Assessing Irrigation Methods Based on Grapefruit Pack-Out in the Lower Rio Grande Valley

Mac Young, Steven Klose, Texas AgriLife Extension Service, and Shad Nelson, Texas A&M University-Kingsville

A rapid growing population and economy is increasing demand for water in the Lower Rio Grande Valley. Citrus is a perennial crop requiring year-round irrigation. Preserving citrus production will require more water-saving irrigation practices. Analyzing grapefruit (fresh versus juice) production is one way to evaluate alternative irrigation methods.

Analyzing the Impact of Drought Conditions on Texas High Plains Agriculture

DeDe Jones and Gid Mayfield, Texas AgriLife Extension Service

Agricultural producers often face economic hardships due to adverse weather conditions. Extension specialists conducted focus groups that developed model farms for five production regions of the Texas Panhandle. Financial performance outcomes are presented to demonstrate the impact of low rainfall in 2011 on these entities.

Evaluating Implementation Costs of Selected Water Conservation Policies in the Southern Ogallala Region

Rachna Tewari, Jeff Johnson, Texas Tech University, Stephen Amosson, Texas AgriLife Extension Service, Bill Golden, Kansas State University, Lal Almas, West Texas A&M University, and Bridget Guerrero, Texas AgriLife Extension Service

Continual decline in water levels in the Ogallala Aquifer makes it imperative to develop innovative water conservation policies (WCPs) and study the feasibility of their implementation. Using economic optimization models, this study estimates/analyzes the costs of implementing WCPs comprising conversion to dryland, water use restriction, and irrigation technology adoption.

Promoting Agri-tourism to High School Students: It Matters Where You Live!

Joey E. Mehlhorn, Scott Parrott, Barbara Darroch, and Doug Snider, University of Tennessee at Martin

Agri-tourism plays an important role in rural development. A 45-question survey was developed to determine the differences in perception for agri-tourism across the state of Tennessee among agriculture teachers. Chi-square analysis showed a significant relationship between the region of the state and the importance of agri-tourism to the county’s economy.

Wheat Pasture Lease Rate Required to Offset the Added Cost and Lower Grain Yield from Grazing

Brandon T. Varner, Francis M. Epplin, Damona G. Doye, Raymond J. Schatzer, and Jeffrey T. Edwards, Oklahoma State University

Winter wheat can be managed to produce a substantial quantity of high quality fall-winter forage. Wheat producers may lease the grazing rights to livestock producers. This study was conducted to determine the minimum pasture rental rate necessary to compensate for the reduced grain yield and additional cost of dual-purpose wheat.

Winter Canola - Winter Wheat Rotation as an Alternative to Continuous Wheat

Andrew P. Griffith, Joshua A Bushong, Thomas F. Peeper, and Francis M. Epplin, Oklahoma State University
Difficult-to-control winter annual grasses have invaded Oklahoma fields traditionally used to produce continuous monoculture winter wheat. This study was conducted to determine whether a winter canola - winter wheat crop rotation could compete with continuous winter wheat. The rotation resulted in significantly greater net returns at three of four locations.

**Economic Feasibility of Sweet Sorghum and Biomass Sorghum for Biofuels Production in Two Texas Regions**

*Stephen Amosson, Jnaneshwar Girase, Bridget Guerrero, Texas AgriLife Extension Service, Seong Park, Texas AgriLife Research, Brent Bean, Texas AgriLife Extension Service, William Rooney, Jake Becker, Texas AgriLife Research, Dustin Borden, and Payne Burks, Texas A&M University*

Costs of production in Texas for two promising crops, sweet sorghum and biomass sorghum, for use in production of biofuels are identified. Sensitivity analyses performed suggest sweet sorghum may have a cost advantage. However, the feasibility of each crop can vary considerably by type and location of the processing plant.

**Measuring Irrigation-and-Drainage Capital Stocks in Japanese Agriculture**


A model for estimating the capital stocks of irrigation and drainage is developed with consideration for stock management measures. This model showed the increasing rate of capital stocks has already declined, and the total effects of the stock management measures were US$ 8.1 billion at the steady state.

**Determinants of Violence in Haiti - Developing an Institutional Framework for Analyzing the Economics of Conflict**

*James A. Sterns and Jens Engelmann, University of Florida*

This research tests for determinants of violence in Haiti by identifying demographic, geographic, economic and institutional factors associated with different levels of violence. Using existing datasets, the study uses GIS mapping and econometric modeling to evaluate data on violence and economic conditions at a disaggregated, intra-country level of analysis.

**Trade Adjustment Assistance: 2010-11 Shrimp and Catfish Programs**

*Nathan P. Kemper and Ron L. Rainey, Southern Risk Management Education Center at University of Arkansas*

The TAA for Farmers Program provides training, payments and consultation to help applicants develop business plans and adopt more effective practices. The 2010-2011 programs saw two major commodities in the southern region accepted: 726 catfish farmers and 4,648 shrimp fishermen were approved in the region. Attendance at workshops topped 22,000.

**Expanding University Agriculture Student Leadership Development through Arkansas Collegiate Farm Bureaus**

*Charles Stark and Paul Francis, University of Arkansas-Monticello*

Collegiate Farm Bureaus represent a natural source for rural communities to recruit leaders that understand the needs and challenges of these locales and can provide the enthusiasm and energy required to succeed. Understanding how various campus groups recruit members and what
activities they pursue can benefit all of Arkansas.

