PROCEEDINGS OF A SYMPOSIUM

ON

THE ROLE OF INTERNATIONAL TRADE IN AGRICULTURAL ECONOMICS PROGRAMS

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FOREWORD

This is the third in an annual series of proceedings publications involving the effective use of public resources in agricultural economics. The first CSRS sponsored publication, Agricultural Economics Program Analysis, focused on computer applications of input and output data for agricultural economics units in academic and government environments. Papers were also presented on computer based information systems regarding research activities in agricultural economics, as well as a conceptual framework for evaluating the effectiveness of research, teaching, and extension functions.

The second proceedings represented the results of a joint AAEA-CSRS Symposium held at the Annual Meeting of the American Agricultural Economics Association at Knoxville, Tennessee, on August 2, 1988. The papers dealt broadly with the Analysis and Management of Agricultural Economics Programs. More specifically, the papers identified and prioritized research issues in agricultural economics, assessed performance of agricultural economics departments, provided an update of the Agricultural Economics Research Information System, reviewed funding for marketing research at State Experiment Stations, and outlined alternative approaches for reviewing programs of agricultural economics.

This third proceedings, The Role of International Trade in Agricultural Economics Programs, attempted to analyze the emerging role of International Trade Centers, review the current status of research in international trade, and present a critique of these programs from the external perspectives of a college administrator and a President and CEO of an international agribusiness company.

Copies of all three proceedings issues are available until supplies are exhausted from Leo Polopolus, CSRS Representative, Department of Food and Resource Economics, University of Florida, Gainesville, FL 32611.

INTRODUCTION: INTERNATIONAL TRADE IN AGRICULTURAL ECONOMICS PROGRAMS

Leo C. Polopolus[1]

The world in terms of time and space is rapidly shrinking, bringing nations increasingly in closer contact. Advances in communications and transportation technologies continue to increase the speed and efficiency of international information exchange and the world wide movement of people and products. These and other advancements have brought about the increased international exchange of goods and services and expanding competition in the world's marketplaces. Moreover, with the emergence of new economic powers in the world and the nation's growing trade deficit, the American public has belatedly begun to awaken to the realities of impending threats to our economic progress, standard of living, national security and prestige.

As an aside on the trade balance situation, particularly the export side of agricultural trade balances, the year 1981 represented the historic peak in American agricultual exports. Since 1981, United States agricultural exports have sagged. What we may fail to realize is that the drop in exports has been precipitous for raw agricultural commodities. On the other hand, there has actually been a small increase in the export of value-added agricultural products in recent years.

The Land Grant University and Experiment Station System has moved with its traditional "glacial speed" in adjusting its research, teaching and extension programs to the emergence of the new global economy. Recently, thanks to the vision and leadership of a few researchers and administrators, regional research projects dealing with international trade in agricultural products have been funded in the North Central and Southern Regions. Two more regional research proposals in this area are being developed in the Western Region. The major response to the threats of global competition has come from the United States Congress, however. Over the past two years, Congress has approved and funded 10 International Trade Development Centers and is considering 20 new proposals submitted by the Land Grant Universities. The federal support for these Centers came by a circuitous route essentially by-passing the CSRS/Experiment Station federal budgetary process. The Congress has targeted specific institutions to receive federal funding to establish International Trade Development Centers to "enhance the exportation of agricultural and related products". This accelerated pace in activities and financial support

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[1]Leo Polopolus is a Professor of Food and Resource Economics at the University of Florida, Gainesville, FL and Representative with CSRS, USDA, Washington, D.C.

represents the beginnings of the internationalization of Land Grant Experiment System programs and is a pivotal period in the history of the System.

The purpose of this symposium is to describe and document these important developments for the historical record and to gain the vision and perspectives of academic and industry leaders on the directions the System should take in the future to enhance the exportation of United States agricultural and related products and to meet the growing challenges of the global economy.

THE CURRENT STATUS OF THE INTERNATIONAL TRADE DEVELOPMENT CENTERS

Roland R. Robinson and Clark R. Burbee[2]

The Oklahoma State University was the first institution to receive federal funding to establish an International Trade Development Center. In FY-1986, the institution received federal funds to construct facilities to support the Center's activities and in FY-1987 received additional federal funding for program development. From FY-1987 to FY-1989, funds have been authorized to establish five additional new Centers (Idaho, Iowa, Kansas, Kentucky, and West Virginia). Funds have also been authorized to provide program support to three existing Centers (CINTRAFOR and IMPACT in Washington State and Wheat Marketing Center in Oregon) and to purchase equipment for one Center (Northern Crops Institute in North Dakota). At the present time there are about 20 proposals for International Trade Development Centers before the Appropriations Committees of the Congress.

The purpose of this paper is to examine the current status of these Centers. The more specific objectives are to describe the enabling legislation providing federal support to assist in the establishment of the Centers; analyze the current level of federal support; summarize and characterize some of the major features of the current collection of Centers and present some concluding remarks about the likely major impact the Centers will have on the future programs of the Land Grand Universities and State Agricultural Experiment Stations.

