Selected Posters

Group 1—Optimal Marketing Strategies, Farming Practices, and Agricultural Policy

Preharvest Marketing Strategies and Financial Performance: What's the Connection? *Manuel Filipe, Lonnie Vandeveer, and Kurt Guidry, Louisiana State University.*

Potential changes in farm policy, along with other changing economic conditions, suggest an increasing need to manage farm income and risk. This study uses a portfolio approach to identify optimal preharvest enterprise marketing strategies. Enterprise price distributions from this analysis are used to estimate the production mix assuming a safety-first decision model. Results of these analyses, along with a financial model, illustrate the interdependence of farm marketing, production, and financial processes. The results show that improved preharvest marketing strategies can be used to manage farm business and financial risk, and to improve debt repayment.

Evaluation of Optimal Marketing Strategies for Feeder Cattle Enterprises. *Artavazd Hakobyan, J. Walter Prevatt, Rob Martin, and Robert Nelson, Auburn University.*

This study evaluated the return-risk relations of feeder cattle marketing strategies based on 1990–2000 market data. The primary objective of this study was to maximize the expected returns for three production time periods for an Alabama feeder cattle producer, subject to a given minimum level of risk associated with a predetermined target level of returns. A target MOTAD model was formulated to examine the return-risk relations. Production periods were evaluated individually and compared collectively. The results were also used to assess the impact of segmenting the 1990–2000 cattle cycle and utilizing load lot feeder cattle sales on return-risk relations.

Data Mining U.S. Soybean Fields. *Bertis B. Little, Walter Johnston, Ashley Lovell, Steve Steed, and Roderick Rejesus, Tarleton State University; Mike Cross, Planning Systems Inc.; Susan Hughes, USDA-RMA; and Stacey Olson, Tarleton State University.*

The objective of this poster is to demonstrate how the integrated application of several data mining techniques are applied to NASS and USDA-RMA insurance databases, a unique and novel collection of data sets for crop insurance analysis, to identify suspicious patterns of soybean planting and harvest behavior. The NASS data is used to identify counties that appear to be unusual and the RMA data is used to identify insured producers who appear to be unusual relative to peer producers in the county.

Changes in Texas County CRP Enrollment Patterns, 1992 to 2001. *Greg Kaase, Joe L. Outlaw, and David P. Anderson, Texas A&M University; and Andrea Scholtz, Oklahoma State University.*

The Conservation Reserve Program (CRP) was instituted in the 1985 Farm Bill to contract with landowners for the removal, primarily, of highly erodible cropland from production. After the 12th signup in 1992, 36.4 million acres were enrolled. The 1990 and 1996 Farm Bills expanded the CRP's scope to include wetlands, and modified the bid system by including an environmental benefits index. As of 2001, 33.5 million acres, nationally, have been bid into the CRP. Texas, once again, leads the nation in CRP enrolled land; however, bid system modification significantly

shifted CRP's importance in certain regions of the state.

Precision Farming Practices in Irrigated Cotton Production. *Susan Watson, Eduardo Segarra, and Man Yu, Texas Tech University; Hong Li, Robert Lascano, and Kevin Bronson, Texas A&M University.*

A dynamic optimization model that introduces an intertemporal nitrate-nitrogen carryover function is used to derive and evaluate nitrogen application rates, yield, and the net present value of return associated with precision farming and conventional whole-field farming practices for irrigated cotton production in the Southern High Plains of Texas. The results show optimal decision rules concerning nitrogen application rates for long-term planning. The results of the study also indicate how optimal nitrogen application rates vary according to nitrogen–cotton–water price scenarios.

Group 2—Empirical Models for Estimation and Forecasting

Are Large-Scale Agricultural Sector Models Useful for Forecasting Exports? *C. Phillip Baumel, Iowa State University; Marty J. McVey, AGRI Industries; and Robert Wisner, Iowa State University.*

Agricultural groups and government agencies have relied on export projections from large-scale agricultural models as inputs into investment and policy decisions. The most prominent sets of public projections are the United States Department of Agriculture's (USDA) Agricultural Baseline, and the Food and Agricultural Policy Research Institute's (FAPRI) Agricultural Baseline. Although USDA and FAPRI state that their model projections are intended only for policy analysis, they are routinely used as forecasts. The U.S. Army Corps of Engineers proposed using the USDA projections as export forecasts in their Upper Mississippi River lock extension feasibility study. This poster compares the projections from the USDA and FAPRI baselines with actual U.S. grain exports, and evaluates the usefulness of these models as forecasting tools.

Estimation of Production Function and Related Labor Risk Considerations for Landscape and Lawn Care Firms. *S.K. Anil, W.J. Florkowski, and G. Landry, University of Georgia.*

The purpose of this study was to estimate the production function of landscape maintenance (LM) and the lawn care (LC) industry, with a focus on labor as the primary source of risk according to views expressed by the industry. This is the first attempt in literature to estimate a production function for this industry. Agricultural production framework proposed by Pope and Just (1979) in treating an input as a source of risk was applied. Analysis showed a positive influence of labor cost on total output. Total acreage served, total chemical costs (fertilizers and pesticides), and total plant material cost (trees, shrubs, grass seed, and sod) all had a positive and significant impact on the total output, showing that these are the most important factors influencing the final output of LM/LC company.

