Quarterly Report

to USDA Rural Development
Agricultural Marketing
Resource Center (AgMRC)

October 1, 2006 – December 30, 2006

Submitted by Iowa State University, Kansas State University and the University of California.
Center for Agricultural and Rural Development (CARD)
Iowa State University

First Quarter Report
October 1, 2006 to December 30, 2006

Goal #1
Create and promote an electronic, Web-based library with powerful search capabilities to make value-added information and other resources available to producers (includes web site development and functions). Provide electronically available information and resources on value-added markets and industries including a wide variety of commodities and products (this includes the Commodities/Products and Markets/Industries sections of the Web site).

Goal #2
Provide value-added business and economic analysis tools, including information on business principles, legal, financial and logistical issues (information contained in the Business Development section of the Web site).

Goal #3
Conduct research and analysis on economic issues facing producers involved in value-added business ventures (this includes research activities on all topics included at the Web site).

Goal #4
Conduct outreach activities to disseminate the research and information assembled and developed under the previous three goals. These activities are designed for producers, producer groups, businesses and others involved in value-added agriculture (this includes all outreach activities of the Center including workshops, seminars, newsletters and other delivery methods including individual client requests for specific information).
Iowa State University Extension
Iowa State University
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Create and promote an electronic, Web-based library with powerful search capabilities to make value-added information and other resources available to producers (includes web site development and functions). Provide electronically available information and resources on value-added markets and industries including a wide variety of commodities and products (this includes the Commodities/Products and Markets/Industries sections of the Web site).

The Web site generated more than 9.8 million hits from October through December and more than 283,531 combined visits during that period. The site averaged 94,510 visits per month and 3,085 visits per day. Each month saw an average of 37,736 downloaded files from the site.

Updated Commodities & Products
The following pages were updated: alpaca, amaranth, anaerobic digester/methane, apples, avocado, beef, beef – branded, beef direct marketing, bioreactors, biodiesel, bioprocessing, catfish, Christmas trees, chufa, corn – organic, cuphea, dairy, elk, enology, ethanol, fiber, floriculture, general biomass, goats – dairy, goats – meat, goats – fiber, hay, hunting leases, meadowfoam, mushrooms, nursery trees, oranges – blood red, peppers, pomegranates, poultry – eggs, poultry – organic, poultry – turkey, quinoa, raspberries, salmon, sawdust, solar power, sweet corn, sweet potatoes, switchgrass, triticale, trout, watermelons and all the Midwestern wine pages.

All 50 state resource pages were updated for individual contacts and links.

Work began on commodity profiles for dates, eggplants, figs, chickpeas and culinary herbs. Additional work began to expand profiles for the various food and energy segments profiled in the Markets and Industries section.

Goal #2
Provide value-added business and economic analysis tools, including information on business principles, legal, financial and logistical issues (information contained in the Business Development section of the Web site).

- Developed a “Value added Agricultural Center” section of the website that contains links to various value-added agricultural websites
- Further developed the presentation section of the website
  - Added the Biofuels presentation section
    - Growing the Bioeconomy (Iowa State University) – 5 presentations
- USDA Energy Conference (St Louis) – 6 presentations
- Ethanol Webcast – 7 presentations
- Iowa’s Leadership Role in the Bioeconomy – 4 presentations
  - Presentations were split into sections
  - Posted transcripts of some of the presentations
- Developed the Grain Risk Management Section
  - Several content additions on options
- Developed the Livestock Risk Management Section
  - Several content additions on options
- Numerous link updates and broken links fixed

Summary

- 4 new subsections
- 17 new content files
- 9 content page revisions
- 13 external links added
- 22 new videos (presentations)
- Several additions and revisions to “see also” links
- 15 sources linked under “other business development websites”

Goal #3

Conduct research and analysis on economic issues facing producers involved in value-added business ventures (this includes research activities on all topics included at the Web site).

2006 FEDERAL FUNDS ALLOCATED TO AGMRC:
$1,014,750 received

The AgMRC Management Team and USDA officials targeted national areas of need in biofuels, alternative fuels, specialty products, and agritourism. The group also placed an emphasis on business development, feasibility analysis and support of the Value Added Agriculture Producer (VAPG) grants. Specialists across the United States were notified and invited to submit pre-proposals. More than 25 pre-proposals were received from 15 states on the targeted topics. Fourteen (14) were selected with priority funding given to under-represented clientele and a wide geographic dispersion across the United States. The contracts are in the process of being finalized on these projects for a total of $732,206. Summaries of the selected pre-proposals follow.