**Forecasting Changes in Local Government Public Services in a Disequilibrium Environment Following a Natural Disaster: A Community Impact Modeling Approach** Arun Adhikari and James Matthew Fannin, Louisiana State University Agricultural Center

Forecasting performance of public sector expenditures under a community policy analysis system (COMPAS) fiscal module (equilibrium model) is assessed under a disequilibrium environment. Local governments and state policymakers may use results from this study in their decision-making processes for allocating funds on public service expenditures for a given fiscal year.

**Conventional Vs. Transgenic: The Showdown** Robert Hogan, Jason L. Johnson, Warren Multer, Gary Earhart, Texas AgriLife Extension Service, and Jeanne Reeves, Cotton Incorporated

A profitability analysis of transgenic-versus-conventional dryland cotton was conducted in west Texas by creating generic budgets for two cultivars for two areas. This simulation model was iterated 500 times and net returns analyzed. Stochastic dominance revealed that conventional cultivars are more economically feasible for west Texas at this time.

**Profitability of Different Livestock Enterprise Budgets in West-Central Texas** Molly R. Butler, Sierra S. Howry, Craig A. Leonard, A. Dean Monroe, Reagan L. Noland, and Michael W. Salisbury, Angelo State University

Multiple species stocking has been accepted as an effective practice in the ranching industry of west-central Texas. This research evaluated the potential profits of different species combinations. Results indicated that a single species cow-calf enterprise is most profitable; however, these results do not account for risk involved with each operation.

**Groundwater Management by Integrating Water Quality Damages from Energy Crop Production** Naveen C. Adusumilli, M. Edward Rister, and Ronald D. Lacewell, Texas A&M University

High-yielding biomass energy crops are water- and nutrient-intensive. Water depletion and contamination costs are imposed on the society. An Optimal Control Model is developed to identify nutrient and water use steady states. Mitigating externalities is a renewable energy policy issue, and independent efforts will not allow achieving a social optimum.

**Driving Forces of Income Growth in the Southeastern Region** Buddhi Gyawali, Kentucky State University, Swagata “Ban” Banerjee, Anquinette Hill, and James Bukunya, Alabama A&M University

County-level data from the 1980 and 2000 U.S. Census were used to examine the driving forces of income convergence in 10 southeastern states. Ordinary Least Squares regression estimation demonstrated conditional income convergence at 16.3% per year. Growth in jobs and education were the major forces of income growth.

**Real-Time Ultrasound Body Measurement Impacts on Replacement Heifer Price: The Eastern Kentucky Case** Carter Mobley, Tyler Mark, Ben Williamson, Morehead State University, and Troy Wistuba, Novus International
Real-time ultrasound has historically been used to help market and sell terminal livestock. However, it can also be used as a management tool to help producers make decisions and market replacement heifers. Real-time ultrasound gives producers quantitative feedback on body measurement characteristics.

**Kentucky's Potential for Wood Biofuel Production** Amir Y. Ahmadi and Tyler B. Mark, Morehead State University

Yellow poplar is used to estimate the cost and revenue of a fast pyrolysis system. Bio-oil from the reactor is estimated via chemical and kinetic equations. Costs and revenues are then represented by the direct costing method. Current market conditions make it infeasible for using wood for bio-oil production.

**Benefits to Econometric Forecasting of Irrigation Water Demand: A Case Study on the Alabama-Coosa-Tallapoosa (ACT) and Apalachicola-Chattahoochee-Flint (ACF) River Basins in Alabama** Babatunde A. Obembe, Swagata “Ban” Banerjee, Alabama A&M University, and Buddhi R. Gyawali, Kentucky State University

A model incorporating acreage forecasts with water use is developed. Changes in the crop mix due to expectations on risks and returns are captured. Policy-induced scenarios in the ongoing study in Alabama ACT/ACF river basin counties indicate water savings of over 30% using the proposed method.

**Outstanding Teaching of a Course Award: Collaborative Classroom Methods for Teaching Agricultural Cooperation** John L. Park, Texas AgriLife Extension Service, TAMU

Agricultural cooperation can be a challenging topic for students. It is broadly defined by the many things that affect a cooperative business, and yet narrowly focused by the subtle differences that create unique business and management challenges. This poster outlines efforts to teach agricultural cooperation with an experiential course structure.

**Consumers’ Willingness to Pay for Food Safety in Milk Products in the Black Sea Region, Turkey** Mehmet Bozoglu, Chung L. Huang, and Wojciech J. Florkowski, University of Georgia, and Bakiye Kilic, Ondokuz Mayis University, Turkey

Turkey produced 13.5 million tons of milk in 2010, and about half was sold unhealthily by street vendors without appropriate processing. This study examines Turkish consumers’ perception and awareness of food safety problems in milk products and determines their willingness to pay for milk products manufactured using ISO 22000 management system.

**Floods and Onset of Armed Conflict** Ramesh Ghimire and Susana Ferreira, University of Georgia

We analyze the link between large-scale floods and onset of armed conflict using new data on large-scale floods in 122 countries between 1985 and 2009. We find that frequency, duration, severity, and magnitude of floods significantly increase the risk of the onset of armed conflict in a given country.

**Who will buy GM foods in South Korea?** Padmanand Madhavan Nambar, Wojciech J. Florkowski, University of Georgia, and
Dong-Kyun Suh, Rural Development Administration of the Republic of Korea

Characteristics of the South Korean urban female consumers who would be willing or not willing to buy GM foods are examined using survey data. Generalized ordinal logistic results conclude that household income, education, occupation, location and attitudes of the consumers are important in defining consumer profiles.