Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

a (H 1)/75/ AIE6



U.S.D.A. U.S.Depact CILIBRARY of Agriculture Washington, DC

Volume 3, Number 4 JUL 17 '85 July/August 1985

A Bimonthly Newsletter for Economic Research Service Employees and Colleagues



ERS PRIORITIES FOR THE 1980'S

At the ERS annual planning conference, March 26-29, Assistant Secretary for Economics Robert Thompson, ERS Administrator John Lee, and the ERS division directors reviewed progress in 1984 and 1985 and reached a consensus on broad research priorities as a basis for planning program redirections for 1986 and budget initiatives for 1987.

Here are Thompson's priorities:

• Improve the quality of ERS's products. "Let's strive for higher quality of output and communication...In writing up one's results for popular outlets, avoid economic jargon (such as 'elasticity')...Write in plain English that those who are unfamiliar with economic jargon can understand... Increase the use of professional journal outlets for ERS research...Increase the use of outside peer reviews...Increase inservice training...Staff analyses should be a showcase of ERS research results."

• Food and agricultural policy. "Research in this area should be broadened to include more on the effects on consumers, regions, trade, and asset values...And to include subsidized credit, inputs, and research...Where are

[Continued on page 11.]

NEW DIVISION ESTABLISHED

A new division, the Agriculture and Rural Economics Division (ARED), has been created to achieve better integration of certain aspects of the ERS program, distribute the workload more evenly among divisions, and better utilize ERS managers' strengths and capacities. ARED has responsibility for selected functions from the National Economics Division (NED) and the former Economic Development Division (EDD). ARED and NED now have six branches each, and there is no longer an EDD.

ARED provides an integrated focus on the farm sector and rural economy and their linkages to macroeconomic developments and policies, including tax, credit, and employment. Research continues on rural resources, communities, and governments, but there is now greater integration of agricultural and nonagricultural aspects of the rural economy.

ARED's program will permit ERS to deal more effectively with the implications for rural and farm economies of changes in tax, credit, and other macroeconomic policies.

Kenneth Deavers, formerly the Director of EDD, is the Director of ARED, and Kenneth Clayton continues as the Director of NED.

Inside . . .

Administrate	or's	Let	tte	er				. 3
Current Rese	earch				•		٠	. 4
Staff Notes							•	10





UPCOMING PROFESSIONAL MEETINGS

July 29 -	Community Development
August 1	Society annual meeting,
-	Logan, Utah

- August 4-7 American Agricultural Economics Association and Association of Environmental and Resource Economists annual meetings, Ames, Iowa
- August 21-25 Rural Sociological Society annual meeting, Blacksburg, Virginia
- August 26- International September 4 Association of Agricultural Economists triennial conference, Málaga, Spain

 \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark

RELOCATION UPDATE

The Natural Resource Economics Division, the Agriculture and Rural Economics Division, and the EMS Information Division have moved to ERS's new headquarters at 1301 New York Avenue. The remaining ERS divisions and the Office of the Administrator are scheduled to move in July and August. After August 1, the mail room will be in operation and mail can be sent directly to ERS without going through USDA's mail room. For best service, address mail as follows:

Name, Division, and Room Number Economic Research Service 1301 New York Avenue, NW Washington, DC 20005-4788

Telephone locator service for the

divisions that have already moved can be obtained from the following numbers:

Natural Resource Economics Division: (202) 786-1451 Agriculture and Rural Economics Division: (202) 786-1523 Information Division: (202) 786-1504

BLUE RIBBON PANEL REVIEW UPDATE

The Blue Ribbon Panel that reviewed USDA's statistics and economics reporting programs (ERS, Vol. 3, No. 1) submitted its findings to Secretary of Agriculture John Block on June 28. A written report will be available to the public in July. For further information, contact Richard Allen, Director, Estimates Division, SRS/USDA, Room 5847-South, Washington, DC 20250-2000 (202-447-3896). A summary of the panel's findings will appear in a later issue of this newsletter.