1. Economics of Ethanol from Sugar Beet Pulp and Other Energy Topics—Department of Agricultural Economics, Kansas State University and Quentin Burdick Center for Cooperatives, North Dakota State University. Lead: Kansas State University. $119,960.

The upper Great Plains (Montana, Wyoming, and western North Dakota) are geographically distant from traditional sources of grain used in the manufacture of ethanol. State and federal mandated legislation on renewable fuels means that these states will require a source
of ethanol to blend with petroleum. The objective of this research is to analyze the economics of manufacturing ethanol from sugar beet pulp.

The work will be done jointly with Kansas State University and North Dakota State University. The study will describe alternative uses for sugar beet pulp and summarize existing research on manufacturing ethanol from sugar beet pulp. An economic analysis of converting sugar beet pulp into ethanol and its feasibility as a source for blending with petroleum will be done. Other deliverables (not specified at this time) on bio-fuels will be produced for the AgMRC web page. Kansas State University will manage the project with a subcontract to North Dakota State University.

2. Implications for expanded bio-energy production in importing regions – Ag Issues Center, University of California. $94,875.

California has emerged as a major market for biofuels, especially ethanol to be used and a gasoline additive. There seem to be two routes for expansion of biofuels production in the major importing regions of the West. First, expand the capacity of plants to produce biofuels using imported corn and perhaps soybeans shipped from the Midwest. The second route is to use alternative feed stocks. This project will evaluate the current state of innovations and the competitiveness of bio-energy production in the major importing regions of the West. Economic analysis will also draw the local economic implications of major expansion of local production of bio-energy. It will then examine the national market implications of expansion of bio-energy production in the West.

3. Analysis of Success Factors for Value-Added Business Ventures, The Windmill Group, LLC, North Dakota. $65,000. The future of the value-added agriculture movement in rural America will be influenced by the ability of farmers to create sound businesses. The recent rash of business failures in the Upper Great Plains has accentuated the importance of this issue. This project will provide research to identify factors critical to business success in the arena of value-added agriculture to improve the probability of success of value-added businesses and strengthen the ability of value-added agriculture to be an effective tool for rural development.

4. The Texas Center for Rural Entrepreneurship (TCRE) $48,500. $38,500 primary goal is to stimulate and support private and public entrepreneurship (Eship) development in rural communities. They will provide training in Texas and New Mexico. $10,000 to Miles Phillips at Texas A&M for Agritourism project. Greg Clary, PhD, Economist, Texas Cooperative Extension, Texas A&M University. Miles Phillips, Development Specialist, Texas A&M University.

5. The Indiana New Ventures. $28,000, will share their successfully developed curriculum with AgMRC and will provide a series of training opportunities for producers in Indiana, southern Ohio and Kentucky. Dr. Joan Fulton, Department of Agricultural Economics, Purdue University.

6. North Carolina Cooperative Extension $65,000. $35,000 to provide business development curriculum for the AgMRC website and will extend the outreach of the website to North Carolina, Virginia, South Carolina and West Virginia. With $20,000 to UT and $10,000 to WV. Debbie Roos, North Carolina State University. Blake Brown, Agricultural and Resource Economics, NCSU.
7. **The Cooperative Development Center in Mississippi** $25,000, will provide business development curriculum and outreach of the AgMRC site to low resource farmers in Alabama, Mississippi and Louisiana. Melbah Smith, Director, Mississippi Center for Cooperative Development.

8. **University of Vermont.** $65,000. Development and expansion of the agritourism industry in the U.S. offers unique opportunities for many farmers and ranchers. This multi-state project will identify unique agri-tourism opportunities including development of agritourism through local foods, and impediments to the development of agritourism by region and locale. The University of Vermont will lead this project with participation and $26,247 subcontracts to Utah State University and Wisconsin.

9. **Specialty Cheese Market.** **The University of Nebraska.** $33,000. Food Processing Center will produce an in-depth marketing study on the specialty cheese market in the U.S. The project will provide web-based and published copies of the report. Included in the report will be several case studies and analysis of market potential for U.S. producers. Joan Scheel, Food Industry Consultant, University of Nebraska-Lincoln.