Legislative Background

The authority providing federal funding for the establishment of the International Trade Development Centers is contained in the National Agricultural Research, Extension, and Teaching Act of 1977, Public Law 95-113, as amended by the Food Security Act of 1985, Public Law 99-198, Section 1419. Under this authority, grants may be awarded to States for the establishment and operation of these Centers, or the expansion of existing Centers located in the United States. The purpose of the Centers is to enhance the exportation of agricultural and related products. The grants are based on a matching formula of 50 per centum Federal and 50 per centum State funding. In making grants preference is given to land grant colleges and universities that -

(1) Operate agricultural programs;

(2) Have existing international trade programs that use an interdisciplinary approach and are operated jointly with

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[2]Roland R. Robinson and Clark R. Burbee are Principal Agricultural Economists with CSRS, USDA, Washington, D.C.

State and Federal agencies to address international trade problems; and

(3) Have an effective and progressive communications system that might be linked on an international basis to conduct conferences or trade negotiations.

Activities to be conducted by the Centers described in the legislation includes:

(1) Through research, establish a permanent data base to address the problems faced by potential exporters, including language barriers, interactions with representatives of foreign governments, transportation of goods and products, insurance and financing within foreign countries, and collecting international marketing data;

(2) Provide facilities for permanent or temporary exhibits that stimulate and educate trade delegations from foreign nations with respect to agricultural and related products produced in the United States and to be made available for use by State and regional entities for exhibits, trade seminars, and negotiations involving such products; and

(3) Carry out such other activities relating to the exportation of agricultural products and related products as the Secretary may approve.

Also the legislation does not restrict the amount of funds that can be authorized for trade centers in any year or to any institution.

In summary, the intent of the authorizing legislation is to provide federal funding to assist in the establishment of International Trade Development Centers. The mission of these Centers, as stated in the legislation, is to enhance the exportation of agricultural and related products. The exact nature of these products is not defined. Federal funds must be matched with equal amounts of nonfederal funds (State appropriations, funds from State and local agencies and from private sources). Preference is given to Land Grant Universities and Colleges that operate agricultural programs that use the interdisciplinary approach and work cooperatively with State and Federal agencies. The availability and utilization of an international communications system to conduct conferences or trade negotiations is another important qualifying criterion. The activities stated in the legislation to facilitate the achievement of the Center's mission includes: conducting research and the establishment of a data base needed to address problems of potential exporters; providing facilities for exhibits, trade seminars and trade negotiations and the conduct of other

activities approved by the Secretary that may contribute to the purpose of the legislation.

The House Report (99-687) accompanying the FY-1987 Agriculture, Rural Development, and Related Agencies Appropriations Bill directed the Cooperative State Research Service (CSRS), United States Department of Agriculture to prepare a detailed report on the role of the International Trade Development Centers authorized by the Food Security Act of 1985. The report emphasized the traditional functions as they relate to achieving the Center's mission of enhancing the report of agricultural and related products. The major programs recommended for support included:

(1) Research-conduct studies, multidisciplinary in nature, designed to generate new knowledge and technology that is relevent and useful in facilitiating international trade development and the export of United States produced agricultural, forestry and related products.

(2) Education-develop and strengthen degree programs to prepare undergraduate and graduate students for careers in inter-national trade development and related fields; develop and conduct adult education programs to enhance the knowledge levels and problem-solving skills of potential exporters.

(3) Extension-develop, maintain and update data base information systems on social, cultural, institutional, economic and other factors that would improve the capabilities of potential exporters; hold conferences and short courses to inform producers and processors of export opportunities and procedures; and prepare exhibits, trade shows and educational materials to promote communications and interactions among potential exporters and importers and to inform the latter of the characteristics, quality, price and avail-ability of United States produced agricultural; forestry and related products.

Centers are strongly encouraged to specialize on specific trade issues of national or regional importance. These trade issues may relate to specific commodities and products or public policies.

The federal support of each Center is earmarked by the Congress. Therefore the grants are noncompetitive. They are reviewed in CSRS on the basis of administrative guidelines and evaluation criteria. Needless to say, the matching requirement in reality works as a serious constraint on federal funding requests. Also, the Center concept as established by the legislation is in the context of an Institution and not in the context of a region or some geographical area. Therefore, theoretically at least, each

of the 50 Land Grant Universities could have one or more trade centers.

The CSRS role is to evaluate and approve the grant proposal for the establishment of a Center, conducts the necessary administrative processes in the federal funding of the Center and is responsible to the Congress for financial and performance accountability with respect to the establishment and operation of the Center.

Current Funding Levels

Table 1 shows the amounts of federal funds appropriated by the Congress in Fiscal Years 1987, 1988 and 1989 to establish the nine International Trade Development Centers.

To date a total of about $9.2 million has been appropriated to assist in the establishment of the Centers - $2.2 million in FY-1987, over $3.8 million in FY-1988 and over $3.1 million in FY-1989. Since federal funds must be matched with equal amounts of nonfederal funds, total funding for the Centers at the present time amounts to about $18.3 million. This under estimates total funding since in several instances the amount of nonfederal funds substantially exceeds federal support. There are two Centers in the State of Washington and the amount of federal funds shown in the Table is used to support both of them. The grant to the University of Idaho is to conduct a center feasibility study. Federal funds for the establishment of the Center have not been appropriated at this time. Also, although federal funds for the Oregon Center have been appropriated, the grant is now being processed.

In addition to the above support for the Centers, the North Dakota Experiment Station received a special research grant (under P.L. 89-106) in FY-1989 for $600 thousand to conduct international trade research.

