"Multilateral Trade Liberalization and the 1990 Farm Bill: Impacts on U.S. and Southern Agriculture." *Amy L. Angel and Parr Rasson III, Texas A&M University.*

Steps toward multilateral trade liberalization and lower farm program support levels promise major impacts upon U.S. agriculture as a whole and also on the South, where many trade-sensitive commodities are produced. This study uses a mathematical programming model to estimate these effects, analyzing production, trade, and welfare for major commodities. Results vary from commodity to commodity, but generally the producers of less protected products fare better than those of more highly subsidized commodities. Few distinct differences were found between results for the South and the United States as a whole in terms of direction or magnitude of changes.

"Estimated Impact of Immigration Reform on Selected Labor Intensive Crops." *Lewell Gunter and Chris Jarrett, University of Georgia, and Jim Duffield, USDA ERS.*

An important concern in the passage of the Immigration Reform and Control Act of 1986 (IRCA) was its impact on labor intensive agriculture. It is difficult to estimate the impact of IRCA on farm labor supply due to the lack of data on illegal workers in agriculture and uncertainty about the effectiveness of the IRCA. This research addresses the impact question by examining the sensitivity of production of four labor intensive crops (fresh tomatoes, grapes, apples and oranges) to various shifts in labor supply.

POSTERS PRESENTED

Annual Meeting, SAEA, Fort Worth, Texas, February, 1991

"Nursery Crop Insurance: Perceived Need and Awareness." *S. O. Osawani and S. P. Singh, Tennessee State University.*

The importance of nursery products in Tennessee's agricultural sector has increased tremendously. Cash receipts from marketing of nursery and greenhouse products in Tennessee were ranked fourth among sales of all agricultural products in 1989. In any business including nursery, effective risk management is very important. Crop insurance policies provide an avenue for an effective risk management. The current Nursery Crop Insurance Policy (89-56) does not, however, cover any nursery crops grown in the field. A survey was conducted in Tennessee to examine the need, awareness and potential of field grown nursery crops for multiperil insurance by nurserymen.

"Analyzing the Effectiveness of the 1985 Tobacco Improvement Act." *William M. Snell, Orlando D. Chambers, and Perry J. Nutt, University of Kentucky.*

This poster analyzed the effectiveness of the 1985 Tobacco Improvement Act in strengthening U.S. flue-cured and burley tobacco economies. The poster outlined the major changes in the production control and price support programs for U.S. flue-cured and burley tobaccos and discussed their impacts on U.S. tobacco quotas, price supports, international price competitiveness, loan stocks, exports, imports, and grower returns. In addition, the poster presented survey results of industry perceptions of the revised tobacco program along with opinions regarding various policy modifications to the 1985 Tobacco Improvement Act.

"Changing Competition in the World Soybean Market: A Comparative Analysis." *Amy Angel and C. Parr Eoaaon, Texas A&M University, and Charles E. Curtis, Jr., Clemson University.*

The decline in U.S. exports and production of soybeans has sparked controversy among casual observers and analysts alike. Relative competitiveness is the best measure to study the market competition due to pervasive government intervention and difficulty associated with measuring comparative advantage. A break-even yield analysis of production and marketing costs and export taxes is conducted for soybeans in Argentina and Brazil. Results are compared to a similar analysis of the Midwest United States, the Delta, and the Southeast. The comparison reveals that for full season soybean production and marketing, the United States and Brazil are at a competitive disadvantage. Under double-cropping soybeans and wheat, the Southeast and Argentina are the most competitive regions.

"Oklahoma's Value-Added Agricultural Export Industry: An Analysis of Export Market Activities." *Barbara Charlet and David Henneberry, Oklahoma State University.*

"Value-added" agricultural exports relative to bulk commodity exports have increased in recent years. Interviews were conducted to determine the level of export market development in Oklahoma's "value-added" industry sector. International food show participation was reported by 52 percent of the respondents. Approximately one-third reported semiformal market research and overseas travel related to international market investment. Moreover, 63 percent indicated a reliance on retained earnings for their initial export efforts. Inexperience, product acceptance, and regulatory compliance were perceived as impediments to successful foreign market penetration. Recommendations for improved performance were outlined, emphasizing long-term managerial commitments to exporting.

"Demand Estimates for U.S. Beef in Japan." *Bruce Lambert, Louisiana State University and Kim Jensen, University of Tennessee.*

The objective of this study was to estimate the demand for U.S. beef in Japan. Two demand systems were estimated via the AIDS model. In the first system, imports were assumed to compete with other broad meat groups. The second system assumed that imported beef competes with other meats of the same quality level. The results from both systems show imported beef is more income elastic than domestically produced beef. Consumption of U.S. beef was more responsive to own price and income changes than was imported beef from other sources.

"International Trade Development Centers." *Mary A. Marchant and Michael R. Reed, University of Kentucky.*

Congress recognized the importance of international agricultural markets and funded the creation of International Trade Development Centers (ITDCs) in the Food Security Act of 1985. This poster presents both general information on ITDCs as a whole, and specific information on an existing Southern ITDC using the Center for Agricultural Export Development at the University of Kentucky as an example. Results (1) provide viewers with a better understanding of ITDCs, (2) encourage use of ITDC services and materials by interested viewers and (3) demonstrate how the academic and private sectors work cooperatively to expand agricultural exports, as demonstrated by the experience of the Center for Agricultural Export Development.