NOTICE TO ERS COLLEAGUES

To receive your own copy of this free newsletter or to change your address, send your name, institutional affliation, and address to ERS Newsletter, ERS/USDA, Room 450-GHI, Washington, DC 20250-1800, or call 202-447-8086.

Economic Research Service

U.S. Department of Agriculture Washington, DC Volume 3, Number 4

volume 3, Number

July/August 1985

Acting Editor: Susan Webb (447-8086), Office of the Administrator

Layout: Carolyn Riley, Information Division, EMS

Division Representatives:

Beverly Anders (447-4382), Data Services Center Suzanne Dash (447-8364), International Economics Kenneth Krupa (786-1422), Natural Resource Economics Kathryn Lipton (447-8707), National Economics Lindsay Mann (786-1512), Information, EMS Paul Myers (786-1549), Agriculture and Rural Economics Photo by Marshall Cohen



ADMINISTRATOR'S LETTER

Let me take this opportunity again to invite you to our annual reunion and luncheon. These events will take place during the annual meetings of the American Agricultural Economics Association and the Association of Environmental and Resource Economists at Iowa State University, Ames, Iowa.

ERS and other USDA employees, alumni, and colleagues and their families are welcome and encouraged to attend both events.

The ERS luncheon is on Wednesday, August 7, from noon to 1:30 p.m. in the Sun Room, Memorial Union. You may purchase tickets for the luncheon when registering (\$6.50 each). The luncheon, in the spirit of the other historical tributes marking the 75th anniversary of the AAEA, will honor and feature as special guests all the former ERS Administrators---Kenneth Farrell, Nathan Koffsky, Louis Upchurch, and Quentin West.

The ERS **reunion** is on Monday, August 5, from 9:00 p.m. to midnight in Rooms 167-171, Scheman Building. The reunion is a chance to get together informally to make or renew acquaintances. There is no fee for this event, but there will be a cash bar and free hors d'oeuvre. "Old timers" are especially encouraged to use this occasion to get together and to meet some of us "young-uns." All the reunions are in the Scheman Building--so stop by ERS's when making the rounds!

I want to give advance acknowledgment to ERS historian Wayne Rasmussen who is chairing the AAEA's 75th Anniversary Film Review Committee. That Committee has planned a film that chronicles (through World War II) the foundations of the agricultural economics profession. The film will premier at a special general session of the AAEA meeting on Monday morning, August 5, commemorating the 75th anniversary of the AAEA.

Also, ERS economist Gene Wunderlich is chairing an AAEA task force on ethics in economics. The task force organized a pre-conference workshop on the normative premises of economics. The workshop will be held in Ames on August 3 and 4.

Finally, the ERS display in the Hilton Coliseum will feature a continuous showing of a film by EMS public affairs specialist David Carter on the importance of agricultural economics to USDA and on ERS's contributions to agricultural economics. That film includes interviews with Secretary of Agriculture John Block and former Secretary of Agriculture Orville Freeman.

John Lee



Current Research

ERS ASSISTS OTHER AGENCIES WITH LONG-TERM ECONOMIC PROJECTIONS

ERS has been providing long-range economic projections to other Federal agencies, regional councils, State governments, private enterprises, and private consultants for more than a decade. For example, ERS economist William Quinby regularly develops longrange projections of commodity supply and utilization, prices, yields, and other aggregate indicators with input from an extensive network of ERS economists.

ERS projections were recently used to facilitate the development of a marketclearing baseline scenario for Forest Service and Soil Conservation Service resource planning and conservation analyses that are required by law. Those analyses, involving dozens of ERS staff members over the last 3 years, led to longrun projections of the agricultural sector with supply and utilization tables for 7 livestock commodities, 23 crops, irrigated and nonirrigated acreage, and yields. Major land use trends have also been projected at the State level.

