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# Minnesota Applied Economist No. 712 Spring/Summer 2004

A Newsletter for Alumni and Friends of the Department of Applied Economics University of Minnesota

## Department Head's Notes

Faculty in the Department of Applied Economics and other faculty on campus with a Ph.D. in economics are in the final stages of planning a new "Joint Graduate Program in Applied Economics," which will replace the Department's current M.S. and Ph.D. programs. Pending approval by the Graduate School and the Board of Regents, the new Joint Graduate Program will be offered to students starting in September 2005.

#### How the New Joint Program Came About

Over the years, many of our departmental faculty have formed close working relationships with economists in other units at the University-including Public Health, the Hubert H. Humphrey Institute of Public Affairs, and the Carlson School of Management. These relationships were formed while our faculty worked on joint research projects with other faculty, while serving as committee members for students in other units at the University, and by inviting other unit faculty to serve as committee members for students in the Department. From these interactions evolved the idea that the University's many applied economics students, who are scattered across a large number of units at the University, would benefit from a joint, cross-University graduate program in applied economics. Faculty from the above three units and the Department have worked together to develop the proposed program.

## The New Program Adds Three Additional Fields of Economic Study

The structure of the new program is similar to our current graduate program. The new program will require all Ph.D. students to satisfy core requirements in economic theory and quantitative methods, complete two fields of



specialization within applied economics, and prepare and defend a dissertation. The key advantages of the new program are 1) it gives students access to a wider range of faculty expertise, and 2) offers them three additional fields of specialization.

The new program will continue to provide training for students in the four fields we currently offer: consumer behavior and household economics, resource and environmental economics, production and marketing, and trade and development economics. The key change is that three additional fields of study will be added: policy analysis, health economics, and labor economics. And, in the future, other fields will be offered as the appropriate faculty expertise becomes available.

The New Program Should Attract More Students The new program should make studying applied economics at the University more attractive to prospective

Ph.D. students in the U.S. and other countries. The avail- $(C_{1}, i_{1}, ..., I_{n}, ..., I_{n}, ..., I_{n}, ..., I_{n})$ 

(Continued on Page 2.)

## In this issue ...

Visiting Student from Italy 2
Outstanding Alumni Award
Japanese Scholar Here , 4
Student Applying Economics 4
Departmental Scholarships 5
Commodity Marketing Spring Break 6
Homeland Security 9
Recent Publications
U and Your Economy

ability of a wider range of fields should spark the interest of students who want to study resource and environmental policy, health policy, and the role that health plays in promoting economic development. In addition, the new program should attract students who are interested in completing an M.A. in public affairs and then continuing on for a Ph.D.

The increased breadth of the new program, I believe, will also be more attractive to the type of applicants who have applied to our program in the past, and should attract attention from a wider range of prospective students who wish to teach economics at four-year colleges or find employment in the private and public sectors. The new program should make the University more competitive with other top universities in the country for graduate students who specifically want a Ph.D. in applied economics.

#### Looking to the Future

When the new program is in place, I expect a number of changes. First, the faculty in the new program will expand from the 32 we have today to about 50. Second, the larger size and greater breadth of the new program will significantly increase the quality and quantity of the Department's research and teaching. Third, our current M.S. program will be incorporated into the new program and, as a result, will be broadened, grow in size,

and gain greater national visibility. And fourth, I expect the number of Ph.D. students entering the program each year will double from 10 to about 20.

If all goes as planned, the proposal for the new graduate program will be submitted for approval to the Graduate School in September 2004. We are requesting a recommendation for approval from the Graduate School, and approval by the Board of Regents, during the 2004-2005 academic year. If we receive that approval, we can begin recruiting for the new program in the spring of 2005, and the first students will enter the program in September 2005.

In closing, let me emphasize what an exciting opportunity our new Joint Graduate Program in Applied Economics presents—especially as the new program can be implemented using our current resources. For example, only one new course needs to be developed and that will be taught by existing faculty. More important, however, the new program will make more efficient use of our faculty resources and will provide our graduates with a more marketable degree. For the reasons outlined above, I firmly believe our new Joint Graduate Program in Applied Economics is a great idea whose time has truly come!

Vernon Eidman

## Applied Economics Welcomes Visiting Student from Italy



Andrea Berti, a graduate student from the University of Bologna, is spending several months in the Department, with the help of travel support from the Center for International Food and Agricultural Policy. He is working with Rob King on research to describe and analyze the supply chain for Parmigiano-Reggiano cheese that is imported from Italy to the United States. This involves interviewing retailers, restaurateurs, wholesalers, and importers. Of course, some tasting of this very fine cheese is also required. This research will be the basis for Andrea's M.S. thesis as well as the subject of a paper to be presented in August at the 9th Joint Conference on Food, Agriculture, and the Environment in Conegliano, Italy. The conference is being organized, in part, by the Center for International Food and Agricultural Policy.

## Michael Martin Receives Outstanding Alumni Award



Michael V. Martin

Michael V. Martin was selected as the recipient of the department's Outstanding Alumni Award for 2003–04. Dr. Martin received his Ph.D. in agricultural and applied economics from the University of Minnesota in 1977. He is currently vice president for agriculture and natural resources at the University of Florida, a position he

has held since October 1998. As vice president he is responsible for the teaching, research, extension, and international programs of the Institute of Food and Agricultural Sciences. The Institute includes 17 academic departments and 13 research and extension centers located around the state.

A native of Crosby, Minnesota, Michael completed a B.S. in business and economics and a M.A. in economics from Mankato State College. On completing the Ph.D. under the watchful eye of his adviser, Professor Emeritus Reynold P. Dahl, Michael joined the faculty in the Department of Agricultural and Resource Economics at Oregon State University. In addition to his teaching, research, and extension responsibilities, he served as president of the Faculty Senate in 1990 and as interim department head for 1990-91. In 1992 he returned to the University of Minnesota as associate dean for research in the College of Agriculture and as assistant director of the Agricultural Experiment Station. In 1995, he was appointed dean, College of Agricultural, Food, and Environmental Sciences as well as director of the Agricultural Experiment Station. During his time as dean, Michael was noted for his application of economic and business principles to the administration of the College and the Experiment Station.

On April 23, 2004, Michael presented a seminar entitled, "A Few Observations About the Economics of University Administration," which was followed by the presentation of the award and a dinner for his family and the faculty. Michael's parents, Dorothy and Ben Martin, his wife Jan, his daughter Amanda, and his son Sam were present to share in the event.

Every year since 1985–86 the Department of Applied Economics has recognized an alumnus or alumna who 1) has attained unusual distinction in his or her field or profession, and 2) has demonstrated achievement and leadership on a community, state, national, or international level. Candidacy is limited to students of a degree program offered by the department and the selection is made by the departmental awards committee. We are pleased to add Michael Martin as the 19<sup>th</sup> member of that list of outstanding departmental alumni.

We thank the Martin team, Jan and Michael, for their outstanding service to agriculture and the profession, and we look forward to their future contributions and accomplishments as they take on more challenges. They have agreed to assume a new challenge on July 1, 2004, when Michael becomes president of New Mexico State University.



Vernon Eidman presents Michael with the Outstanding Alumni Award plaque

## Japanese Scholar Visits the Department



Kazuhiko Oyamada will be visiting the Department for two years from Japan where he is a research fellow at the Institute of Developing Economies (IDE), which is a component of the Japan External Trade Organization

(JETRO). His main fields of interest are trade, multinational enterprises, and economic growth. For example, Kazuhiko has conducted research on the dynamic effects of various economic partnerships and arrangements of interest to Japanese policy makers-including areas such as trade liberalization between Japan and the Republic of Korea, Mexico, Chile, and ASEAN members. In addition, Kazuhiko has prepared a number of background papers for the Japanese Ministry of Economy, Trade, and Industry, and was part of the team that compiled the Asian International Input-Output Tables in cooperation with Badan Pusat Statistik-Statistics Indonesia (which is based in Indonesia), the Bank of Korea (in the Republic of Korea), the Taiwan Research Institute (in Taiwan), the Bureau of Economic Analysis (in the U.S.), and INFORUM (at the University of Maryland).