Some Major Characteristics of the Centers

Needless to say the character of the Centers as a system will change as new Centers are established; therefore the characteristics of the current system (9 Centers) will change dramatically as new ones are established. Appendix I presents a summary of the Centers currently funded. The summary excludes the University of Idaho which has at this time only received a grant to conduct a Center feasibility study. The framework used to summarize the Centers consisted of the following elements:

Title
Location/Leadership

Table 1. Federal Funding: International Trade Development Centers

International Trade Development Center	Appropriation FY-87	Appropriation FY-88	Total Acts FY-89	Funding FY-87/89
	(In Thousand of Dollars)			
International Trade Center Iowa State University	1,000	-----	1,000	2,000
Mid-American World Trade Center Wichita, Kansas	-----	2,500	-----	2,500
International Trade Development Center Oklahoma State University	-----	100	-----	100
Center for International Trade in Forest Products (CINTRAFOR) University of Washington and International Marketing Program for Agricultural Commodities and Trade (IMPACT) Washington State University	-----	1,000	1,000	2,000
International Trade Development Center University of Kentucky	-----	227	227	454
International Trade Development Center Feasibility Study University of Idaho	-----	-----	50	50
International Trade Development Center West Virginia University	-----	-----	575	575
International Trade Development Center, Wheat Marketing Center Portland, Oregon	-----	-----	300	300
Northern Crops Institute North Dakota State University	1,200	-----	-----	1,200
Total	2,200	3,827	3,152	9,179

Mission/Goals
Program Objectives (organized under the categories of research, education, public service/outreach and information/telecommunication services).
Areas of Concentration (consisting of products, markets and functions) Cooperating Units and Disciplines
Advisory Committees (Membership and Roles)
Funding Sources

Seven of the Centers are located at Universities - six at Land Grant Institutions and the other at the University of Washington at Seattle. Two of the Centers (Kansas and Oregon) are located in private organizations in those States. The one in Kansas, Mid-America World Trade Center is affiliated with the respective Land Grant University. The Wheat Marketing Center in Oregon is affiliated with the Office of the State Director of Agriculture. The Center in Iowa has combined programs conducted jointly by Iowa State University and the Chamber of Commerce in Des Moines.

Some of the major characteristics of the Centers that resulted from the summarization are as follows:

* The Centers show a great diversity of purpose and activities which gave each one a uniqueness. Generally, the mission statements focused on enhancing the export of locally or regionally produced agricultural and forest products. Also, the program objectives concentrated on the specific export opportunities and problems of the industries producing these products.

* There is a division of effort based on comparative advantage between the Centers located at the Institutions and those at private organizations. Institutional Centers have a long run orientation on the development of research and education programs while Centers at private organizations concentrate on the educational, information and promotions programs to facilitate contacts among trading partners and the promotion of trade in the short run.

* The Centers tend to give about equal emphasis to export of raw commodities and value-added products. The Oklahoma Center specializes in the export of value-added products and the Forestry Centers in Washington and West Virginia emphasize the export of semiprocessed and finished forest products.

* Agricultural Economists are not heavily involved in administrative leaderships roles. Only three of the Centers have agricultural economists serving as program directors. Agricultural economists are however significantly involved in the research, education and public service/outreach programs of the Centers.

* Relatively little attention is given to higher education or the development of curricula for career training in international trade and related fields. Most of the educational activities proposed are concerned with increasing the awareness and knowledge of managers in agribusiness firms and/or professionals in public agencies involved in or concerned with international trade in specific commodities and products.

* The Centers are drawing heavily on Schools of Business for talent and expertise in international trade and business. Apparently, these Schools have a tradition of strong programs in these fields and have a substantial reservoir of trained professionals.

CONCLUDING COMMENTS

This is a pivotal period in the history of the Land Grant University - Agricultural Experiment Station System. It is a period that may be characterized as the beginning of the internationalization of these Institution's programs. The internationalization process has been rather slow in developing relative to national needs and problems. The nine International Trade Development Centers, approved thus far, have infused considerable amounts of new investments in the System. If the 20 or so new Centers presently before the Congress are funded over the next few years, then the additional new investments will be substantial and certainly have dramatic and continuing effects on the research, teaching and extension programs of the System. Our judgement is that some of the proposed Centers will be funded and the Center programs will receive continuing support in the foreseeable future. The technological and economic progress of the nation's agricultural industry is at stake. Global competition is not a temporary problem that is likely to go away; nor is the funding of international programs likely to be a federal budgetary "fad" and fade into insignificance over time. Finally, although agricultural economists have not played particularly strong roles in the establishment of the Centers so far; the new proposals we have reviewed indicate more important roles for them in the future.

APPENDIX:

SUMMARIZATION OF INTERNATIONAL TRADE DEVELOPMENT CENTERS

INTERNATIONAL TRADE DEVELOPMENT CENTER

Location/Leadership:

Iowa State University, Ames, Iowa; administered by a Directorate consisting of the Dean of the College of Agriculture at the University and the Vice President for Economic Development of the Greater Des Moines Area Chamber of Commerce (CF), Des Moines, Iowa.

Mission/Goals:

To enhance trade in agricultural products and related commodities produced particularly by small to medium-sized businesses in Iowa and the Midwest.

Program Objectives:

Assemble and maintain trade data bases.
Conduct international marketing studies.
Conduct training courses and conferences on international trade.
Prepare and distribute publications.
Establish satellite uplink.
Conduct public policy studies on international trade and competitiveness.