REMOTE SENSING COOPERATION

USDA is one of the largest users of data obtained through remote sensing in the world. Agencies such as USDA's Agricultural Stabilization and Conservation Service and the Forest Service have routinely used aerial photography since the 1940's. The Remote Sensing Coordinating Committee, composed of representatives from ERS and a number of other USDA agencies, monitors remote sensing work within USDA. Also included are representatives from the National Aeronautics and Space Administration, USDA's Office of International Cooperation and Development, and the Departments of Commerce and State.

An ERS project involves updating a 1976 remote sensing study of land use change in rapidly urbanizing areas. ERS researchers plan to gather information on land use change in fast growth areas during the 1970's, including development of a better sampling framework, identification of all sources of photography and other imagery, and refinement of land use and land cover classifications.

Representatives attend monthly meetings in Washington, DC, to review the latest developments in the field and discuss current projects using remote sensing. Economist William Anderson is the ERS representative on the interagency committee.

FARM CREDIT RESEARCH

The current financial picture for farmers and farm lenders is not bright, as witnessed by reports of farm bankruptcies and farmers' arrival in Washington to lobby for more credit assistance. ERS economists David Harrington and Jerome Stam have led numerous analyses of the deteriorating farm financial situation and its ramifications in recent months.

Researchers led by Harrington and Stam recently produced a report that brought data and conceptual work together to provide information on the current financial condition of farmers and farm lenders (ERS, Vol. 3, No. 2). While that is the most recent result of their work, an ongoing research and information program ensures continued information in this area.

In March, a summary report requested by the White House and Cabinet Council on Economic Affairs was released. The summary concentrates on the 679,000 family-size commercial farms that sell between \$50,000 and \$500,000 of agricultural products annually. Other recent products from this research program have included a paper for the Roosevelt Center for American Policy Studies entitled The Financial Condition of Farmers and Farm Lenders, a presentation by Harrington to the South Carolina Farm Bureau, a briefing for the Agricultural Credit Committee, briefings for the Secretary of Agriculture, and numerous national magazine, newspaper, TV, and radio interviews.

In the coming months, Harrington will also be working with a group of policy and financial economists to develop a series of articles on the financial situation of the farm sector. Those articles will be used as extension training and background materials over the next year and beyond.

The following articles have been outlined: (1) an assessment and projection of the situation; (2) shortterm credit crisis management strategies; (3) long-term credit system restructuring policies; (4) macroeconomic policy influences on farm sector conditions; (5) price and income policies; (6) education, retraining, and relocation policies; and (7) tax and institutional barriers to and incentives for asset ownership, transfer, and control.

Harrington and economist Marvin Duncan of the Farm Credit Administration will coauthor the first paper. Other members of the team include Ronald Knutson, Walter Armbruster, John Brake, Robert Jolly, Myles Watts, David Lins, John Penson, Harold Guither, and Daniel Klinefelter.

INSTABILITY AND RISK

A project to study instability and risk in agriculture is providing the conceptual and empirical bases on which other research efforts treating risk in farming will be conducted during the next 2 years.

Beginning with ERS economist Michael Weiss's development of conceptual and analytical foundations of producer behavior under risk, ERS researchers have produced a base on which special projects exploring public and private adjustments to risk in agriculture will be conducted.

ERS economists involved in the project include Thomas Miller, Beverly Fleisher, and Linda Calvin. Also, Purdue University professor Edna Loehman is working on the project with the ERS staff through a cooperative research agreement.

Related research on risk in marketing is being led by ERS economist Richard Heifner and involves ERS economists Gerald Plato and Bruce Wright.

ERS SITUATION AND OUTLOOK DATA BASE

ERS is developing a situation and outlook data base in its continuing effort to upgrade and streamline the situation and outlook program. Approximately 70,000 time series variables will be added this year including comprehensive data on farm program commodities; U.S. agricultural trade data; crop production, acreage, and yield data; and producer and consumer price indexes.

The data will be part of ARIES (Automated Research Information for Economic Studies), ERS's agencywide data base management system.