"EC 1992 Confronts Developing Countries." *Terri Raney and Liana Neff, USDA ERS.*

By the end of 1992, the European Community plans to eliminate all internal barriers to the free movement of goods, people, capital and services. EC 1992 is expected to affect developing countries' trade via downward pressure on EC internal prices; harmonized phytosanitary, sanitary, and food safety regulations; and modification of the internal EC market for Lome protocol commodities. An ARIMA model is used to examine the implications of EC 1992 on agricultural trade flows for the Lome African, Caribbean and Pacific (ACP) trading group, non-ACP developing countries and the rest of the world. Twenty aggregate commodity groups and three ACP protocol commodities are covered.

"Consumers' Food Safety Concern: Preference for Residue-Free Produce and Willingness to Pay." *Sukant K. Misra and Chung L. Huang, University of Georgia, and Stephen L. Ott, USDA ERS.*

The study examines consumer concern with regard to pesticides use in fresh produce production. The analysis focuses on consumers' preferences for residue-free and organic produce and their willingness to pay. Furthermore, the importance of testing and certification of fresh produce and who should provide this service are addressed.

"Experimental Market Simulator: Integrating Research, Teaching and Extension." *Clement Ward, James Trapp, Derrell Peel, and Stephen Koontz, Oklahoma State University.*

Economists have limited opportunities to: (1) conduct controlled experiments, and (2) provide lifelike experiences in classroom/extension courses. Experimental economics fills both voids. A game simulating the fed cattle market was developed to teach how markets operate, including price discovery and market structure, and to conduct controlled experiments. Participants play the roles of cattle feeders, meatpackers, futures market traders, and market news reporters. Results indicate that participants have a deeper understanding of such economic principles as supply and demand, price discovery, market structure, and value of information, after playing the game, compared with only enrolling in traditional agricultural economics courses.

"Forecasting Rates of Economic Growth Across States: Are States with Agricultural-Based Economies Lagging?" *David L. Debentin and Angelos Pagoulatos, University of Kentucky.*

It is widely believed that states with agriculturally and energy dependent economies never fully recovered from the recession of the early 1980s. Data on the size of each major sector of a state's economy are readily available and can be used to place each state's economy into one of six categories—agriculturally based, energy based, government based, manufacturing based, finance and services based, or diversified. States in each category can then be compared with respect to growth in personal income during the 1980s. The extent to which agriculturally and energy dependent states have lagged should be readily apparent. Rates of growth in per capita income can provide evidence to support or contradict this hypothesis. This evidence is displayed in a series of maps and graphs.

"AQUADEC: An Aquacultural Financial Analysis and Decision Aid Software Package." *Charles M. Adams, University of Florida.*

AQUADEC is a compilation of budgeting and financial decision support tools for the start-up or on-going commercial aquacultural business. The software package allows the business manager to develop a wide variety of financial statements and supportive information to aid in the decision-making process of the fir. Financial statements which can be generated using AQUADEC include: cost recovery schedules, loan amortization schedules, income statements, monthly cash flows, balance sheets, operating budgets an financial ratio estimates. Utilizing these tools, the user is able to describe a baseline operational year, vary key parameters, and ask "what if" questions of an economic and financial nature.

"A Computer Worksheet for Determining the Cost of Greenhouse Plants." *Larry A. Johnson and Brian E. Corr, University of Tennessee.*

This poster outlines the features of a computer spreadsheet that estimates the cost of growing plants in a greenhouse. The program is a stand-alone compiled Lotus 123™ Spreadsheet which is menu-driven and user friendly. Through the what-if features of the spreadsheet, the program can also be used to approximate the most profitable crop-mix, the most efficient utilization of greenhouse space and financial planning. The program provides a model greenhouse as a guide for the user, with examples for four different types of greenhouse plants. The program can be used by greenhouse growers, researchers, students, and extension personnel. In addition to the poster, the computer program itself on a laptop computer was available for interested users. Both the poster and the computer were a part of the display.

"Measuring Agricultural Literacy Among Students in Agricultural Economics." *David B. Schweikhardt and Lynn L. Reinschmiedt, Mississippi State University.*

Departments of agricultural economics are revising undergraduate programs in response to changing student interests, student backgrounds, and employer needs. This research employs the concept of "cultural literacy" to test the agricultural knowledge of freshmen and senior students in a southern department of agricultural economics. Statistical tests are then used to examine the level of agricultural literacy among incoming freshman students, the experiences that contributed to their literacy, and the improvement of their literacy level during their college years. The results could be used to better gauge the teaching methods used by agricultural economists.

ORGANIZED SYMPOSIA
Annual Meeting, SAEA, Fort Worth, Texas, February, 1991

SUSTAINABLE AGRICULTURE: IMPLICATIONS FOR EXTENSION FARM MANAGEMENT IN THE SOUTH (Moderator: *John Ikerd, University of Missouri*).

Organizer: *John Ikerd, University of Missouri.*

Presenters: *Chuck Laughlin, University of Georgia; Tim Hewitt, University of Florida; Dana Hoag, North Carolina State University; Jerry Crews, Auburn University.*

The impact of conventional farming systems on the environment has become a major public issue. The concept of sustainable agriculture has arisen from efforts to identify farming systems that are environmentally sound and resource conserving but are also productive and profitable. Development of sustainable farming systems requires that ecologic and economic variables be balanced in developing systems that can maintain their productivity and usefulness to society indefinitely. Meeting the challenge of sustainability is particularly critical in the