Areas of Concentration (Products/Markets/Functions):

Feed grain and animal products and related commodities produced in Iowa and the Midwest; targeted markets are identified as work develops - Pacific Rim, European Economic Community and Eastern Europe; research, information dissemination, telecommunication services and education.

Cooperating Units/Disciplines:

The Meat Export Research Center (MERC), the Food Crop Processing Research Center (FCPRC), and the College of Business and International Research (CBIRG); Economics, Marketing, Transportation and Logistics, Food Technology and Chemical Engineering.

Advisory Committee (Membership/Roles):

Representatives from agriculture, industry, labor, and consumer groups; roles not specified.

Funding Sources:

State appropriations; federal funds (CSRS administered grant).

MID-AMERICAN WORLD TRADE CENTER FOR AGRICULTURAL PRODUCTS

Leadership/Location:

Dr. Stan Leland, Project Director and Assistant Director of the Experiment Station, Kansas State University and Mr. Geoffrey Peters, Mid-American World Trade Center, Wichita, Kansas.

Mission/Goals:

To enhance the exportation of agricultural products, processed products, by-products and products and services of industries integrally related to agriculture in the seven Mid-America states of Kansas, Nebraska, Oklahoma, Colorado, North Dakota, South Dakota and Wyoming.

Program Objectives:

Research: Identify foreign markets for agricultural commodities and related products including their product specifications and transaction requirements for potential exporters.

Education: Conduct educational and other services to enhance public and industry awareness of export opportunities. Conduct internship programs for undergraduate and graduate students and guest lecture programs in the fields of international trade, marketing, finance economics and politics.

Public Service/Outreach: Identify producers/ manufacturers of agricultural products, by-products and/or products and services of industries integrally related to agriculture; associations of producers/manufacturers/ distributors or related agricultural groups and associations in the seven states and assess their potentials for involvement in the export market. Identify regional, state and local government institutions with the seven states with responsibility for economic and trade development services. Develop market contacts for exportable products and facilitate trade and transaction through promotion strategies through international communications network. Identify and maintain a list of trade specialists who can provide professional services to clientele groups.

Information/Telecommunication Services: Develop and maintain appropriate communications/information services to facilitate trade.

Areas of Concentration (Products/Markets/Functions:

Primary functions are public service/outreach and market information and services.

Advisory Committee (Membership and Roles:

Representatives from each of the seven state agencies or departments involved in export programs and from the constituency served by the Center. Also, representatives from banking and financial institutions, international freight companies, legal firms involved in international law, Land Grant Universities involved in the Center's programs and other industries/groups/associations affected by the Center's programs.

Funding Sources:

State agencies, municipalities, federal funds (CSRS administered), and membership dues.

Cooperating Units/Disciplines:

International Trade Institute and Experiment Station, Kansas State University; Fort Hays State University Institute of Public Affairs; State of Kansas Department of Commerce, Trade Development Council; University of Nebraska, Lincoln Agribusiness Program, College of Agriculture.

CENTER FOR INTERNATIONAL TRADE DEVELOPMENT

Location/Leadership:

Oklahoma State University, Stillwater, Oklahoma; Mr. Robert Chitwood, Acting Director.

Mission/Goals:

To improve the export of value-added agricultural commodities produced in Oklahoma.

* To identify and categorize key value-added agricultural products currently produced in Oklahoma and evaluate their export potential.

* To identify growth markets for value-added exports and link these markets to specific products produced or capable of being produced in Oklahoma.

* To disseminate key findings on the improvement of value-added agricultural exports and to stimulate interest in

export markets among producers of value-added products-existing and new.

Program Objectives:

Research: Develop products, processes and production technologies; develop strategies for foreign market penetration; adapt production to meet foreign needs and requirements and provide technical assistance to Oklahoma firms.

Education: Internationalize the outlook and perspectives of campus programs, provide career training in international trade development, international business and related professions, encourage student training abroad and foreign internship experience, and provide outreach program concerning the world economy.

Public Service/Outreach: Provide information and analysis on foreign market potentials; assist firms on special problems and procedures of exporting, develop a state trade promotion strategy, develop programs to promote the products, services and environment of Oklahoma.

Areas of Concentration (Products/Markets/Functions:

Value-added products with high levels of exports and low levels of Oklahoma production and/or products with high levels of Oklahoma production but low levels of foreign sales; Pacific Rim countries (including the Peoples Republic of China), India, North Africa, Latin America and the European Economic Community; Research and public service/outreach.

Cooperating Units/Disciplines:

Colleges of Agriculture, Arts and Sciences, Business Administration, Education, Engineering, Architecture and Technology, Home Economics and Veterinary.

Advisory Committee (Membership an Roles:

Representatives from business, government and academe that are knowledgeable and active in the Oklahoma export industry; to suggest strategies for the improvement of Oklahoma's value-added exports.

Funding Sources:

State appropriations and federal funds (CSRS administered grant).

CENTER FOR INTERNATIONAL TRADE IN FOREST RESOURCES (CINTRAFOR)

Location/Leadership

University of Washington, Seattle, Washington; Dr. David B. Thorud, Acting Director, College of Forest Resources.

Mission/Goals:

Activate the resources of the University and the State in addressing the changing markets for forest products produced in the State and the Pacific Northwest Region.

* Conduct analyses which will expand international trade in forest-based products, including trade in manufactured forest products; develop technology for manufactured products that will meet the needs of international customers; and develop and disseminate market and technical information relevant to international trade in forest products.