10. **Switchgrass Marketing.** **University of Tennessee** $29,371. Recent studies have identified the mid-south region of the U.S. as having a very good potential for producing biomass for energy production. The objective of this research project is to evaluate the ability and willingness of farmers to provide biomass feed stocks given their on-farm resources and constraints, potential contractual arrangements with user facilities, and risk preferences. Burton C. English, Department of Agricultural Economics, University of Tennessee.

11. **Value-added Agricultural Instructional Materials.** **Montana State University.** $20,000, will develop an instructional materials package will serve as a “user-friendly” resource to assist educators around the U.S. on value-added agricultural concepts. Instruction based on the materials developed will serve to educate ag entrepreneurs. After the curriculum is developed and tested in Montana, it will be distributed through the U.S. Martin J. Frick, Associate Professor of Agricultural Education, Montana State University.

12. **Development and Expansion of Marketing Options for Farmers. Market Maker—The University of Illinois.** $75,000, will build programming capacity to make Market Maker a regional/national marketing tool. Significant programming changes will be made to allow log-in password functionality, key word search capabilities and sponsorship/advertising sections. Additionally a national portal will be developed to allow users to expand searches beyond their own state. Using this function will routed users through AgMRC, this will give AgMRC a highly visible and direct link from MarketMaker resulting in increased AgMRC visibility and usage with significant potential for revenue generation through the sponsorship and advertising components build into MarketMaker. Darlene Knipe, Marketing and Business Development, Univ. of IL.

13. **Real Options Ethanol Investment Study Research Project, University of Minnesota,** $38,000. The new information that this project will create about option value in ethanol investment decisions will be of significant value to the industry and to policy makers, since these decisions to invest may be periodically biased by overly optimistic or pessimistic
assumptions about investment profitability and feasibility. This project will provide a tool to assess these risks and the corresponding alternative future courses of action that investors might consider. Glenn Pederson and Tianyu Zou, University of Minnesota.

14. Meat Goat Marketing. Tuskegee University, AL. $25,000, will provide a complete and current market analysis of the meat goat market in the U.S. This AgMRC web-based report will highlight and feature the growing ethnic market opportunities. Because of its ease of entry, goats are an affordable entry enterprises for lower resource farmers. Sandra G. Solaiman, Ph.D., PAS, Director of Small Ruminant Research, Tuskegee University.

<table>
<thead>
<tr>
<th>Proposed subcontracts:</th>
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<tbody>
<tr>
<td>1 Kansas State Univ. Economics of Ethanol from Sugar Beet</td>
<td>119,960</td>
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<tr>
<td>2 Univ. of CA Bio-energy production</td>
<td>94,875</td>
</tr>
<tr>
<td>3 The Windmill Group, LLC, Analysis of Success Factors, ND</td>
<td>65,000</td>
</tr>
<tr>
<td>4 Texas Center - entrepreneurship development</td>
<td>48,500</td>
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<tr>
<td>5 Indiana New Ventures</td>
<td>28,000</td>
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<tr>
<td>6 North Carolina Ag Business Tools</td>
<td>65,000</td>
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<tr>
<td>7 Mississippi Cooperative Develop Ctr Curriculum and Outreach</td>
<td>25,000</td>
</tr>
<tr>
<td>8 Univ. of Vermont - Agritourism</td>
<td>65,000</td>
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<tr>
<td>9 Univ. of NE, Specialty Cheese Market</td>
<td>33,000</td>
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<tr>
<td>10 Univ. of Tennessee- switch grass marketing</td>
<td>29,371</td>
</tr>
<tr>
<td>11 Montana State - instructional materials</td>
<td>20,000</td>
</tr>
<tr>
<td>12 Univ. of Illinois - Market Maker</td>
<td>75,000</td>
</tr>
<tr>
<td>13 Univ. MN Real Options for Ethanol Facilities</td>
<td>38,500</td>
</tr>
<tr>
<td>14 Tuskegee Univ. - Meat goat</td>
<td>25,000</td>
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<tr>
<td>TOTAL</td>
<td>732,206</td>
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Center for Agriculture and Rural Development (CARD), Iowa State University, Bruce Babcock, $100,340. Will provide an examination of the impact of the biofuels industry on the livestock industry, in terms of livestock feeding, the optimal location for the livestock, and the indirect effects on the meat market. And a study of the transportation bottlenecks in the ethanol industry and the impact of those bottlenecks on the industry and related industries.

This is $79,635 direct, $100,340 includes Indirect costs.