The data will be disseminated through ARIES to ERS and other USDA users for research and analysis. Eventually, links with graphics, publications, and public access systems will permit fully automated dissemination of the data base to other government agencies, universities, and the private sector.

A directory documenting the data base contents is now available and will be revised monthly. Contact the Data Base Management Branch (447-2624) or James Horsfield (447-8576) for additional information on the current contents of ARIES.



FEDERAL TAX POLICY AND INVESTMENT

ERS economist James Hrubovcak and former ERS economist Michael LeBlanc have been examining the impacts of Federal income tax policy on agricultural investment. The results, which have been published in **Tax Policy and Agricultural Investment**, TB-1699, show that Federal income tax policies between 1956 and 1978 stimulated net investment in agricultural equipment by more than \$5 billion and net investment in agricultural structures by more than \$1 billion (in 1977 dollars).

The results also suggest that the investment tax credit has probably been the most effective tax tool in stimulating investment. From 1962 to 1978, for example, the investment tax credit accounted for nearly \$3 billion or 12 percent of net investment in agricultural equipment and \$500 million or 5 percent of net investment in structures.

FOOD AND FIBER SYSTEM AND THE ECONOMY

ERS economists Gerald Schluter, Mark Henry, and William Edmondson recently estimated the food and fiber system's share of total business activity in various sectors of the economy. They disaggregated those estimates into activities related to supporting farm production (backward linkages) and supporting the assembly, processing, and distribution of raw farm commodities for final consumption (forward linkages).

The disaggregation procedure involves manipulation of partitioned input/output matrices. While forward and backward linkages have been used by the profession for some time, this may well be the first specification of forward and backward linkages which are additive to the total business activity generated by a given set of final demands.

For the United States in 1977, backward linkages accounted for 11 percent (about \$80 billion) of nonfarm business activity of the food and fiber system. Forward linkages accounted for 89 percent (\$626 billion).

AGRICULTURAL TAX POLICY: TAX REFORM

ERS economists Ron Durst and Abby Fromang-Milon are examining the role of Federal tax policies on the farm sector. The policies affect investment and production decisions in agriculture through their effects on the relative prices of the various inputs used in farming. Durst and Fromang-Milon will study the effects on the agricultural sector of current tax policies and the Department of the Treasury, Bradley-Gephart, and Kemp-Kasten tax reform plans. The research project includes the examination of the special farm tax provisions, tax treatment of land investments, capital costs recovery system, interest deductions, and corporate income tax.

MACROECONOMICS AND THE MEAT SECTOR

ERS economists John Kitchen and Paul Westcott have been studying the linkages between macroeconomic activity and production responses in the meat sector. While historical evidence shows a strong relationship between real GNP and beef sector responses (implying that increases in macroeconomic activity trigger an expansion in the cattle sector), the 1983/84 cattle sector contraction suggests that that simple historical relationship may no longer hold.

Significant changes in the macroeconomic and financial market environment of the 1980's have brought increased risk and uncertainty to factors related to beef producers' expectations of costs and returns. As a result, beef producers may look for an indication of **sustained** general economic growth before starting to expand.

CONSERVATION RESERVE PROGRAM

In response to a request by Secretary of Agriculture John Block, ERS economists have been studying and reporting for over a year on how to make conservation and commodity programs more mutually supportive. Reports have been published that define the issues and identify highly erodible land on which program crops are being produced. A more recent study analyzed costs of retiring some of that land.

Several of the dozen or so farm bill proposals that contain conservation provisions propose larger conservation reserves than anticipated by previous studies. ERS economists Clayton Ogg and Shwu-eng Webb are, therefore, extending their analyses. They are using new modeling tools developed by Wen-yuan Huang from the CARD (Center for Agricultural and Rural Development) modeling system at Iowa State University.