* Develop and maintain a computer based worldwide forest products production and trade base system and coordinate this system with state, federal and private efforts.

* Monitor international forest products markets and assess the status and competitiveness of the State's forest products industry.

* Provide graduate education and professional non-degree training in international trade in forest products.

* Develop cooperative linkages with the International Marketing Program at Washington State University and with state and federal agencies.

* Disseminate the results of the Center's programs through technical workshops, short courses, international and national symposia, publications, etc.

* Maintain and disseminate international trade data on Forest Resources.

Program Objectives:

Research: Assess market potentials for forest products in Pacific Rim countries including technical, economic and policy analyses for expansion of market opportunities; assemble and disseminate information on wood construction on an international basis; identify product requirements, trade barriers or other conditions impacting trade in forest products; use

the CINTRAFOR Global Trade Model to assess Pacific Rim forest products trade and as an analytical tool for conducting other research.

Education: Develop curriculum and a Mast of Science program to provide students with training in 1) worldwide forest products and wood processing, 2) economic, political, and cultural framework for international trade, 3) financial, business, and administrative process for forest products trade and analytical problem-solving concepts and methodology for international trade research.

Public Service/Outreach: Conduct symposia and conferences to bring together leaders from the forest products industry, government and academic institutions to discuss trends in trade, current and technical policy issues and recent developments in selected consuming and producer countries. Conduct workshops on specific topics to transmit new information generated from research programs. Respond to request for advice, information, publications, participation as speakers, and other involvement of the faculty and staff with client groups in both industry and the public sector.

Information/Telecommunication Services: Develop, maintain and update an integrated computerized data bank for forest products statistics (INTRADATA) and make available to client-users.

Areas of Concentration (Products/Markets/Functions):

Forest products. Markets in Canada, Japan, Taiwan, Peoples Republic of China, Korea, Australia, New Zealand, West Germany, Italy and Great Britain. Research, outreach/public service and information services.

Cooperating Units/Disciplines:

Forest biology, forest management, wood science and technology, forest engineering and Schools of international studies, law and business.

Advisory Committee (Membership and Roles):

Professional staff from forest industry, CINTRAFOR faculty and program directors and adjunct faculty and representatives from cooperating University of Washington Colleges and Departments. Advise the Director on program implementation, formulates recommendations on individual project priorities, and reviews progress.

Funding Sources:

State appropriations, private and federal funds (CSRS administered grant).

INTERNATIONAL MARKETING PROGRAMS FOR AGRICULTURAL COMMODITIES AND TRADE

(IMPACT)

Location/Leadership

Washington State University, Pullman, Washington; Dr. A. Desmond O'Rourke, Project Director, Department of Agricultural Economics.

Mission/Goals:

Harness science and technology in order to assist the export of agricultural products from the State of Washington.

* Discover new or expanded export opportunities for Washington agricultural commodities.

* Solve technical impediments to the export of Washington agricultural products.

* Develop new products from Washington agriculture for sale in export markets.

Program Objectives

Research: Conduct market studies of opportunities for specific products or product groups that are of particular concern to exporters, including profiles of the demographic, social, economic and market situations in targeting countries; conduct cross-cultural studies in order to understand the appropriate methods of operation in export markets; evaluate specific and existing end-uses and potential new uses of grain crops to expand their utilization; determine on farm practices that increase the marketability of grains, fruits, vegetables, seeds and livestock products; develop post-harvest technologies and systems to improve the acceptability (appearance, self-life, etc.) of exported products; determine the availability and competitiveness of production and marketing systems and potential demand opportunities of alternative crops; and conduct research to improve compatibility of United States and Japanese wood products standards thus enhancing delivered product performance.

Education: Strengthen instruction in international marketing at the graduate level.

Information/Communication Services: Participate in a number of national and international communications networks. Washington State University Library is on-line to private and public data bases throughout the United States and internationally. BITNET system provides direct contact with the United States and with Europe and Japan. WHET system provides direct telecommunications contact within the State of Washington. WSU seeking admission to international telecommunications educational system (PEACESAT).

Cooperating Units/Disciplines:

On-Campus: Departments of Agricultural Economics, Agricultural Engineering, Agronomy, Child and Family Studies, Food Science, Horticulture, Marketing and Business Administration, Rural Sociology, and Wood Technology.
Off-Campus: USDA, (AMS, ERS, FAS), State Department of Agriculture Center for International Trade in Forest Products (CINTRAFOR), University of Washington, Seattle and the Post-Harvest Institute for Perishables, University of Idaho.

CENTER FOR AGRICULTURAL EXPORT DEVELOPMENT

Location/Leadership:

University of Kentucky, Lexington, Kentucky; Director, Dr. Michael R. Reed, Department of Agricultural Economics.

Mission/Goals:

To increase the capacities of farmers and agribusiness firms in the Ohio Valley and Appalachia region to compete successfully in international markets.

* To increase the understanding of farmers and agribusinesses in export marketing.

* To provide timely and relevant information to current and potential exporters regarding export marketing.

* To assist farmers and agribusiness firms in finding profitable markets for their products.

* To facilitate arrangements between United States exporters of agricultural products and their import partners.

* To determine relationships between United States and foreign policies (public, commodity and macroeconomic) and the competitiveness of United States agricultural exports.