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Trade Show Promotions/Outreach
Staff attended and manned a booth at numerous trade shows to continue development of a user base. The following table represents programs, events and outreach either funded by AgMRC, designated by a * or represented AgMRC as match dollars through staff time and travel dollars.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
<th>Location</th>
<th>Attendees</th>
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<tbody>
<tr>
<td>Oct. 10-12, 2006</td>
<td>USDA Biofuels Conference (Advancing Renewable Energy)</td>
<td>St. Louis, Missouri</td>
<td>Ray Hansen attended and distributed promotional materials for AgMRC.</td>
</tr>
<tr>
<td>Oct. 11-12, 2006</td>
<td>Biodiesel Finance &amp; Investment</td>
<td>Minneapolis, Minnesota</td>
<td>Craig Tordsen attended on behalf of AgMRC.</td>
</tr>
<tr>
<td>Oct. 18-20, 2006</td>
<td>World Food Prize Symposium *</td>
<td>Des Moines, Iowa</td>
<td>Margaret Smith attended on behalf of AgMRC.</td>
</tr>
<tr>
<td>Oct. 19, 2006</td>
<td>Community Entrepreneurship Academy</td>
<td>Newton, Iowa</td>
<td>Dan Burden attended and spoke on behalf of AgMRC.</td>
</tr>
<tr>
<td>Oct. 22-26, 2006</td>
<td>AgMRC hosted Chinese Food Editors in Ames. *</td>
<td>Ames, Iowa</td>
<td>Madeline Schultz coordinated the visit and various farm and food tours.</td>
</tr>
<tr>
<td>Oct. 23, 2006</td>
<td>Biorenewables “Town Meeting”</td>
<td>Ames, Iowa</td>
<td>Several staff members attended and offered information from AgMRC.</td>
</tr>
<tr>
<td>Oct. 27-28, 2006</td>
<td>Strengthening and Valuing Latino Communities Conference</td>
<td>Des Moines, Iowa</td>
<td>Ray Hansen presented on local foods and Market Maker, along with AgMRC.</td>
</tr>
<tr>
<td>Oct. 25-28, 2006</td>
<td>National FFA Convention</td>
<td>Indianapolis, Indiana</td>
<td>Patty Gibler and Sue Woods manned a trade show booth for AgMRC.</td>
</tr>
<tr>
<td>Nov. 2-4, 2006</td>
<td>Local Economy Gathering</td>
<td>Fairfield, Iowa</td>
<td>Marsha Laux attended and spoke on AgMRC.</td>
</tr>
<tr>
<td>Nov. 6-10, 2006</td>
<td>Cooperation Works Training *</td>
<td>Madison, Wisconsin</td>
<td>Schultz attended on behalf of AgMRC.</td>
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<tr>
<td>Nov. 9-10, 2006</td>
<td>AgMRC Advisory Council Meeting</td>
<td>Minneapolis, Minnesota</td>
<td>Mary Holz-Clause, Hansen, Gibler and Christa Hartsook attended.</td>
</tr>
<tr>
<td>Nov. 13, 2006</td>
<td>Perspectives on Present &amp; Future Corn-Based Ethanol Industry (Breeze)</td>
<td>Ames, Iowa</td>
<td>Tordsen and Connie Hardy attended.</td>
</tr>
<tr>
<td>Nov. 20, 2006</td>
<td>Iowa Organic Conference</td>
<td>Ames, Iowa</td>
<td>Smith, Schultz and Laux attended and presented on behalf of AgMRC.</td>
</tr>
<tr>
<td>Nov. 20-21, 2006</td>
<td>Iowa Forage &amp; Grassland Conference *</td>
<td>Des Moines, Iowa</td>
<td>Smith attended.</td>
</tr>
<tr>
<td>Nov. 21, 2006</td>
<td>Flax Working Group meeting</td>
<td>Ames, Iowa</td>
<td>Smith coordinated and presented.</td>
</tr>
<tr>
<td>Nov. 28-Dec. 1, 2006</td>
<td>Cooperation Works! Member Meeting *</td>
<td>New Orleans, Louisiana</td>
<td>Schultz attended and presented.</td>
</tr>
<tr>
<td>Nov. 30, 2006</td>
<td>Integrated Crop Management</td>
<td>Ames, Iowa</td>
<td>Hardy presented information on ethanol.</td>
</tr>
<tr>
<td>Nov. 30-Dec. 1, 2006</td>
<td>Renew Rural Iowa Seminar</td>
<td>Storm Lake, Iowa</td>
<td>Tordsen attended and presented information on AgMRC.</td>
</tr>
</tbody>
</table>
information on AgMRC and subcontracts.