While at the University of Minnesota, Kazuhiko will work with Professor Terry Roe and others on a number of projects related to economic growth, foreign trade, and trade policy. One such project is to better understand the importance of public capital, its importance in contributing to economic growth, and the factors influencing the institutional environment that is critical to evolution of this capital over time. In addition, he will mentor graduate students in economic growth, foreign trade, and trade policy.

## Students Applying Economics

Developing students' skills in applying economic concepts and methods to real-world problems is a key goal in our undergraduate teaching program. Most of our students eventually find themselves working in situations they could never have anticipated, and many facts they learn in our classes are soon out of date. We cannot possibly prepare them for all the challenges they will face, but we can prepare them to combine knowledge and experience in creative ways to solve new problems.

Nathan Hay, a 2004 graduate with distinction in agricultural and food business management, recently shared an example of this kind of creative problem solving with us. Nate spent the summer of 2003 as an intern for Cargill Animal Nutrition working on inventory management for bagged feed ingredients. He worked on a spreadsheet that used information on order costs, monthly usage, and carrying costs to determine safety stocks and reorder points for each ingredient. Nate quickly encountered a problem. The warehouse was too small to accommodate the efficient quantity of all ingredients, and the economic order quantity formulas in the spreadsheet didn't account for this. At any given time, some ingredients would be overstocked and some understocked. This cost the company money in tied-up cash and stock-outs.

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## Students Applying Economics (continued)

Nate had never studied a problem like this in a class, but he recognized that the linear programming methods he had studied in Managerial Economics (ApEc 3002) could be used to allocate limited warehouse space most efficiently. He added a linear programming component to his spreadsheet that minimized inventory management costs subject to the limited warehouse space available for storing feed components. Cargill incorporated Nate's program into their feed-ingredient inventory-management system and reduced the amount of working capital tied up in inventories. After graduation, Nate returned to Cargill Animal Nutrition where he is currently a trainee administrative manager. This position puts him in charge of office functions for several feed plants in upstate New York. The duties involved in his new position include accounting, finance, merchandising, formulation, credit management, leading the office staff, setting performance goals, and strategic planning – which gives him plenty of opportunity to put the problem-solving skills he learned in class to practical use.

## Three Students Receive Departmental Scholarships

Three undergraduate students—Adam Bjerketvedt, Eric Anderson, and Tim Amundson—were awarded scholarships by the Department for the upcoming 2004-05 academic year. Adam Bjerketvedt received the Hal Routhe Scholarship, and Eric Anderson and Tim Amundson each received a Willis Peterson Scholarship.

<u>Adam Bjerketvedt</u>

Adam received the \$2,000 Hal Routhe Scholarship, which is awarded to an upper-division undergraduate student with an interest in agricultural finance. Adam grew up on a small dairy farm in Hancock, MN, is on the Dean's List, and plans on working with the managerial and financial aspects of a large crop operation upon graduation.

· Eric Anderson

Eric received a \$1,500 Willis Peterson Scholarship, which allows an undergraduate student to pursue his or her interest in economics. Eric is a freshman majoring in agricultural and food business management and grew up on a farm in McCook, NE. During high school he participated in FFA (Future Farmers of America), and is interested in a career in agribusiness when he graduates.

#### Tim Amundson

Tim, who received a \$1,500 Willis Peterson Scholarship, is from Andover, MN. Currently, he is president of the Applied Economics' Student Association, on the Dean's List, and works as an intern with the Land O' Lakes Finance Company.

The Hal Routhe Scholarship was set up to honor Harlund (Hal) G. Routhe, Professor Emeritus, University of Minnesota. Hal graduated from the College of Agriculture in 1951 with a B.S. in agricultural economics and earned a master's degree in 1954. Hal devoted his career to the University of Minnesota— as a 4-H leader, later as an applied and agricultural extension economist, and then as program director of agriculture and related industries and associate director of the Minnesota Extension Service. Hal created this scholarship because of his continuing interest in agriculture and education.

The Willis Peterson Scholarship was established by the colleagues, friends, and relatives of Professor Emeritus Willis Peterson to honor his memory. For many years Professor Peterson taught two courses—"Principles of Microeconomics" and "Principles of Macroeconomics"—and won the University's highest award for teaching excellence, the Horace T. Morse-Minnesota Alumni Association award for outstanding contributions to undergraduate education.

## Commodity Marketing on Spring Break

During spring break, Professor Brian Buhr offered a new course, entitled "Commodity Marketing on Spring Break," to undergraduate students in our majors. Eleven dedicated students gave up opportunities for sun and fun to learn from some of the world's leading agribusinesses about how agricultural commodity markets work in the real world. In addition, the students learned about career opportunities related to food and agricultural marketing, and gained first-hand insights into the nation's complex and elegant food supply chain. Professor Buhr's course consisted of five separate, daylong tours of six Minnesota agribusinesses. To enroll in the course, students must have completed either ApEc 3411 (Commodity Marketing) or ApEc 4481 (Futures and Options Marketing). What follows is a day-by-day account of the tours taken by our students.

#### Monday—The Minneapolis Grain Exchange

Monday began with a visit to the Minneapolis Grain Exchange (MGE). The first stop was the trading gallery where students had the opportunity to see the opening of trading. Next, the students met with traders to gain a perspective on their working lives and to learn how the traders approach floor trading of wheat—from both a philosophical and technical perspective. By talking with the traders and MGE administration, students learned a great deal about the actual operations of a futures exchange, how contracts are developed, how trades are cleared, and the role of various members of the exchange. To cap off the day, students had the opportunity to participate in simulated electronic trading on the MGE's new MGExpress electronic trading platform.

What a wonderful perspective the students gained on the past and future of commodities trading! They began the day by observing the historical—but still operating cash-trading tables next to the open-outcry pits, and ended the day by doing electronic trading. One student commented how the original traders—shown in early photos of the grain exchange dressed in their formal business attire—could never have imagined the day when people could trade commodities from home dressed in their pajamas!

#### Tuesday—Cargill's Worldwide Headquarters

Tuesday was spent at the worldwide headquarters of Cargill in Wayzata, MN. This was a full day and included presentations by Cargill AgHorizon's personnel who discussed real-world contracting and grain-origination issues. Meetings later in the day with actual commodity traders provided insights into how the world's grain is traded on a daily basis.

For those students thinking of careers in commodity marketing, the presenters at Cargill provided insights into their own educational backgrounds and career paths. Our students were struck by the wide range in backgrounds of Cargill's employees and their shared commitment to corporate excellence. The day wrapped up with a simple trading simulation that taught the students about the importance of market information, knowledge, and experience — and, judging by who made money (Cargill traders), it doesn't look like the students are ready to take on Cargill...yet!

#### Wednesday—CHS' MN River Barge Facility

Wednesday included two stops, both at divisions of CHS Cooperatives. The first stop was at CHS' Minnesota River Barge Facility (MRBF) in Savage, which is the newest-but smallest in terms of storage capacity-of all barge facilities in the area. Here the students learned about the amazing throughput of grain in a modern barge facility. In addition, they experienced first hand the implications of genetically modified organism (GMO) and non-GMO handling, segregation, and testing of grain. On the day our students visited MRBF, the barges weren't venturing north just yet, but CHS was receiving non-GMO grain. Students were able to follow the grain from the loading area to the on-site grain-testing facility, and learned how grain is graded and tested for the presence of GMOs. Students were awestruck by the volume of grain this streamlined facility handled-and all using a computer screen and just a tap on a keyboard.