Program Objectives:

Research: To investigate potential products and geographical areas which might provide opportunities for increased exports of regional producers and agribusiness firms; to investigate factors which determine trade flows and project future trade patterns which will impact United States export markets, more specifically the effect of macroeconomic factors such as United States monetary policy (interest rates and money supply growth) on world economic activity and the export of United States agricultural products; and determine the effects of government policies (both United States and foreign) and market structures on competitiveness of United States exporters.

Education: Train potential exporters on elements involved in successful exporting. Teach at least one course at the undergraduate and graduate level in international marketing. Establish and coordinate internships for students interested in international marketing.

Public Services/Outreach: Hold conferences and workshops for potential exporters which present the nuances of export marketing, such as contract terms, letters of credit, transportation arrangements, cultural considerations and foreign exchange risk. Bring together potential exporters and foreign buyers through trade shows and overseas travel.

Information/Telecommunication Services: Telecommunication facilities and experienced personnel at the University will be utilized by the Center in its educational programs and in conducting trade negotiations.

Areas of Concentration (Products/Markets/Functions):

Breeding stock, distilled spirits, ginseng, timber and timber products, white corn, mushrooms, ornamentals and seeds; information delivery and research.

Advisory Committees (Membership and Roles:

Representation from agricultural industry, congressional delegations, agribusiness firms, and government agricultural agencies. To oversee the broad mission of the Center, giving it direction and informed perspectives for meeting the region's agricultural exporter needs.

Funding Sources/Period of CSRS Grant:

State appropriations, federal funds (CSRS administered; May 1, 1988 to October 31, 1989.

Cooperating Units:

Experiment Station, Extension Service, Department of Forestry, Patterson School of Diplomacy and International Commerce, College of Business and Economics, and Small Business Development Center.

THE APPALACHIAN INTERNATIONAL TRADE DEVELOPMENT CENTER FOR HARDWOOD FOREST PRODUCTS

Location/Leadership:

West Virginia University, Morgantown, West Virginia; Project Director, Dr. J.E. Coster Division of Forestry.

Mission/Goals:

Enhance the exports of high value hardwood forest products by Appalachian forest products manufacturers.

* Develop a program to expand and upgrade existing Appalachian hardwood export markets and to develop new products and markets.

* Develop a technical assistance system to aid producers of Appalachian hardwood products for export.

* Develop an Appalachian hardwood export market information system.

* Improve the capabilities of the human resource related to the wood products industry to operate in the international trade arena.

Program Objectives:

Research: Identify international markets that have growth potential for the export of Appalachian hardwood products; identify opportunities to develop markets for new hardwood product types (e.g., species, grades, products forms); and identify and document product specifications (grades, dimensions, packaging, etc.) that must be met for producers to effectively serve specified markets.

Education: Increase the pool of graduates of business and professional curriculum having contemporary education in

global economics and international trade; and through continuing education programs, increase the awareness and understanding of professionals and managers in the hardwood products industries of economic opportunities in export markets, of appropriate technology needed to be competitive with new and existing products, and of effective business management techniques for the export trade.

Public Service/Outreach: Develop product information and promotion strategies to exploit identified market growth opportunities; develop technical information and delivery systems to provide products specifications to producers of export products and to assist them in incorporating such specifications into their production processes in a cost-effective manner; and provide technical assistance and workshops regarding international marketing, financing, custom requirements, business planning and related services to firms desiring to enter international markets.

Information/Telecommunication Services: Explore existing export market information systems, assess the extent and timeliness of this information in terms of its coverage for Appalachian hardwood products and determine additional export market information services needed to serve hardwood exporters; develop and maintain a supply and demand information system for use by potential sellers and buyers of hardwood products; and make available relevant information by an on-line computer system and printed newsletters/bulletins.

Areas of Concentration (Products/Markets/Functions):

Appalachian hardwood products; Western Europe and Pacific Rim countries; Research, education; public service/outreach and information services.

Cooperating Units/Disciplines:

On-Campus: Colleges of Agriculture and Forestry, Business and Economics, Cooperative Extension Service, Appalachian Hardwood Research Center, Center for Economic Research, and Small Business Development Center.

Off-Campus: USDA-Northeastern Forest Experiment Stations located at Princeton, West Virginia, and Blacksburg, Virginia; USDA-Forest Service, Forest Products Laboratory, Madison, Wisconsin; Institute for International Trade and Development, Marshall University, Huntington, West Virginia, and State Department of Agriculture and Governor's Office of Community and Industrial Development.

Advisory Committee (Membership and Roles):

Nine persons selected from a cross section of forest products organizations, public agencies, and related organizations with strong interest in international trade in hardwood products. Role not specified in proposal.

Funding Sources:

State appropriations, federal funds (CSRS administered grant).

NORTHERN CROPS INSTITUTE

Location/Leadership:

North Dakota Agricultural Experiment Station, Fargo, North Dakota; Dr. D.E. Anderson, Project Director. Also, Associate

Director of the Experiment Station and Associate Dean, College of Agriculture, North Dakota State University.

Mission/Goals:

To provide educational and technical service programs that assist commodity groups in promotion and market development efforts for northern grown crops in both domestic and export markets.

Program Objectives:

Provide short courses for trainees from around the world in the milling and separating semolina from durum wheat on a semi-commercial scale and the production of feed using high quality materials such as barley, soybeans, corn, sunflower, edible beans, sugar beet molasses, etc.

Areas of Concentration (Commodities/Markets/Functions):

Durum wheat, barley soybeans, corn, sunflower, edible beans. Markets in Western and Eastern Europe, Middle East, Soviet Union, Central and South American and Asia. Demonstration and education.