<table>
<thead>
<tr>
<th>Date</th>
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<tr>
<td>Dec. 7, 2006</td>
<td>Iowa Agritourism Working Group</td>
<td>Des Moines, Iowa</td>
<td>Malinda Geisler and Burden attended and presented information on AgMRC.</td>
</tr>
<tr>
<td>Dec. 10-21, 2006</td>
<td>Croatia AgMRC *</td>
<td>Zagreb, Croatia</td>
<td>Tordsen attended and presented information to Croatian service providers on establishing a Croatian AgMRC.</td>
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</table>

Client Requests
Staff researched and responded to 169 e-mailed questions this quarter.

During this quarter there were a total of 115 toll free phone inquiries to AgMRC from 20 different states. Each call was assisted by directing them to Web site resources for information, forwarded to specialists for additional assistance or provided answers to clients.

Additional Public Relations
The Fall issue of the AgMRC Action newsletter was distributed via e-mail and made available online. The 10-page newsletter is sent bi-monthly to a list of 2,000 names comprised of producers in value-added agriculture, service providers, media and others. Each newsletter consists of an article from one of the partnering organizations in AgMRC, a state profile to give a snapshot of value-added agriculture in certain areas, new research and other updates added to the Web site in the past month, a value-added agriculture business profile and a calendar of upcoming value-added agriculture events.

Features in the newsletter included cultivating agritourism, the U.S. beef industry, egg production, biodiesel and web updates to www.agmrc.org.

A marketing push was sent via mail. A letter re-introducing AgMRC and several brochures were sent to rural development specialists and state extension specialists in all states.
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Kansas State finished a commodity profile on kusmat, a value-added wheat product and updated several commodity profiles.

Goal #2
Provide value-added business and economic analysis tools, including information on business principles, legal, financial and logistical issues (information contained in the Business Development section of the Web site).

Began and completed database of 2005 to 2006 VAPG grant recipients. Finished budgets for on-farm cheese processing, natural beef, on-farm bottled milk, pasture-grazed poultry, and pasture-raised pork.

Goal #3
Conduct research and analysis on economic issues facing producers involved in value-added business ventures (this includes research activities on all topics included at the Web site).

Staff finished a case study on the raisin industry and SunMaid Growers of California and began a case study on the citrus industry and Sunkist.

Kansas State staff completed a draft of research analyzing profitability of vertical integration and diversification in cooperatives and agribusiness firms.

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Kansas State University staff met with value added producer grant recipients in focus group discussions to help better learn what resources they use in grant implementation.
Staff worked on forming a committee to help plan governance and strategy workshop with National Association of Corporate Directors for cooperatives.

Staff attended the NCERA 194 Research on Cooperatives and Farmer Cooperatives program in November.
Agricultural Issues Center  
University of California  

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Writing of summaries of our research findings (see Goal 3) and their postings on the Web site has been ongoing. In addition UC AIC finalized new national raisin and spinach commodity profiles that have since been posted on the AgMRC Web site.

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Commodity Profiles (Hayley Boriss, Henrich Brunke, Daniel Sumner and Marcia Kreith, University of California)  
During this quarter we finalized two national commodity profiles that are now on the AgMRC Web site — raisins and spinach.

The Measure of Agriculture and the Contribution of Agriculture to the Economy (Daniel Sumner, Hayley Boriss, Henrich Brunke, Marcia Kreith, Kurt Richter, Omid Rowhani and Laurie Treacher, University of California)  
This quarter, major efforts were spent reformatting and then rechecking the revised chapter that estimates direct and indirect effects in California and subregions from agricultural production and processing. Other chapters are currently undergoing reformatting and revision.

Agricultural Exports (Omid Rowhani and Daniel Sumner, University of California)  
We have completed collection of data and its analysis and have drafted an issues brief, which awaits review and technical editing prior to finalizing for posting on the AgMRC Web site. The data has been posted on the AIC Web site at http://aic.ucdavis.edu/pub/exports.html.

Our figures show that California exported more than $9 billion in agricultural goods in 2005, a 13 percent increase from 2004. The top five export commodities are almonds,
cotton, wine, table grapes and dairy products. The increase in export value was driven largely by a 32 percent increase in the value of almond exports from 2004, to $1.8 billion.