The second stop of the day was at Ventura Foods in Albert Lea. Ventura Foods is a subsidiary of CHS that

processes oil crops (such as soy and canola) into vegetable spreads and oils. This was the first chance for students to make a connection between farm products and final consumer food products. This tour was production-oriented and focussed on how today's complex food-processing facilities are managed and how rigorous quality control is maintained to ensure the highest quality and safest products for consumers.

#### Thursday—Hormel Foods' Processing Plant

Thursday included a field visit to Hormel Foods in Austin, MN. The day began with a plant tour of Quality Pork Processors, one of Hormel's many processing plants. Students were amazed by the level of mechanization and complexity involved in producing pork products. With current work-safety regulations and foodsafety protocols limiting plant tours, these students are a few of the lucky people who have seen the real SPAM processing line—and not the museum version, which is also in Austin.

Following the tour of the processing plant, students visited Hormel's headquarters and were given a first-class presentation on how a world-leading food-products firm markets to today's discriminating and time-pressed consumer. For the first time, many students could clearly see the link between farm products and Madison Avenue's marketing of branded, consumer-ready food products. The students were then treated to a fantastic lunch of Austin Blues barbecue pork products and a discussion of Hormel's product-research, risk-management, and career opportunities.

The day, of course, would not have been complete without a stop at the SPAM museum. Although it's a wonderful and entertaining view of the history of Hormel Foods, most students agreed it didn't hold a candle to the real deal!

#### Friday-Land O' Lakes Dairy Proteins Plant

Friday was capped off with a visit to Land O' Lakes' Melrose Dairy Proteins plant in Melrose, MN. Students had the opportunity to tour the plant, which specializes in making mozzarella and cheddar cheeses. Most striking for students was the size of the plant, its amazing cleanliness, and the absence of employees in the plant—because, like most modern processing facilities, labor has been reduced through mechanization and information technology. In addition, students learned about the

(Continued on Page 8.)



Mr. Clinton Gergen demonstrates testing for GMO grains at CHS' Savage, MN terminal.

cheese-making process and how milk is utilized, and almost everyone—including the instructor—was amazed to discover that dairy products could be used to make ethanol, which is produced at the Melrose site.

Much of the remainder of the day was spent learning about milk, dairy-product marketing, and risk management. Students gained valuable insights into risk-management strategies and the complex world of dairy marketing with federal marketing orders and multiple product uses. The students also learned there's nothing in the world that tastes as good or squeaks as much as fresh and warm cheese curds!

#### Students Gained a New-Found Enthusiasm for Marketing Careers

Overall, the inaugural course was an absolute success. Students gained a first-hand view risk-management and marketing in the agricultural and food industries. In class reports, the students unanimously expressed their newfound enthusiasm for their future careers in food and agricultural marketing. This enthusiasm didn't come only from seeing the food marketing chain; it came from the contagious enthusiasm of the many dedicated people who provided their time and talents during our visits. The passion of all of the hosts for their industry spoke volumes about the importance and fulfillment they gain from careers in the food and agricultural sector. I personally want to thank the many people we met on our tour who took the time to share their passion with our students. In particular I want to thank the people who helped organize each of our site visits at their respective businesses. In addition, most of these individuals also dedicate their time to an advisory group that has been formed to assist in special project and curriculum development for our agricultural marketing courses. These include Kent Horsager of the Minneapolis Grain Exchange, Frank Remley and Dennis Inman from Cargill AgHorizons, Scott Cordes of CHS, Roe Erlandson and Tim Toliver with Hormel Foods, and Steve Watrin with Land O' Lakes.

Finally, a word of recognition to the students who participated in the inaugural course: Alyssa Bentz, Mark Bickler, Greg Bunkowske, Joseph Dimler, Susannah Dodge, Jessica Donley, David Johannsson, Adam Kidrowski, Joshua Larson, Roelef Nel, and Patrice Wetzel. Giving up spring break showed commitment but their inquisitiveness, questioning, and enthusiasm helped make the tour a success and provided a strong representation of the quality of the students attending the University of Minnesota.

If you're a student, come join us for the next Commodity Marketing on Spring Break course in 2005!



Students toured Hormel Foods processing facilities in Austin, MN.

## Department Members Affiliated with Homeland Security Center of Excellence

The University of Minnesota has been named one of three Homeland Security Centers of Excellence and has received a three-year, \$15 million grant from the U.S. Department of Homeland Security to help develop ways to protect the nation's food supply from deliberate contamination or terrorist attack.

#### **The Participants**

The University's National Center for Food Protection and Defense is a national consortium of academic, private sector, and government partners. Currently the Center includes faculty from 15 universities, as well as experts from state health and agriculture agencies, independent research facilities, professional organizations, agriculture and food industry companies, and private consulting firms. Dr. Frank Busta, Professor Emeritus in the Department of Food Science and Nutrition, is the director of the Center, which is comprised of a collaborative staff of about 90.

Several Department of Applied Economics' faculty helped develop the original proposal for creating the NCFPD. Jean Kinsey and Tom Stinson took the lead in developing four parts of the economics section of the proposal (supply-chain benchmarking, consumers' willingness to pay, strategies for optimal investment in homeland security, and economic impacts of catastrophic events), and Brian Buhr and Ford Runge as well Robert Kauffman (from the Carlson School of Management) and Hamid Mohtadi (from the University of Wisconsin) helped develop this section.

#### **Research Goals**

The U.S. food system—from farms, to processing plants, to distributors, to food retailers—presents an array of vulnerable targets for terrorist attacks. Intentional contamination of agricultural or food products with biological, chemical, or radiological agents could lead to devastating effects on human health, as well as major economic losses to a critical sector of the economy. Historically, efforts to protect the food supply have focused

primarily on preventing and reducing accidental contamination by naturally occurring agents.

"The need to protect against potential deliberate contamination now creates a demand for enhanced capabilities to anticipate, prevent, respond quickly to, and minimize the impact of such attacks," said Michael T. Osterholm, the Center's Associate Director. "This places great importance on federal, state, and local governments and the private sector to coordinate and integrate their biosecurity activities."

During the past two years, a farm-to-table industry group has been collaborating with the University to identify security gaps in the nation's food supply and develop comprehensive plans to respond to those gaps. In the future, the Center's research activities will provide strategies and scientific discoveries related to protecting the food supply. These strategies and discoveries are expected to be useful in the development of food tracking systems, in rapid testing methods for contamination, and in quick response readiness along the supply chain.

In summary, the Center has three main goals: first, to extend the Center's findings—through scientific discovery and scholarly publications—to multiple audiences in the U.S.; second, to train graduate students in food protection and defense issues; and third—and most important of all—to educate the general public about the importance of being alert to the dangers currently facing the food-supply system in the U.S.

To view the 2003 Department Publications list, visit the department website at <u>http://www.apec.umn.edu/</u> <u>misc/pubbook2003.html</u>

## **RECENT PUBLICATIONS**

For information on locating a copy of a publication not available on the Internet, contact the underlined author at the department by calling 612-625-1222.