ERS now has the modeling capability to anticipate in some detail the national and regional consequences of protecting highly erodible and fragile crop land. Analysis of acreage reduction options will include effects on commodity program outlays and storage costs. National and regional acreage, production, and erosion changes will be mapped for several conservation reserve options. ERS economist Michael Price will use ERS's Food and Agricultural Policy Simulator (FAPSIM) to identify price support effects of retiring all the highly erodible and fragile land. Water quality effects will also be considered.

SODBUSTING AND FARM PROGRAMS

During the last several years, some landowners have been plowing up prairie and pasture land for conversion to crop land. That process, known as "sodbusting," has been concentrated primarily in the western Great Plains. This has people worried over the possibility of increased erosion from such recently plowed lands and whether Government programs contribute to the conversion.

ERS economist Ralph Heimlich has studied the economics of sodbusting, the extent of the problem, and the potential for increased erosion. His principal findings are:

• Government programs provided the margin of profitability for conversion on only 384,000 of 1.9 million acres converted to crop land in 1982. One million acres would have been profitable to convert even without benefits, and 470,000 acres had a loss even with benefits.

• Conversion to crop land has occurred in every region. In 1979-81, 20 percent of land conversion was in the Corn Belt, 14 percent in the Northern Plains, and over 12 percent in the Southern Plains.

• Most newly converted land does not have high erosion potential. However, 1 acre in 5 was classified as highly erodible, compared with 1 acre in 10 for crop land generally.

CHINA'S CHANGING FARM STRUCTURE

Fundamental shifts in China's farm economy have sharply boosted output of agricultural products. Changes in rural organization have made an important contribution to the rise in farm productivity.

At the request of the Congressional Joint Economic Committee (JEC), ERS economist Frederick Crook is studying changes in China's rural structure. The JEC will publish his findings next winter.

The commune (the basic political, economic, and administrative unit in the countryside since the late 1950's) has been reorganized and its functions dispersed to newly organized township governments, different kinds of cooperatives, and households.

Greater autonomy for households has meant greater effort by farmers, improved management, and more efficient use of inputs at the farm level. The Chinese Government, however, still retains substantial control over farm production through procurement contracts with households and a variety of indirect tools such as credit and water control.

While China's leadership remains committed to socialism, coming years will probably bring further reforms-perhaps even an expansion of the role of market forces, according to Crook.

COMPETITIVENESS OF U.S. AGRICULTURE

A new multiyear study, being planned by ERS economist Velmar Davis, will:

• Review trends, the current situation, and the outlook for the quantity and value of exports and market share of U.S. agricultural commodities;

• Identify and quantify factors influencing shortrun and longrun competitiveness, including production and marketing costs, technology, trade barriers, macroeconomic variables, and agricultural production, marketing, and consumption policies and programs; and

• Evaluate alternative economic and trade policies aimed at strengthening U.S. competitiveness.

LATIN AMERICA: DEBT, PRICE, OR PRODUCTION?

U.S. exports of agricultural commodities to Latin American countries rose \$2.4 billion during 1979-80, then declined \$1.9 billion to \$4.4 billion during 1981-82.

ERS economist Chong Kim has evaluated the relative importance to grain trade of domestic production, commodity price, and debt. His results show that debt was the major factor affecting changes in grain imports in 14 out of 24 Latin American countries, domestic production was the major factor for 6 countries, and price was the major factor for 4 countries.



FUMIGANT ASSESSMENT

ERS economists Joseph Barse, Craig Osteen, John Baritelle, Walter Ferguson, and Luis Suguiyama are participating in a study of the effects of the possible cancellation by the Environmental Protection Agency of the use of chemical fumigants. The study was requested by Assistant Secretary for Science and Education Orville Bentley following the cancellation of ethylene dibromide (EDB), a fumigant used to control fruit fly larvae and insects in stored grain and for a variety of other purposes.