The rank of the top five export destinations did not change from 2004. They are the European Union, Canada, Japan, Mexico and China/Hong Kong.

**Market Power and Policy in the U.S. Dairy Industry: Political Power of Dairy Cooperatives in the Raw Milk Markets** (Byeong-il Ahn and Daniel Sumner, University of California)

During this report period, Ahn and Sumner finalized the paper, "Political Market Power of Milk Producers Reflected in U.S. Milk Pricing Regulations," that assesses the political market power of milk producers in the U.S. raw milk markets. They also made a draft of the paper for journal submission. In the paper, they considered the profit-maximizing pattern of price discrimination for producers (as a group) in each marketing order region. In this model, milk marketing orders, which can be understood as government-sanctioned regional cartels, act as monopolists in regional beverage milk markets and oligopolists in the national market for manufacturing milk products. Based on the theory, they simulated the implied price differentials using parameters for demand and supply elasticities derived from earlier studies. Actual price differentials are far below those consistent with profit maximization by the producer cartels that exercise monopoly power.

The paper also developed a model of policy preference functions that, consistent with the operation of the policy, allows for several regional regulators. In the model, regulators choose price differentials to maximize regional policy preferences given welfare weights between consumer surplus and producer surplus. In addition to the regional beverage milk market, regulators account for the impact of their own regional decisions on the national manufacturing milk price. With broadly accepted elasticities from the literature, the welfare weights that are implied by actual price differentials were derived. Consistent with the first approach, the derived welfare weights imply that the political market power of milk producers is only about seven percent of that implied by full monopoly power. These results suggest that in setting price differentials, milk producers have positive political weight (that is the price is above a competitive equilibrium), but that their political power in setting prices is small relative to full monopoly power.

**Market Power and Policy in the U.S. Dairy Industry: Test for bilateral market power. Evidence from responses to minimum prices in milk marketing orders** (Byeong-il Ahn and Daniel Sumner, University of California)

The observations of over-order premiums in the prices of Class I milk in almost all the regions in the United States indicate that dairy cooperatives exercise market power in these markets. The Class I price differentials act as lower bound of price for bargaining when both dairy cooperatives and fluid milk bottlers have market power in the regional Class I milk markets. Ahn and Sumner have derived a pricing equation in which the Class I price differential is included as an explanatory variable. Therefore if the estimated coefficient on Class I price differential is significant, we can conclude the existence of bilateral market power in the regional Class I milk markets.

For empirical estimation, they investigated the possible endogeneity problem associated with Class I price differentials. Because Class I price differentials adjusted only once at the 1999 federal marketing order reform the identification of the coefficient on price differential...
in the empirical pricing equation follows from the correlation between changes in Class I prices and price differentials between December 1999 and January 2000.

In addition, they reviewed documents of hearings and final decisions for the federal marketing order reform in 1999 and found indications that the adjustments of price differentials were influenced by changes in transportation costs of Class I milk between regions.

**Government Programs, Market Power and International Trade** (Sang Gon Jeon and Daniel Sumner, University of California)

This study analyzing the impacts of exogenous shocks on prices, productions and consumption of fluid milk has been ongoing. Using Korea as a case study, Jeon and Sumner have been developing a dairy trade model under imperfect competition. For this purpose, Jeon reviewed thoroughly works by Lee et al. (2006), Sexton et al. (2003), and Alston et al. (2005). To develop the dairy trade model, Jeon and Sumner have been constructing a trade model in which several countries make transactions with each other. They have assumed the processor in each country has a market power and develop the imperfect industrial structure. To apply this model to dairy trade, they use a component such as fat and non-fat-solid rather than dairy products as an aggregated group.

**Assessing Grower Benefits from Stimulating Consumer Demand for Fruits and Vegetables** (Karen Jetter and Daniel A. Sumner, University of California and James A. Chalfant, University of California, Davis)

This project is estimating the impact on U.S. agricultural industries should people increase average consumption of fruit and vegetables to meet the minimum U.S. dietary guidelines. During the period from October through December 2006 the model was revised to: (1) make it more consistent with the dual approach developed by Wohlgenant, and (2) generalize the model to allow for less restrictive parameter values. Activities included respecifying the multi-market model, reprogramming the file to generate the parameter matrix, reprogramming the files to run the analysis and data analysis.