## **GLOBAL PERSPECTIVES**

Agricultural Trade Barriers and the Role of Institutions in African Development by Terry Roe, Agapi Somwaru, and Xinshen Diao. This paper focuses on the interdependence between international trade and institutional reform, and suggests that the trade barriers erected by advanced countries to the agricultural exports from poor countries and sub-Saharan agriculture, in particular, are a barrier to economic growth and development. Drawing upon recent literature, the suggestion is that trade barriers inhibit institutional reform, which is a major factor affecting economic growth. An empirical analysis of trade reform and economic growth shows that sub-Saharan economies can repeat potential gains from increased trade that are larger when such integration with world markets induces institutional reform. Paper presented at the Empirical Trade Analysis Conference: Strengthening Analytical Capabilities to Support Trade Negotiations; Washington, DC; January 22-23, 2004.

Asia's Irrigation Management in Transition: A Paradigm Shift Faces High Transaction Costs by K. William Easter. This article argues that we have generally agreed on a strategy to address water management problems in Asian irrigation projects. It goes on to ask whether or not the strategy is being implemented effectively. A review of the irrigation record of six Asian countries shows that they have implemented several of the key irrigation management reforms but that high transaction costs are delaying further reform. IN Economics of Water Resources: Institutions, Instruments, and Policies for Managing Scarcity edited by K. William Easter and Mary Renwick. Burlington, VT: Ashgate Publishing Company, 2004. Reprint of article published in Review of Agricultural Economics, v.22, 2004.

**Conflict and Cooperation in Managing International Water Resources Such as the Great Lakes by Nir Becker and <u>K. William Easter</u>. This article uses game theory to assess the potential for cooperative management of an international water body such as the Great Lakes. The authors demonstrate that a non-cooperative solution is not the inevitable outcome for the use of this open-access water resource. Stable cooperative coalitions are possible when a subset of states and provinces decides to cooperate. IN Economics of Water Resources: Institutions, Instruments, and Policies for Managing Scarcity edited by K. William Easter and Mary Renwick. Burlington, VT: Ashgate Publishing Company, 2004. Reprint of article published in Land Economics, v.75, 2004.** 

**Constrained Conjuctive-Use for Endogenously Separable Water Markets: Managing the Waihole-Waikane Aqueduct by** <u>Rodney Smith</u> and James **Roumasset.** (Need summary) In Economics of Water Resources: Institutions, Instruments, and Policies for Managing Scarcity edited by K. William Easter and Mary Renwick. Burlington, VT: Ashgate Publishing Company, 2004. Reprint of article published in Agricultural Economics, v.24, 2004.

Costing the Conservation of Genetic Resources: A Comparison of the CIMMYT and ICARDA Genebanks by Bonwoo Koo, <u>Philip Pardey</u>, and Brian Wright. In this contribution we compile and use a set of cost data for wheat and maize stored in the CIMMYT genebank and cereals, food legumes, and forage legumes in the ICARDA genebank to address a number of questions. We illustrate the cost-saving consequences of consolidating genebanks with data from CIMMYT. IN: Efficient Conservation of Crop Genetic Diversity: Theoretical Approaches and Empirical Studies edited by Detlef Virchow. New York, NY: Springer-Verlag, 2003.

**Creating, Protecting, and Using Crop Biotechnologies Worldwide in an Era of Intellectual Property by** <u>**Philip Pardey, Bonwoo Koo, and Carol Nottenburg.** In this paper we review the evidence on the scope of agricultural research and development worldwide, provide new data on the structure of crop-</u> related intellectual property rights, and summarize trends on the uptake of proprietary bioengineered crops. Staff paper P04-4, 2004. http://agecon.lib.umn.edu/mn/p04-04.pdf

Does Food Safety Conflict with Food Security? The Safe Consumption of Food by Jean Kinsey. This paper concludes by saying "No"; food safety and security reinforce each other. This paper combines food safety and food security into the concept of "safe food consumption." Unsafe food consumption occurs when food contains known substances that lead to short- or longterm illness or death (such as botulism) and suspect substances (such as pesticides) that are believed to lead to delayed diseases. Unsafe food consumption also occurs when hunger or overeating contribute to long-term illness and shorter life expectancy. Working Paper 04-01, 2004. <u>http://agecon.lib.umn.edu/mn/tr04-01.pdf</u>

Economics of Water Resources: Institutions, Instruments, and Policies for Managing Scarcity edited by <u>K. William Easter</u> and Mary Renwick. This book brings together 30 of the best economic articles written in the past several decades that are concerned with water scarcity issues. The introductory chapter gives an overview of the 30 articles and suggests areas for future research. The book itself is divided into five sections, each of which addresses a key water-scarcity issue. These issues include: valuing water in alternative uses, optimum water allocation over time, institutional arrangements to improve water management, economic instruments for better managing water, and designing water policies to improve water use in developing economies.

Burlington, VT: Ashgate Publishing Company, 2004.

Ending Hunger by 2050: Crucial Investments and Policies by <u>C. Ford Runge</u>, <u>Benjamin Senauer</u>, <u>Philip Pardey</u>, and Mark Rosegrant. In a world of unprecedented wealth, the persistence of widespread, chronic hunger is unacceptable. Although ending food insecurity will be an enormous task in itself, the greater challenge may be complacency, indifference, and a lack of political commitment. With appropriate investments, innovations, and institutions, we can end chronic hunger in our lifetime. Widespread hunger is preventable. International Food Policy Research Institute; Washington, DC, 2003. <u>http://www.ifpri.org/pubs/ib/ib14.pdf</u>

Evolution of the Economic Results and the Structure of Farms: An Analysis through the Book-Keeping Data in Central and Northern Italy by M. Canavari, R. Ghelfi, M. Merlo, S. Rivaroli, D. Sarti, G. Toffanin, and P. Vanelli. In this paper an analysis of the book-keeping results of agricultural enterprises in northern and central Italy is carried out. We try to underline and analyze the evolution of the economic results and the main structural and organizational elements in the firms. The study is aimed at underlining the influence of the EU payments on the profitability and the changes in the value distribution between the various input suppliers. Center for International Food and Agricultural Policy, Working Paper WP04-2, 2004. http://agecon.lib.umn.edu/mn/wp04-02.pdf

Formal and Informal Markets for Water: Institutions, Performance, and Constraints by K. William Easter, Mark Rosegrant, and Ariel Dinar. This article reviews the conditions necessary for establishing successful water markets, identifies potential problems, and offers mitigating strategies. In addition, it uses examples from several informal and formal water markets that are already operating, to illustrate these problems and suggest possible solutions. Yet government inaction and ineffective institutional arrangements are likely to continue to prevent water markets from being an effective tool for reallocating scarce water resources. IN Economics of Water Resources: Institutions, Instruments, and Policies for Managing Scarcity edited by K. William Easter and Mary Renwick. Burlington, VT: Ashgate Publishing Company, 2004. Reprint of article published in World Bank Research Observer, v.14, 2004.

Intellectual Property Rights and Biotechnology Transfer by Carol Nottenburg and <u>Philip Pardey</u>. Notwithstanding the positive incentive to innovate effects of intellectual property (IP) rights, there is concern that increased intellectual property claims (such as patents and plant breeders' rights, but, especially, contractual rights) for biotechnologies, are unduly limiting the transfer and productive uses of those technologies. This paper describes the IP barriers and discusses the challenges to transferring biotechnology to developing countries, including a range of policy and practical strategies that facilitate access to these technologies. Paper prepared for Asia and the Pacific Industrial Development Forum on Biotechnology; Chengdu, China; December 16–17, 2003.

International and Institutional R&D Spillovers: Attribution of Benefits Among Sources for Brazil's New Crop Varieties by <u>Philip Pardey</u>, Julian Alston, et al. In general, reported rates of return to agricultural R&D are high but questions have been raised about upward biases in the evidence. The main reason for this bias is that insufficient attention is paid to attribution aspects, such as matching research benefits and costs. In this paper, using new evidence for Brazil, we show that paying insufficient attention to attribution is a pervasive and important—problem. Staff paper P04-03, 2004. http://agecon.lib.umn.edu/mn/p04-03.pdf

#### Measuring Commodity Price Volatility and the Welfare Consequences of Eliminating Volatility by Amyaz Moledina, <u>Terry Roe</u>, and Mathew Shane.

