, sugar production and ethanol factories, a growers’ cooperative and a mill equipment manufacturing plant. The group was able to discuss the issues and ask questions about infrastructure, policies, research, actual processes, costs, and worker issues.

The commissioners and county extension faculty who participated toured a variety of Brazilian entities during the five days of visits within the São Paulo state of Brazil. The participants were educated firsthand about techniques like mechanical harvesting and biological pest control, which are being utilized to reduce the water consumption and pesticide usage. Participants visited mills which are creating bioelectricity to power the plants and sell the excess back to the grid and that flex-fuel vehicles have become standard. The group was taught about the three grades of ethanol, one of which is used in cognac production. These attendees would not have otherwise had the resources, contacts, or interest to schedule such an intensive agenda.

The participants gained firsthand knowledge of many types of biofuel development and production including inputs required for ethanol production, biodiesel production by visiting production plants and talking with researchers and producers directly involved in the production of products utilized by these production facilities. Participants also discussed policy issues with officials assisting biofuel production facilities and processes.

Recommendations and Educational Importance
The recommendation and educational importance of this project are to continue with the goals for Internationalizing Extension by continuing to develop partnerships from other Extension systems in Central and South America to assist in Internationalizing Extension, to assist our county extension faculty in their development by enhancing their capacity through firsthand knowledge and to develop our partners knowledge of the benefits of Internationalizing Extension in a global society.

**Key Words:** Extension, Stakeholder, Elected Officials, Biofuels