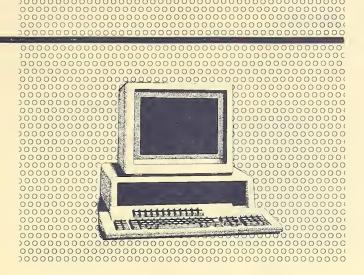
The interdisciplinary study also involves USDA's Agricultural Research Service, Animal and Plant Health Inspection Service, Extension Service, Cooperative State Research Service, and Forest Service and scientists from State universities. Plans are to have an initial report by late fall.

NEW FOOD SYSTEM REPORT

ERS economists Charles Handy and Anthony Gallo are preparing a new report entitled Food Marketing Systems Review. Targeted for publication prior to the 1985 Agricultural Outlook Conference, it will focus on current events and issues within the food manufacturing, wholesaling, service, and retailing segments of the food marketing system, and is to complement Food Cost Review.

FARM BILL DEBATE

Eleven 1985 farm bills are described and compared to the provisions of the Agriculture and Food Act of 1981 in the June issue of ERS's **Agricultural Outlook** magazine. Demand for that information has been so great that a free reprint of the article is now available to nonsubscribers--while supplies last. To obtain a copy, contact ERS economist Herbert Moses, ERS/USDA, Room 395-GHI, Washington, DC 20250-1800 (202-447-8378).



COMPUTERIZED DIRECTORY OF WATER BIBLIOGRAPHIES

Publicly and privately collected information on various aspects of water quantity, quality, and location in the United States has grown substantially in recent years. However, until recently, there have been few attempts to centralize, categorize, and provide easy access to such information.

ERS now has a computerized directory of a wide array of bibliographies dealing with water. The directory contains a brief description, key word access, and a contact person for each bibliography.

Anyone interested in obtaining more information on this subject or wanting to contribute additional bibliographies to the directory is encouraged to contact ERS economist William Crosswhite (202-786-1413).

AGRICULTURAL INFORMATION

ERS economics assistant Mary Rivers is compiling State data from the 1982 **Census of Agriculture** and **Economic Indicators of the Farm Sector** (1983) for a forthcoming report. The publication will provide information such as the number of farms, characteristics of farmers, the balance sheet of the farming sector, the top five counties in agricultural sales, and the five major commodities for each State.





Collins



Heifner



Paar1berg

COLLINS, HEIFNER, AND PAARLBERG RECEIVE USDA SUPERTOR SERVICE AWARDS

ERS economists Keith Collins and Richard Heifner, and former ERS economist Philip Paarlberg received Superior Service Awards at the Department's Honor Awards Ceremony on June 19.

Collins was commended for "superior initiative, creativity, and leadership in the conduct of economic research and outlook programs for crops and for outstanding contributions to staff analyses." He is the Deputy Director of the National Economics Division.

Heifner was honored for "superior contributions to economic analyses of sensitive policy issues related to trade in agricultural commodities, agricultural marketing

institutions, and Government programs." He is the Leader of the Commodity Markets and Pricing Section, Food Marketing and Consumption Economics Branch, National Economics Division.

Paarlberg was recognized for "pathbreaking research that resulted in an increased understanding of U.S. agricultural trade issues." He was the Leader of the International Economic and Trade Policy Section, Economic and Trade Policy Branch, International Economics Division, and is now assistant professor at Purdue University.



WILSON NAMED DEPUTY ASSISTANT SECRETARY

Ewen Wilson has been named Deputy Assistant Secretary for Economics. He was most recently Vice President for Economics and Statistics of the American Meat Institute (AMI), the

national trade association of meat packers and processors, where he was well known for his knowledge of the economics of the meat industry.

Prior to joining AMI in 1977, Wilson was Assistant Professor and Extension Specialist at Virginia Polytechnic Institute and State University. He also has overseas experience, having served as Research Fellow at the University of Rhodesia, Conservation and Extension Officer in the Ministry of Agriculture of Zimbabwe (then Rhodesia), and assistant farm manager in Kenya (where he was born and brought up on his family's coffee estate).