Commodity price volatility in international markets has numerous policy implications. The common measure of volatility, the standard deviation of the coefficient of variation, likely overstates the magnitude faced by economic agents. By making a distinction between its predictable and unpredictable components, volatility is found to be low, suggesting that welfare gains may not by obtainable by policy interventions designed to diversify risk or stabilize prices. Working Paper prepared for the USDA Economic Research Service and the University of Minnesota Economic Development Center, November 2003.

**Optimal Environmental Development Under Differing Stochastic Regimes by Shirra Freeman and** <u>Naomi Zeitouni</u>. In this work, two variations of land development under uncertainty in a multi-period setting are considered. The premium for maintaining temporal flexibility in the development decision is found to be model related. When development causes the level of environmental sensitivity to increase, the optimal magnitude of development is the private optimum; however, there is a positive value to delaying action. When development

causes a jump in the level of damage but leaves other parameters unaffected, the optimal magnitude of development is smaller than the private optimum but there is no value to waiting to develop. IN Risk and Uncertainty in Environmental and Natural Resource Economics edited by Justus Wesseler, Hans-Peter Weikard, and Robert Weaver. Northampton, MA: Edward Elgar, 2004.

Pricing Irrigation Water: Principles and Cases from Developing Countries by Yacov Tsur, Terry Roe, Rachid Doukkali, and Ariel Dinar. This book draws upon World Bank-funded case studies of the economics of water in China, Mexico, Morocco, South Africa, and Turkey. At least 2.5 billion of the world's population lives in areas with declining water supplies. As globalization links economies, the importance of irrigation water is becoming ever more critical to the participation of these populations in the economic gains that globalization can potentially contribute to their well-being. Yet, using markets to allocate water most economically, raises social problems as to who has the property rights to the water, and, hence, who should earn the gains from water trades? Should everyone have an inalienable right to water? As economies expand and water demand in urban industrial centers expands, should water be taken away from farmers? Should they be compensated? This book addresses these key issues. Washington, DC: Resources for the Future, 2004.

**Reform of Irrigation Management and Investment** Policy in African Development by K. William Easter and Slim Zekri. This paper examines the reform of water and irrigation management in Africa and compares it with similar reforms in Asia. Several things are evident from the review. First, Sub-Saharan Africa (SSA) is at an earlier stage of irrigation development and reform than Asia. Second, the articulated need for reform is much stronger in Asia than it is in SSA. Third, the productivity of small-scale irrigated farms is significantly lower in SSA compared to Asia. Thus, any irrigation investment strategy in SSA should be different from Asia and focus on increasing small-farm productivity as well as small-scale irrigation projects. Paper presented at the Pre-IAAE-Conference on African Agricultural Economics; Bloemfontein, South Africa; August 13-14, 2003. http://agecon.lib.umn.edu/mn/cp03ea01.pdf

Social Science Knowledge and Economic Development: An Institutional Design Perspective by <u>Vernon Ruttan</u>. In this book, Ruttan advances a model in which institutional change is induced by changes in resource and cultural endowments and by technical change. The disequilibria resulting from such changes create opportunities for the design of more efficient institutional arrangements. The design perspective employed in the book stands in sharp contrast to organic and evolutionary perspectives on the sources of institutional change. Ann Arbor, MI: University of Michigan Press, 2003.

Sustainability and Enclosure: Land, Intellectual Property, and Biotechnology by <u>C. Ford Runge</u>. The tension between enterprise as a means and sustainability as an end, is directly related to the tension between rights to exclude others from a stream of private benefits and rights to be included in streams of environmental improvements. Resolving these tensions is necessary if we are to square the circle between sustainability and enterprise. I begin, for perspective, with a brief review of the enclosure of land and the widely cited notion of the Tragedy of Commons. I then consider the modern version of the debate, its surrounding informatics, and more specifically—intellectual property in plant genomics. Staff paper WP04-1.

http://agecon.lib.umn.edu/mn/wp04-01.pdf

**Teacher Incentives by** <u>**Paul Glewwe, Nauman Ilias,</u> <b>and Michael Kremer.** This study examines whether rewarding teachers in rural Kenya based on their students' test scores leads to better student academic performance. The methodology used is randomized evaluation, in which 50 schools (out of 100) were randomly chosen to implement the teacher incentives program (rewarding teachers for high student test scores) and the other 50 did not adopt the program. Overall, the program had little effect on student test scores over 2 years. National Bureau of Economic Research Working Paper 9671, 2003.</u>

**Traceability and Information Technology in the Meat Supply Chain: Implications for Firm Organization and Market Structure by** <u>Brian Buhr</u>. The traditional food supply chain is arranged as a complex array of producers, handlers, processors, manufacturers, distributors, and retailers. As the food supply chain grew in complexity over time, little emphasis was placed on preserving information regarding the origin of raw materials and their transformation, often by multiple handlers, into consumer-ready products. This paper provides case illustrations of the implementation of information systems for support of traceability in Europe. Journal of Food Distribution Research, v.34, no.3, November 2003.

## **ISSUES IN THE U.S.**

The 2003 Supermarket Panel Annual Report by Jean Kinsey, Elaine Jacobson, Ajay Behl, and Jonathan Seltzer. This report presents findings from the 2003 Supermarket Panel and provides an overview of findings from the past four years. The 2003 Panel includes 391 stores that are a representative cross-section of the supermarket industry. The Panel tries to follow the same stores over time. Of the 391 stores, 268 were in the Panel in 2002. Nine percent of the stores have been in the Panel all four years. At least one store from every state is in the Panel. The Food Industry Center, 2003. http://agecon.lib.umn.edu/mn/tr03supa.pdf

**Cheap Food Shouldn't Cheapen Farm Livelihood by <u>Richard Levins</u>.** Our nation's food bill continues to rise but projected farm income remains stagnant. Increased food processing, more eating away from home, and lack of farmer market power are factors to consider. Successful Farming, January 2004.

**Diet Quality and Calories Consumed: The Impact** of Being Hungrier, Busier, and Eating Out by Lisa Mancino and Jean Kinsey. While Americans claim to be eating better and improving their understanding of diet and health, they are getting heavier and increasing their risk of suffering from diet-related illnesses. The cause of this inconsistency is unclear. Using theoretical models of preference reversal and econometric empirical analysis, this study finds that the number of calories eaten per meal increased and the quality of the diet decreases as people wait more than six hours to eat their next meal, work more then fifty hours a week, and consume a larger amount of food away from home. These situational factors are important even for consumers who have considerable knowledge about diet and health. The Food Industry Center Working Paper 04-02, 2004.