Cooperating Units/Disciplines:

Department of Cereal Science and Food Technology, and the USDA Hard Red Spring and Durum Wheat Quality Laboratory.

Advisory Committee (Membership and Roles):

None stated in proposal.

Funding Sources:

State appropriations (North Dakota, South Dakota and Minnesota) and the Montana Wheat and Barley Marketing Committee. Agricultural commodity organization support from the North Dakota Wheat Commission, Minnesota Wheat Research and Promotion Council, South Dakota Wheat Commission, North Dakota Barley Council, North Dakota Soybean Council, South Dakota Soybean Council and the Red River Valley Edible Bean Growers Association (Minnesota and North Dakota). Federal funds (CSRS administered grant). Funds for purchase of equipment by an existing center.

RECENT TRENDS IN THE FUNDING OF INTERNATIONAL TRADE AND DEVELOPMENT RESEARCH CONDUCTED AT STATE AGRICULTURAL EXPERIMENT STATIONS

Paul L. Farris[3]

The growing interest in international trade and development is reflected in rising research spending at State Agricultural Experiment Stations (SAES). Data on expenditure patterns show an upward trend during the past two decades that has accelerated in recent years. While the funds allocated to internationally related research remain relatively small, the growth reflects a significant response to problem areas perceived to be of increasing importance. The objectives of this paper are to analyze recent trends in support for international research conducted at the SAES and to summarize regional research projects that have been activated in the past two years and those that are currently in the planning stages for approval and support in coming months. The summary is presented in Appendix I.

DATA SOURCE

Information on SAES expenditures were obtained from the CRIS (Current Research Information System) that was established and is maintained by the United States Department of Agriculture (USDA), Cooperative State Research Service (CSRS). The CRIS research classification scheme has four basic dimensions: (1) Goals, with contributing RPAs (Research Problem Areas); (2) Activity; (3) Commodity, Resource or Technology; and (4) Field of Science. In order to focus on international work, we chose Goal VI (Expand Exports and Assist Developing Nations). The data include annual expenditures for all Fields of Science in Goal VI for the years 1967-1987. The tabulations show expenditures in the four RPAs (Research Program Areas) within Goal VI. These are RPA 603, Technical Assistance to Developing Countries; and RPA 604, Product Development and Marketing of Foreign Products. The Importance of economics (Field of Science 2630) is also shown within Goal VI and by RPA. Data series were available both including and excluding AID (Agency for International Development) funds. John R. Myers, Director of CRIS, provided the special computer tabulations of data for this paper.

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[3]Paul L. Farris is a Professor of Agricultural Economics at Purdue University, Lafayette, Ind., and Representative with CSRS, USDA, Washaington, D.C.

SAES EXPENDITURES ON INTERNATIONAL TRADE AND DEVELOPMENT

Figure 1 shows that total nominal spending by SAES on international trade and development increased from less than $1 million in 1967 to nearly $18 million in 1987. Excluding AID funds, the amount reached $8.4 million in 1987. Spending rates on international research began to accelerate around 1982.

Figure 2 shows that in 1967, both with and without AID funds, international trade and development expenditures were only about .3 percent. But 1987 total international spending was 1.36 percent of the SAES total. Excluding AID funds, the 1987 percent was .66. Figure 3 indicates that following an early rapid increase in AID funding, the proportion of international work support by AID funds still averaged more than half.

In addition to the support of SAES work classified under Goal VI (Expand Exports and Assist Developing Nations), AID funds also supported SAES research classified under other goals (see Appendix Table 4). Over half of AID funds were expended on goals other than Goal VI in most years. The extent to which the AID funds expended on other SAES goals was also in support of international work is not known.

Areas of International Emphasis

Figures 4 and 5 reflect the importance of the two main areas of emphasis, Foreign Market Development (RPA 601) and Technical Assistance to Foreign Countries (RPA 603). Excluding AID funds, foreign market development accounted for about half of international work . The heavy emphasis of AID on technical assistance is reflected in Figure 5, with RPA 603 accounting for around two-thirds of SAES international work in most years. RPA 602, Evaluation of Foreign AID Programs, and RPA 604, Product Development and Marketing of Foreign Products, have been given relatively minor emphasis.

Economics Emphasis in International Work

Figure 6 shows that economics (Field of Science 2630) is very important in international work, accounting for 62 percent in the 1968-1977 period and about half in 1978-1987. The relative decline of economics in international work is associated with the growth of AID supported technical assistance in the latter decade. Emphasis on economics in foreign market development work, RPA 601, has been high, amounting to more than 90 percent in both decades. By contrast, economics work in the technical assistance area, RPA 603, declined relative to other fields of science between the two periods.

Growth in the importance of international economics research as a proportion of all SAES economics research has been significant

(Figure 7). Including AID funds, international economics research amounted to about 4 percent of total SAES economics research in 1967, increasing to about 11 percent in 1985. Excluding AID funds, the increase was from about 4 percent in 1967 to over 6 percent in 1985. However, it should be noted that expenditures for all economics research at the SAES is only about 6 percent of total research expenditures (Figure 8). Therefore, the major impacts from the increased support for international economics research has been on research programs in departments of agricultural economics and not on total station programs.