**Healthy Food for Residents of Low-Income Neighborhood** (Karen Jetter, University of California and Diana Cassady, University of California, Davis)

The object of this project is to determine if making fresh produce available in convenience stores in low-income neighborhoods will result in significant purchases of those items by residents of the neighborhood. Weekly sales data are currently being collected based on an inventory of the produce available in the store and purchase orders for produce brought during the week. Average sales are about 550 pounds a week. (Data collection was completed on June 9th and analysis of the sales data begun.) Activities during this last quarter focused on revising the analysis and developing a research brief article.

**Market Basket Study** (Karen Jetter, University of California and Diana Cassady, University of California, Davis)

This study examined the cost of the standard Thrifty Food Plan (TFP) market basket of goods to a healthier market basket of goods by store type and neighborhood income level. During October to December 2006 an additional analysis was completed comparing the cost of the TFP vegetable market basket to the cost of a fruit and vegetable market basket that met the 2005 Dietary Recommendations for a family of four. An article was submitted to the *Journal of the American Dietetic Association.*
Economics of Traceability and Food Safety (Sébastien Pouliot and Daniel Sumner, University of California)

During October and November, Pouliot and Sumner worked on finalizing the paper “Traceability, Liability and Incentives for Food Safety and Quality” that has since been posted on the AgMRC Web site. It also has been submitted to the American Journal of Agricultural Economics for publication and is currently under review. In addition, Pouliot presented the paper in the AG-IO Forum at the Agricultural and Resource Economics Department on October 19, 2006. The paper shows how increased traceability creates incentives for firms in a marketing chain to supply safer food.

In December, they began to work on traceability as an instrument to improve food recall after the discovery of a contaminated product. The motive for implementing traceability is the protection of the general reputation of an industry by making food recalls more efficient and potentially smaller. The goal of the paper is to derive conditions where firms will supply an efficient amount of traceability and where industry mandated traceability is optimal. This work will contribute to explain the increased number of industries supplying traceable products and to identify industries where traceability systems can significantly contribute to the reputation of an industry.

Grapevines of Innovation: Diffusion of Innovations in the Wine Industry (Calanit Bar-Am and Jonathan Barker, University of California and Rolf A.E. Mueller, Universität Kiel)

The objective of this project is to assess the importance of communication networks for technology adoption by agribusiness enterprises, in this case, the adoption of ozone sanitation technology by California wineries. This quarter the survey questionnaire was completed and the technical problems of posting it on online surmounted. It is currently being pretested with several wineries prior to being sent to the selected wineries.

Hedonic Wine Pricing Using Experimental Methods (Christopher Gustafson and Daniel Sumner, University of California)

Gustafson continued to work on wine characteristics, information and consumer wine consumption choices. He has designed a series of experiments to examine how consumers value and react to different sources of information when participating in a market, and in particular, how different levels of human capital invested in wine knowledge affects the sources of information used by consumers, and how this affects consumption.

Gustafson continued to expand his review of literature on wine and hedonic pricing, and on experimental economics. Furthermore, he has been investigating spatial econometric methods, which allow a researcher to specify “spatial” relationships between economic actors to examine the effect of those spatial relationships on some choice variable (e.g. density of firms in a particular market segment on the price.) He is also investigating whether to devise an experiment that examines the situation in which a consumer is willing to pay more for an item if there are a number of people who would be willing to buy it at a particular price, but are unable to.

Food Retailers’ Pricing and Marketing Strategies (Richard Sexton, University of California, Davis)
"Food Retailers’ Pricing and Marketing Strategies, with Implications for Producers," Lan Li, Richard J. Sexton, and Tian Xia's September 2006 research paper on this study has been posted on the AgMRC Web site. The paper examines grocery retailers’ ability to influence prices charged to consumers and paid to suppliers. They discuss the impacts of aspects of retailer behavior on the upstream farm sector.

An Assessment of Policies Applied to the Processing Tomato Industry (Bradley C. Rickard, California Polytechnic State University, formerly with University of California and Daniel A. Sumner, University of California)
Appearing first in the October-December 2006 issues of the California Agriculture magazine, Rickard and Sumner's non-technical article, "EU support reductions would benefit California tomato growers and processors," has been made available on the AgMRC Web site.