Do We Now Collect Any Revenue from Taxing Capital Income? by Roger Gordon, Laura Kalambokidis, and Joel Slemrod. The U.S. income tax system has long been recognized as a hybrid of an income and consumption tax system, with elements that do not fit naturally into either pure system. What it actually is has important policy implications for, among other things, understanding the impact of moving closer to a pure consumption tax regime. In this paper, we examine the nature of the U.S. income tax system by calculating the revenue and distributional implications of switching from the current system to one form of consumption tax, that is, a modified cash flow tax. IN: Journal of Public Economics, v.88, no.5, April 2004. http://ej.lib.umn.edu/ ?url=http://www.sciencedirect.com/science/journal/ 00472727

**Dynamic Reserve Site Selection by Christopher Costello and <u>Stephen Polasky</u>. We analyze the problem of choosing sites through time to include in a network of biological reserves for species conservation. When sites cannot all be protected immediately and excluded sites are threatened by development, planning should factor in both expected biodiversity benefits of sites and the development risk. We formulate this problem as a stochastic dynamic integer-programming problem. Resource and Energy Economics, v.26, no.2, June 2004.** 

Estimating Site-Specific Nitrogen Crop Response Functions: A Conceptual Framework and Geostatistical Model by <u>Terrance Hurley</u>, Gary Malzer, and Bernard Kilian. Determining the profitability of variable-rate nitrogen applications for corn is challenging because of the difficulties of collecting and interpreting the appropriate data. To address these difficulties, a new spatial statistical model was developed to estimate site-specific crop response functions for interpreting data from complete randomized-block field experiments. The model is then used to estimate the potential profitability of variable-rate nitrogen for corn, based on field data from south-central Minnesota. Staff paper P04-2, 2004. <u>http://agecon.lib.umn.edu/mn/p04-02.pdf</u>

**Ethanol Dry-Mill Spreadsheet (internet resource)** by **Douglas Tiffany**. Tiffany wrote a paper entitled, "Factors Associated with Success of Fuel Ethanol Producers" (with Vernon Eidman), which analyzes the sensitivity of dry-mill ethanol plants to various factors, such as corn price, ethanol price, ethanol yield, natural gas price, and capacity factor. The values of improved yeasts, corn varieties, or energy-saving technologies on profits are measured. The paper and associated electronic spreadsheets can guide managers of existing plants and individuals considering investments in new plants. Individuals can readily use the spreadsheets to estimate profits and loan repayments of the plants under different scenarios. Tiffany and Eidman also constructed a retrospective history of profits for a model, well-sized plant over the past decade to understand the volatility of returns for such plants, which now dominate U.S. ethanol production. The paper and spreadsheets are available from the following websites: http://www.apec.umn.edu/staff/ dtiffany/staffpaperp03-7.pdf and http://www.agmrc.org/ energy/info/ethanolsuccess.xls.

**Fighting Obesity: Do Well by Doing Good by <u>Ben</u> <u>Senauer</u> and <u>Jean Kinsey</u>. Helping Americans to adopt healthier lifestyles will be critical to slowing rising U.S. medical costs. Overweight and obesity are the most rapidly increasing risk factor for many serious diseases, such as heart disease, cancer and diabetes. If we are to make progress against overweight and obesity, the help of the food industry will be needed. Supermarkets have an opportunity to help their customers eat healthier and become more physically active, which could also promote the much sought goal of customer loyalty, an example of doing well business-wise by doing good. Advantage, v.2, no.2, February 2004.** 

FINPACK 2003, Release 3.12 (computer software) by <u>R. Craven</u>, <u>Dale Nordquist</u>, <u>K. Klair</u>, <u>R.</u> <u>Loppnow</u>, <u>D. Richardson</u>, <u>David Nordquist</u>, and <u>C.</u> <u>Mikesell</u>. FINPACK is used by extension educators, other educators, lenders, producers, and others to provide a framework for farm financial planning, business analysis, and credit analysis. FINPACK makes it possible to quickly and easily develop balance sheets, cash flow plans, long range plans, whole-farm financial reports, and enterprise analyses. Recent updates added graphical benchmarks for standard financial measures, collateral analysis tools for lenders, updated linkages to Farm Service Agency forms, and an import procedure for Quicken accounting data. Center for Farm Financial Management, 2003.

# Five Common Mistakes in Grain Marketing by <u>Edward Usset</u>, <u>D. Wynn Richardson</u>, and <u>Robert</u>

**Craven.** Marketing is important! Studies from Iowa State University show that the average Iowa farm has earned 20–30 cents/bushel (including government payments) since 1998. Marketing strategies that increase the net price received by just 10 cents per bushel, could increase net income by 33–50%! This paper identifies five common mistakes most producers make in grain marketing. One of them is not understanding local basis. The other four, plus an overview of actual marketing plans, are part of the discussion in the popular workshop by the same name. Center for Farm Financial Management, 2003.

**Identifying the Public Value in Extension Programs by** <u>Laura Kalambokidis</u>. Recent government budget crises have compelled state Extension Services to defend their receipt of state and county funding. This paper develops a defense of Extension programs' public support that is based on the principles of public-sector economics. The paper then describes how Extension program directors have applied economic principles to identify the public value in their own programs. Journal of Extension, v.24, no.2, April 2004.

http://www.joe.org/joe/2004april/a1.shtml

Increasing the United States Tariff-Rate Sugar Quota for Cuba and Mexico: A Partial-Equilibrium Simulation by <u>Daniel Petrolia</u> and P. Lynn Kennedy. Increases in the United States tariff-rate quota for sugar are simulated to determine the impact of Cuban market access and an increased Mexican allotment. The effects on both domestic and international sugar markets—including production, consumption, prices, and trade—are determined and welfare effects identified. This analysis is carried out using a partial-

equilibrium simplified world-trade model, Modele Internationale Simplifie de Simulation (MISS), which simulates, in a comparative-static framework, the effects of various policy actions. Journal of Agricultural and Applied Economics, v.35, no.3, December 2003.

Let's Negotiate Our Way to Higher Prices by <u>Richard Levins</u>. Price negotiation is common throughout the non-farm sectors of our economy. The potential for farmers joining together to negotiate better milk prices should not be overlooked. Hoard's Dairyman; v.149, no.4; February 25, 2004.

MARKETEER: The Marketing Plan Tool, Release 4.03 (computer software) by <u>Robert Craven</u> and <u>D.</u> <u>Wynn Richardson</u>. MARKETEER helps producers analyze and implement crop- and milk-marketing plans. Producers can use it to develop pre-harvest and postharvest plans to reduce price risk, while trying to capture as much up-side price potential as possible. Producers can see how their plans will fare under various price scenarios, compare alternative marketing plans, and record actual trades. New features add the capability to develop milk-marketing plans. Center for Farm Financial Management, 2003.

**On Fairness and Welfare Analysis Under Uncertainty by Jean-Paul Chavas and Jay Coggins.** This paper investigates the role of fairness, uncertainty, and a "veil of ignorance" in efficient resource allocation. It focuses on the choice of private and public goods, the method of financing, as well as the choice of information available for public decision-making. The paper investigates the role of information in public decision-making in terms of its implications for both efficiency and fairness. Social Choice and Welfare, v.20, 2003.

RankEm 2003, Release 2.11 (computer software) by <u>Dale Nordquist</u>, <u>Rann Loppnow</u>, <u>Wynn</u> <u>Richardson</u>, and <u>Robert Craven</u>. Agricultural producers, like other businesses, can benefit from benchmarking their production and financial performance against others producers. RankEm generates benchmark comparisons for producers who belong to farm management associations and farm business management education programs to enable them to compare farm financial and enterpriselevel measures of performance with peer-group producers. Center for Farm Financial Management, 2003.

**Risk and the Value of Bt Corn by <u>Terrance Hurley</u>, <b>Paul Mitchell, and Marlin Rice.** A conceptual model is developed to evaluate the effect of Bt corn on risk. Results highlight the importance of distinguishing between marginal and aggregate risk effects and demonstrate that the effect of Bt corn on risk depends crucially on the price paid for the technology. Empirical results show that, depending on the price, Bt corn can be marginally risk increasing or decreasing and can either increase or decrease corn acreage. Also, depending on the price, Bt corn can provide a risk benefit to farmers, even when Bt corn is risk increasing. American Journal of Agricultural Economics, v.86, no.2, May 2004.