Demand Prospects for Fruits and Vegetables: Econometric Analysis of AIDS Model. *Adelin Semali and Dr. Chung-Liang Huang, University of Georgia.*

This study considers a comparison of original AIDS model and LA/AIDS model in the estimation of demand for fruits and vegetables in the United States. Time series data for the period from 1953 through 1997 is used. The preliminary results show significant differences between the models. The overall results are statistically reasonable and demand elasticities are computed.

Group 3—Animal Agriculture: Forage Management, Stocking Rates, and Environmental Management

Georgia Citizens' Attitudes Toward Animal Agriculture. *Brigid A. Doherty, John C.*

McKissick, and John C. Bergstrom, University of Georgia.

This poster will illustrate the results of a survey of Georgia citizens regarding their attitudes toward animal agriculture. The survey explores opinions about animal agriculture and the environment, ethics, and food safety. Results show support for animal agriculture in Georgia.

Profit-Maximizing Forage/Livestock Systems for Small Farms. *Damona Doye, Oklahoma State University; Karen Smith, University of Tennessee; Darrel Kletke, David Lalman, and Francis Epplin, Oklahoma State University.*

Results of using a mixed integer program to solve for profit-maximizing forage and beef enterprises on small farms are featured. Dry matter, total digestible nutrients, and crude protein are used to characterize livestock nutritional needs and warm and cool season forage production. Stocker enterprises and fescue forage production dominate the solutions. Net returns to land, overhead, and owner labor and capital on small farms are limited, particularly if the pasture is not fescue and the producer prefers a cow/calf enterprise to a stocker enterprise. Access to capital is critical.

Reducing Cow/Calf Nutrition Costs for Small Oklahoma Farms. *Tammie LaGrone, Damona Doye, Darrel Kletke, Daren Redfearn, and Francis Epplin, Oklahoma State University.*

Specialists indicate that proper forage management and stocking rates may result in shorter feeding periods and lower production costs. Determining constraints that prevent small producers from adopting best management practices for the individual livestock system may reduce the high cost of supplemental feeding. The focus of this study is on identifying improved forage programs that will allow producers to maintain small herds inexpensively. Results of identifying forage programs to reduce the need for supplemental feed and hay on small farms are reported. Growth models determine potential forage production in the region under different environmental scenarios.

Evaluating Markets for Value-Added Livestock Waste in Tennessee. *Kent Wolfe, University of Georgia; Rob Holland, University of Tennessee; Chris Ferland and Brigid Doherty, University of Georgia.*

Concern about environmentally friendly disposal of animal waste material has been increasing over the years and regulations have been implemented to control its disposal. During the spring of 2000, The University of Tennessee's Agricultural Development Center conducted a random-sample interview with five potential consumer groups for livestock waste products (home owners/gardeners, lawn and garden stores, golf courses, nurseries/green houses, and landscaping businesses/contractors). The results suggest a significant market for composted manure-based lawn and garden care products. In addition, the study revealed that many more consumers would be willing to use these products if they were readily available.

Group 4—Rural and Urban Development: Education and Outreach

A Study of Peasant Entrepreneurs in Floriculture in South India. *Murali Kanakasabai, University of Kentucky; and Anita Jhamtani, Indian Agricultural Research Institute.*

Peasant agriculture in developing countries has often been regarded as a traditional activity. This has led to a majority of extension and governmental efforts to rely on transfer of technology as the best route to rural and community development. However, promotion of an entrepreneurial culture among peasant farmers could serve as the essential ingredient to develop self-sustaining and progressive communities. This study, conducted in two districts on South India, focuses on the socioeconomic and behavioral attributes of peasant entrepreneurs, their felt needs, and the gap in

the current role played by the extension organization for fostering entrepreneurship in floriculture.

Determining the Educational and Economic Impact of Marketing Clubs. *Robert Borchardt, Dean McCorkle, Mark Waller, Stephen Amosson, Stan Bevers, and Jackie Smith, Texas A&M University; Edward C. Usset, University of Minnesota; and Karl Foord, Texas A&M University.*

Results from a 2½-year postsurvey of the Master Marketer program indicated a major impact on the knowledge and adoption of several risk management and marketing tools taught in the program. Master Marketer graduates are expected to work with their extension agent to start and lead a marketing club in their home area. One area currently void of any known impact is that of marketing clubs. A survey instrument is being developed to obtain key information from past and new marketing clubs necessary to determine the factors that make a marketing club successful, evaluate their educational effectiveness, and estimate the economic impact.

Economic Impact of the Florida Cultured Hard Clam Industry. *Dorothy Comer, Effie Philippakos, Charles Adams, Alan Hodges, David Mulkey, and Leslie Sturmer, University of Florida.*

This study analyzed the flow of Florida hard cultured clams through market channels and estimated the economic impact of the industry on the state. The hard clam culture industry represents a significant economic contribution to the economy of Florida, and to the local economies where the production and marketing activities occur. Approximately 143 million cultured clams, worth $21.8 million, were sold in 1999, 43% within Florida and 57% out of state. The total economic impact of the industry on Florida, after accounting for direct, indirect, and induced impacts, was $55 million.

Designing Effective Assignments. *Molly Espey, Clemson University.*

This poster illustrates several principles to assist educators in designing assignments to enhance learning. Teaching objectives should be determined and assignments should be designed to both teach the material and to measure the degree of leaning. Five ideas for improving the effectiveness of assignments are listed and some suggestions are provided for obtaining and incorporating student feedback into the process. Finally, some examples are included to illustrate how a variety of assignments and assessment methods can be used to match the teaching objectives and enhance learning.