Tomato Producer-Processor Contracts (Rachael Goodhue, University of California, Davis)
A paper summarizing the findings of this project was finalized for AgMRC during this quarter and posted on the AgMRC Web site. "Effects of Price Premiums for Multiple Product Attributes on Product Quality: California Processing Tomatoes" by Corinne Alexander, Rachael E. Goodhue, Sandeep Mohapatra, and Gordon C. Rausser examines how growers respond to price incentives and how these incentives interact for two important processing tomato quality attributes: limited use tomatoes and material other than tomatoes. A research paper on that topic was also completed.

Solano County Agriculture Futures Project (Kurt Richter, University of California; Al Sokolow, Human and Community Development Department, University of California, Davis; and Carole Paterson, University of California Cooperative Extension, Solano County)
The first phase of the Solano Agricultural Futures project was completed in December 2006 when the Focus Group Summary report was submitted to the Solano County Board of Supervisors. The report presented the opinions of nearly 80 producers who participated in one of the 10 focus groups held since April 2006. Currently the project is analyzing the nearly 100 producer surveys received from Solano County producers. The producer surveys will be presented in a report in February 2007. During December the research team began collecting commodity specific information on the top 20 commodities produced in Solano County. The commodity report will be presented to the Solano County Board of Supervisors in May or June of 2007.

Implications for expanded bioenergy production in importing regions (Hyunok Lee, University of California, Davis and Daniel Sumner and Marcia Kreith, University of California)
This new AgMRC project is evaluating the current state of innovations and the competitiveness of bioenergy production in the major importing regions of the West. Also it will examine the national market implications of expansion of bioenergy production in the West.

Hyunok Lee started by reviewing past studies and collecting relevant information. The U.S. biofuels industry has been changing very rapidly, and information collection, particularly updating information has been an important part of this study. Lee and Sumner also met with Professor Bryan Jenkins and others to discuss biofuels issues in the context of climate change.
**Goal #4**

*Conduct outreach activities to disseminate the research and information assembled and developed under the previous three goals. These activities are designed for producers, producer groups, businesses and others involved in value-added agriculture (this includes all outreach activities of the Center including workshops, seminars, newsletters and other delivery methods including individual client requests for specific information).*

**Outreach Talks**

In October Omid Rowhani was interviewed by the Futures Channel for an episode designed for 5th and 6th graders, explaining how math that they learn in the classroom is being applied in the “real world.” The focus of the episode was statistics, and how people involved in agriculture use them.

In November, at a Brown Bag seminar which was part of the UC Davis campus-wide book project discussing "The Omnivore's Dilemma," Karen Jetter presented the results of the study on healthy food for residents of low-income neighborhoods.

Speaking at the annual Solano County Farm Bureau dinner, November 17, 2006 in Fairfield, Calif., Daniel Sumner discussed the challenges facing the economic wellbeing of agriculture in Solano County and statewide. The focus was on alternative for profitable rural development.

**Materials Made Available for Print and/or Online Posting during this Quarter (partial listing)**

“Commodity Profile: Raisins (dried grapes).” Created September 2006 by Hayley Boriss, Henrich Brunke and Marcia Kreith.

“Commodity Profile: Spinach.” Created February 2006 by Hayley Boriss and Marcia Kreith.

“Food Retailers' Pricing and Marketing Strategies, with Implications for Producers.” Lan Li, Richard J. Sexton, and Tian Xia's research paper examines grocery retailers' ability to influence prices charged to consumers and paid to suppliers. They discuss the impacts of aspects of retailer behavior on the upstream farm sector. University of California Agricultural Issues Center. September 2006.

“EU Support Reductions Would Benefit California Tomato Growers and Processors” by Bradley J.Rickard and Daniel A. Sumner. Article in October - December 2006 issue of *California Agriculture*, which presents simulation model results from a 50 percent reduction in European Union trade barriers and subsidies.

"Traceability, Liability and Incentives for Food Safety and Quality" by Sébastien Pouliot and Daniel A. Sumner. This paper shows how exogenous increases in food traceability create incentives for farms and marketing firms to supply safer food by increasing liability costs. University of California Agricultural Issues Center. November 2006.
"Effects of Price Premiums for Multiple Product Attributes on Product Quality: California Processing Tomatoes.” This paper by Corinne Alexander, Rachael E. Goodhue, Sandeep Mohapatra, and Gordon C. Rausser examines how growers respond to price incentives and how these incentives interact for two important processing tomato quality attributes: limited use tomatoes and material other than tomatoes. November 2006.

Ask a Specialist Resource

Marcia Kreith responded to three questions received by AgMRC.