TAA: Trade Adjustment Assistance for Farmers (internet resource). Trade Adjustment Assistance for Farmers expands the traditional TAA to agricultural producers and fishermen. The purpose of this website is to provide producers and fishermen with technical training assistance customized for each eligible commodity or fishery. http://www.agrisk.umn.edu/taa/

**Toward a Consumption Tax and Beyond by Roger Gordon, Laura Kalambokidis, Jeffrey Rohaly, and Joel Slemrod.** In this paper we investigate the extent to which the U.S. income tax system of 2004 collects tax on capital income and the implications of extending taxpreferred savings accounts. Paper presented at American Economic Association Annual Meeting; January 3– 5, 2004; San Diego, CA.

**Trucking Efficiency Versus Transportation Efficiency: An Economic Evaluation of TRB Special Report 267 by <u>Gerard McCullough</u>. This evaluation of the "TRB Special Report 267: Regulation of Weights, Lengths, and Widths of Commercial Motor Vehicles" argues that the report focuses too narrowly on trucking efficiency and overlooks transportation efficiency. This narrow analytical perspective significantly limits the report's usefulness in establishing national transportation policy. Transportation Research Record, no.1833, 2003.**  Valuing Pest Control: How Much Is Due to Risk Aversion? by <u>Terrance Hurley</u> and Bruce Babcock. Bt corn has been promoted as a form of insurance, which suggests a strong risk benefit. To the contrary, we find that the risk benefits of Bt corn are negligible, and that the primary benefit of Bt corn is its potential to increase the average per acre net return of corn production. IN: Risk Management and the Environment: Agriculture in Perspective edited by Bruce A. Babcock, Robert W. Fraser, and Joseph N. Lekakis. Boston, MA: Kluwer Academic Publishers, 2003.

Winning the Game: Launch Your Marketing Plan by Edward Usset, D. Wynn Richardson, and Robert Craven. Contents include: "Launch Your Marketing Plan," "Crop Insurance," "Pricing Targets," "Decision Rates," "Pricing Tools," "Trump Cards," "The Game," "Your Market Plan," "Baseline Prices," "Marketing Plan Studies," and "Other Marketing Resources." National Ag Risk Education Library; Agricultural Management E-School; Web sites; Additional Information; Estimating Cost of Crop Production in Iowa-2003; Moving Averages; Baseline Price Table. Center for Farm Financial Management, 2003.

## **REGIONAL TOPICS**

Assessing Structural Indicators of Child-Care Quality at the Local Level: Lessons from Four Minnesota Counties by Deborah Ceglowski and Elizabeth Davis. In 1999 Minnesota was ranked as one of ten states that provide quality child-care and education an assessment that is based primarily on the individual states' licensing requirements. Yet, in response to growing concerns about staff turnover and low quality, a partnership of child-care staff (including referral staff) and university researchers conducted an assessment of the quality of child care in four Minnesota counties. The study provides a framework for assessing the quality of child care at the local level—based on structural indicators using multiple methods and data sources. Child and Youth Care Forum, v.33, no.2, April 2004. The Challenge of Controlling Machinery Costs and Planning Custom Work by <u>William Lazarus</u>. This article points out that machinery investments are increasing faster than farm sizes. FINBIN (a computer program) data shows that machinery and labor costs make up twothirds of the cost of harvesting hay. The data suggests that custom hiring might be on the upswing. Forage Connection, April 2004.

**Dairy Producers Make Money with Grazing by** <u>**Margot Rudstrom.**</u> Grazing dairies typically produce less milk per cow than cows in traditional confinement systems. Using data from the Center for Farm Financial Management FINBIN program, net returns for grazing and confinement dairies in Minnesota were compared for 2000-2002. Grazing dairies had fewer cows, lower milk production per cow and higher net returns per cow and per hundred weight than confinement dairies. Forage Connection, Winter 2003-2004.

The Economic Impact of the Health Sector on the Economy of the Aitkin County/Riverwood Healthcare Center Service Area, Aitkin County, Minnesota by William Lazarus and Michael Darger. Medical facilities have a tremendous economic impact on the communities in which they are located. This is especially true with health-care facilities such as hospitals and nursing homes. These facilities not only employ a number of well-paid people, but they also draw into the community a large number of people from rural areas who need medical services. The overall objective of this study was to measure the economic impact of the health sector on the economy of the Aitkin County/ Riverwood Healthcare Center Service Area in Aitkin County, Minnesota. Minnesota Department of Health and Primary Care, Minnesota Center for Rural Health, 2003.

**The Economics of Using a Hay Windrow Merger by** <u>**William Lazarus.**</u> This paper discusses how the standard economic-engineering cost formulas can be used to evaluate the purchase of a new piece of equipment that improves the operating efficiency of an expensive self-propelled forage harvester. Forage Connection, Winter 2003–04.

A Great Way to Strangle an Economy by <u>Thomas</u> Stinson. Economists may differ about whether short term budget deficits are a matter for concern, but they agree that deliberately setting of on a path of continuing long term budget deficits is likely to limit improvements in the standard of living for future generations. The 10 year federal budget outlook prepared by the Congressional Budget Office should raise a warning flag for federal policy makers. It shows a federal budget deficit of \$284 billion if the President's budget is enacted. Even if federal discretionary spending (including spending for national defense is held at today's level for the next ten years, a deficit of \$110 billion remains. Promises of tax cuts and increased spending are popular during an election year, but Congress needs to beginning to take some steps now to bring the federal budget more nearly in line. Returning to the pay- go rules would be a modest but important step in getting the nation's finance back on track. Star Tribune; v.23, no.14; April 18, 2004.

Legumes Beat Nitrogen Fertilizer for Bromegrass Pastures by Greg Cuomo, <u>Margot Rudstrom</u>, Dennis Johnson, Paul Peterson, and Craig Sheaffer. A three-year study on the impact of legumes or nitrogen fertilizers on the productivity of pasture was completed at the West Central Research and Outreach Center (WCROC) in Morris, Minnesota. The cost of pasture forage consumed by dairy cows in an intensive grazing system in a legume/grass pasture with no nitrogen applied was less than 50% of the cost of smooth bromegrass consumed with any level of nitrogen. Incorporating legumes in grass pastures is a less-costly method of improving pasture productivity than applying nitrogen fertilizer. Forage Focus, April 2004.

Local Labor Market Conditions and the Jobless Poor: How Much Does Local Job Growth Help in Rural Areas? By <u>Elizabeth Davis</u>, Laura Connolly, and Bruce Weber. The employment outcomes of a group of jobless poor Oregonians were tracked in order to analyze the relative importance of local labor market conditions on their employment outcomes. Local job growth increases the probability that a jobless poor adult will get a job and shortens the length of time until he or she finds a job. After accounting for both the effects of personal demographic characteristics and local job growth, there is little evidence that the probability of employment or the duration of joblessness differs in rural compared with urban areas. Journal of Agricultural and Resource Economics, v.28, no.3, 2003.

Minnesota Chapter—American Society of Farm Managers and Rural Appraisers, Proceedings, 2004 Annual Meeting, Mystic Lake Casino/Hotel, February 4–6, 2004. edited by <u>Ward Nefstead</u>. Contents included: "Report of Nomination Committee," "Profit and Loss," "Biography of W. David Snook," "Minutes of Business Meeting 2003," "Minnesota Livestock Industry Benchmark Report—An Economic Baseline of Minnesota's Animal Agriculture," "FarmerMac," and "Market Outlook for 2004–05." Minnesota Chapter of the American Society of Farm Managers and Rural Appraisers, 2004.