Wilson has a B.Sc. in agriculture from the University of London, an M.S. in agricultural economics from West Virginia University, and a Ph.D. in economics from North Carolina State University. He has published numerous monographs and papers in various academic and professional journals including the American Journal of Agricultural Economics, Public Choice, and Agrekon.

Prior to joining USDA, Wilson was a member of the Blue Ribbon Panel that reviewed USDA's statistics and economics reporting programs (ERS, Vol. 3, No. 1), USDA/USTR Agricultural Technical Advisory Committee on Livestock and Livestock Products, National Livestock and Meat Board's Meat and Economics Film Advisory Committee, AAEA, SAEA, and NABE. He has also served on the Live Cattle Advisory Committee of the Chicago Mercantile Exchange, U.S. Meat Export Federation Board of Directors, and AMI Task Force on Wage and Price Guidelines.

Photo by Carolyn Riley

ASSISTANT SECRETARY THOMPSON CONFIRMED

Assistant Secretary for Economics Robert Thompson (ERS, Vol. 3, No. 2) was sworn in by Secretary of Agriculture John Block on May 16 after the Senate confirmed his nomination by President Ronald Reagan.

PRIORITIES, continued from page 1. there market failures?...What are the objectives of and rationale for interventions?...Do we have any new ideas for policies (such as income insurance)?"

• Macroeconomic policy. "We need to estimate the second order effects of monetary and fiscal policies on farmer well-being and agricultural trade."

• Conservation. "Why doesn't it pay producers to conserve soil?...What should the public response be?...Land values are higher than they would otherwise be because of public policies...Water is scarcer than it would otherwise be because of public pricing policies."

• Agricultural finance. "There is potential for more equity capital instead of the currently predominant debt capital...Rural credit markets are now more integrated with national financial markets."

• **Risk.** "Volatility of export demand, macroeconomic policies, and, to a lesser extent, yields contribute to increased risk."

• Tax treatment of agriculture. "How do changes in tax policy affect net transfers to agriculture?"

• Longrun outlook for agriculture. "What are the impacts on farm size and asset values of changes in the mix of products, trade, and technology?"

• Marketing. "What are the potential effects on agriculture of electronic marketing and options trading?"

• Demand. "Are own- and cross-price elasticities as stable as we assume them to be in our models?"

• Costs of production. "How do they vary across regions and by cost deciles?"

Here are Lee's priorities:

• Data. "We need a long-term (5-year) data collection plan and an agencywide data base management system."

• Economic indicators. "These are very important and are now produced in all of the ERS program divisions."

• Global interdependence. "What are the consequences for U.S. agriculture of increased international interdependence?"

• Monitoring activities. "These need to be rationalized."

• Synergistic research. "We need to improve the effective leveraging of ERS resources via linkages with universities and other research institutions."

• Anticipatory research. "We need to improve intermediate-term analysis and anticipatory research."

• Situation and outlook program. "We need to improve the analytic and educational content of the situation and outlook reports."

Here are some of the priorities identified by the division directors:

 Competitiveness of U.S. agricultural commodities in world markets.

• Intersectoral analysis of agriculture and the general economy, including the effects of rail and bank deregulation.

• Structure and performance of the agricultural sector, including risk and organization.

• Thin markets and short-term price forecasting.

- Trade liberalization.
- Political economy of centrally-

planned and state-trading countries.

• Food security, food aid, foreign development, and trade.

Agricultural inputs.

 Technology assessment, productivity, and long-term projections.

- Surface and groundwater quality.
- Rural typology.
- Income distribution.
- Monitoring of rural conditions.
- Rural development modeling.

UNITED STATES DEPARTMENT OF AGRICULTURE ECONOMIC RESEARCH SERVICE 1301 NEW YORK AVENUE, N. W. WASHINGTON, D. C. 20005-4788

OFFICIAL BUSINESS PENALTY FOR PRIVATE USE, \$300 FIRST-CLASS MAIL POSTAGE & FEES PAID USDA PERMIT NO. G-145