Paying for Minnesota Roads: A Tax Policy Assessment by Barry Ryan and Thomas Stinson. Minnesota state and local roads generate 52 billion vehiclemiles of travel (VMT) annually at a cost of \$2.6 billion. Spending averages 5 cents per VMT statewide, but travel on local government roads, especially low-volume networks, costs more. State road aid reduces the local tax effort significantly in most high-cost areas. State and local road funding is supported primarily with motor fuels excise taxes, vehicle registration and sales taxes, and state property tax relief. The average Minnesota household pays about \$600 annually for roads but this estimate varies widely with household characteristics. Substituting travel-dependent taxes for fixed or hidden charges could improve the efficiency of the tax system and potentially distribute the road tax burden more fairly. Minnesota Department of Transportation final report MN/RC-2004-04, 2004.

http://www.lrrb.gen.mn.us/pdf/200404.pdf

**Preferences and Trip Expenditures—A Conjoint Analysis of Visitors to Seoul, Korea by Yong Kun Suh and <u>William Gartner</u>. This study analyzed the preferences of international urban travelers by focusing on European, North American, and Japanese travelers to Seoul, Korea, and attempted to identify the relationship between preferences and expenditures for the selected attributes or activities. The results indicated that, for both**  pleasure and business trips, the travelers from the near origin (Japan) tended to give most consideration to the "tangible" attribute (shopping), while the travelers from the distant origins (Europe and North America) evaluated the "intangible" attribute (local culture) as most valuable. IN: Tourism Management, v.25, no.1, February 2004.

**Profitability of Organic Cropping Systems in Southwestern Minnesota by Paul Mahoney, <u>Kent Olson</u>, et. al. Using experimental data from 1990–99, this study compared the profitability of organic versus conventional strategies. Net return (NR) was calculated from actual yields, operations, inputs, prices, and organic premiums. Yields and costs were lower for the four-year organic strategy. With premiums, the four-year organic strategy had NRs significantly higher than the conventional strategies; without premiums, the NRs were statistically equal. Thus, the four-year organic strategy was not less profitable nor its NR more variable than the conventional strategies used in this study. Renewable Agriculture and Food System, v.19, no.1, 2004** 

**Results of a Farm and Market Survey for Hmong** Specialty Crop Farmers in the Minneapolis-St. Paul Metro Area by Kent Olson, Vang Yang, et al. This report is part of a larger project entitled "Risk Management Education and Farm Management Development Program for Hmong Specialty Crop Farmers in the Minneapolis-St. Paul Metro Area," which was funded by the Risk Management Agency, U.S. Department of Agriculture. The project is designed to assist Hmong farmers in the Twin Cities area in improving their production and management practices so they can increase their economic viability and reduce their exposure to risk. As part of the overall project, 62 Hmong farmers and 69 customers at farmers' markets were surveyed to determine the local specialty crop production and market conditions. The findings of these two surveys are contained in the report. Staff paper P03-11, 2003. http://agecon.lib.umn.edu/mn/p03-11.pdf

Southeastern Minnesota Farm Business Management Association 2003 Annual Report by Dale Nordquist, Lorin Westman, and Kent Olson. The average net farm income was \$85,669 for the 50 farms included in the 2003 annual report of the Southeastern Minnesota Farm Business Management Association. This was an increase of 32% from 2002. In constant dollars, 2003 was the most profitable year for association members since 1995. Staff paper P04-5, 2004. http://agecon.lib.umn.edu/mn/p04-05.pdf

Southwestern Minnesota Farm Business Management Association 2003 Annual Report by Dale <u>Nordquist</u>, Robert Anderson, James Christensen, James Kurtz, Garen Paulson, and Kent Olson. Average net farm income was \$96,404 in 2003 for the 175 farms included in this annual report of the Southwestern Minnesota Farm Business Management Association. This is a 38% increase over the average income of \$70,007 in 2002. In constant dollars, 2003 was the most profitable year for association members in the past 16 years. Staff paper P04-6, 2004.

http://agecon.lib.umn.edu/mn/p04-06.pdf

Surfing for Milk Pricing Opportunities by Margot

**Rudstrom.** Knowing where to access milk pricing information is an important aspect of milk marketing. The Chicago Mercantile Exchange (CME) website provides delayed price quotes and daily cash settlement prices for Class III milk futures contracts. The University of Wisconsin's "Understanding Dairy Markets" website provides historical Class III milk price information in an easily understood format. Paper presented at Dairy Expo 2003; St. Cloud, MN; December 10, 2003.

2003 Minnesota Livestock Industry Benchmark **Report**—An Economic Baseline of Minnesota's **Animal Agriculture: Transitioning a World Class** Industry by Brian Buhr. The livestock benchmark report analyzes key production and economic changes in Minnesota's livestock industry. The report analyzes the vertical economic value of livestock production on crops, livestock, and processors, and, by including beef cattle, swine, dairy and poultry, provides a horizontal comparison by species. Finally, a delphi survey technique was used to identify key issues major animal agriculture agribusinesses view as key competitive opportunities, challenges, and threats. IN: Minnesota Chapter-American Society of Farm Managers and Rural Appraisers, Proceedings, 2004 Annual Meeting, Mystic Lake Casino/Hotel; February 4-6, 2004 edited by Ward

Nefstead. Minnesota Chapter of the American Society of Farm Managers and Rural Appraisers, 2004.

Utilizing Federal Crop Insurance: Coverage Alternatives and Marketing Strategies for Managing Grain Yield and Price Risk by Gary Hachfield and <u>Robert Craven</u>. Producing and marketing grain in today's economic environment carries with it narrow margins and a great deal of yield and price risk. Producers can manage this risk by using revenue-based crop insurance coupled with pre-harvest marketing plans. Understanding the different crop insurance products available and how to combine insurance coverage with marketing alternatives is the key to implementing a sound crop risk-management plan. University of Minnesota Extension Service, 2004. <u>http://www.cffm.umn.edu/</u> <u>Pubs/federalcropinsurance2004.pdf</u>

## Upcoming Department Events

August 1-4: Annual Meeting of the American Agricultural Economics Association in Denver, CO.

August 30: Applied Economics day at the College of Agricultural, Food and Environmental Sciences booth at the Minnesota State Fair, University of Minnesota building.

September 1: Orientation for incoming Applied Economics graduate students.

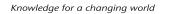
September 6: First day of Fall Semester.

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#### Minnesota Applied Economist

#### **Editing Committee**

Vernon Eidman, Professor and Head of Dept. Melissa Sullivan, Program Associate

Prepared by the Department of Applied Economics, with the assistance of Business and Science Writers Incorporated. The views expressed are those of the authors, not necessarily those of the sponsoring institutions.

Send comments, suggestions or address changes to Melissa Sullivan, Department of Applied Economics, University of Minnesota, 1994 Buford Ave., St. Paul, MN 55108-6040. (612) 625-1222, msulliva@apec.umn.edu

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ISSN: 0885-4874



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## U and Your Economy

Associate Professor Tom Stinson spoke at four "U and Your Economy" workshops organized by Community Economics extension educators. Workshops were held in Cloquet, Rochester, Montevideo, and Moorhead during March and early April. Topics covered in the day-long sessions included the changing Minnesota economy, industry clusters, and strategies for improving the ability of small stores to compete with big-box retailers. Highlights from current Community Economics programs on business retention and expansion, community tourism, the rural health care industry, and Internet information access were also presented.

During the workshops, Stinson discussed how Minnesota's economy has evolved during the past 40 years—moving from a resource-based economy to a diversified manufacturing and services economy. What is noteworthy is that, during this transition, per capita personal income in Minnesota grew from 95 percent of the U.S. average to 109 percent. In the early 1960s, Minnesota ranked 25th among states in personal income per capita but ranked 7th in 2003. Wise public and private sector investment decisions – particularly investments in baby-boom human capital appear to have been the driving force behind Minnesota's strong economic performance since the 1960s.