RESEARCH PROJECTS AT SAES ON INTERNATIONALLY RELATED WORK

In November, 1988 CRIS reported (Table 1) that 208 SAES projects had components of international work (RPAs 601, 602, 603 and 604). Of these, 171 had at least some emphasis on economics (Field of Science 2630). Thirty-four of the Hatch projects contributed to a regional project that involved economics work related to international trade or development. Eleven regional projects were identified by these contributing projects that had some elements of international trade and development. These regional projects were under way in each of the four major CSRS administrative regions, Northeast, South, North Central and West. However, participation was nationwide, which made these projects more interregional or national than regional. None of the projects that had no economic work was associated with a regional project. The major type of research project involving international trade and development was Hatch which made up 61 percent of the total.

Table 1. State Agricultural Experiment Station Projects Related to International Work, November, 1988

Type of Funding	Economics Component	No Economics	Total
	- - - - Number of Projects - - - -		
McIntire-Stennis	11	0	11
Special Grant	10	8	18
Hatch	105[1]	14	119
State	45	15	60
TOTAL	171	37	208

[1]Thirty-four of these were related to a regional project.

Project numbers do not accurately reflect funding levels since Hatch projects are heavily supported with state funds. On the other hand, state projects are supported only with state funds. Appendix I presents a summary of the recently activated regional research projects and those that are in the planning stages for approval and support in the near future. The summary consists of project titles, durations, objectives and participants.

CONCLUDING REMARKS

International markets are large and very important to the United States food and agricultural sector. From 1972 to 1981, agricultural exports increased from 8 to 44 billion dollars. The latter figure represented about one-third of farm cash receipts and 40 percent of harvested acreage in the United States. During the 1980s, agriculture experienced a major reduction in export sales, falling 40 percent to 26 billion dollars in 1986. The export of processed food products has been in the range of 4 to 5 percent of domestic production, but the export share trended downward during much of the 1980s. Food and agricultural products constitute the fourth largest category of imported goods into the United States.

In general, the American public has become sensitized to the overall trade deficit, and its adverse effects on the nation's economic progress. The competitive position of United States products in world markets importantly influences the overall United States trade balance. Research that can lead to expansion of agricultural and related products can contribute much toward an improved United States trade balance. Although there has been a gradual relative increase in SAES research expenditures on international trade and development, the change has been rather minimal in terms of total SAES research programs. The major changes have occurred in agricultural economics programs.

An important question is whether the response in terms of increased SAES support and program adjustments have been large enough to meet the challenges of emerging global competition facing the nation's food and agriculture industry. Events of the more recent past reflect an increase in the international orientation of SAES research programs that seems likely to gain strength in the years ahead.

APPENDIX

APPENDIX I. SUMMARY OF RECENT REGIONAL RESEARCH ACTIVITIES IN INTERNATIONAL TRADE

NC194: The Organization and Performance of World Food Systems: Implications For United States Policies

Duration: October 1, 1988 to September 30, 1993

OBJECTIVES

1. To delineate and quantify the interrelationships between industrial organizations and market performance, including the international competitiveness of United States industries, in world markets for semiprocessed and processed agricultural and manufactured products.

2. To identify and assess the economic impacts of United States and non-United States policies that affect the organization of United States food-related industries on competitiveness and other dimensions of market performance.

3. To develop a model of international market competition and coordination for semiprocessed and processed agricultural products and manufactured foods that integrates industrial organization and international trade theories.

PARTICIPANTS

University of Illinois
Purdue University
Ohio State University
Michigan State University
University of Minnesota
University of Missouri
North Dakota University
University of Wisconsin
University of California
University of Florida
Iowa State University
ACS, USDA
AMS, USDA
ERS, USDA
CSRS, USDA
Federal Trade Commission
Office of Technology Assessment
University of Kentucky
Louisiana State University
University of Maryland
Mississippi State University
Cornell University
Oklahoma State University
Virginia Polytechnic Institute and State University
Texas A&M University
Oregon State University
University of Connecticut

S-224: International Trade Research on Commodities Important to the Southern Region

Duration: October 1, 1988 to September 30, 1993

OBJECTIVES

1. Identify and assess technological, physical, and economic factors affecting the competitive position of the Southern Region in International Markets for selected agricultural commodities and products.

2. Assess macroeconomic policies including monetary policy and currencies exchange rates, marketing and trade policies of the United States and trading partners, including developing countries, as they relate to and impact the competitiveness of Southern Region products in International Markets.

3. Identify and evaluate market opportunities for Southern farmers and agribusiness with emphasis on value-added products; and identify and elucidate adjustment problems of the Southern Region stemming from projected changes in international trade based on the results of research under objectives 1 and 2.

PARTICIPANTS

Auburn University
University of Arkansas
University of Florida
University of Georgia
(Athens and Griffin
Experiment Stations)
University of Kentucky
TVA
ERS, USDA
CSRS, USDA
Mississippi State University
Oklahoma State University
University of Tennessee
Texas A&M University
Texas Tech University
Virginia Polytechnic Institute
and State University

WRRC-68: International Marketing of Agricultural Products in the Western United States

Duration: Project to be finalized and submitted for approval.

OBJECTIVES

1. Delineate the common international marketing problems which are of greatest economic impact on western United States agriculture.

2. Combine resources from a number of states to permit more effective assaults on shared international marketing problems.

3 Transfer information on marketing technology between states and between comparable commodities.

PARTICIPANTS

University of California (Berkeley)
University of California (Davis)
Washington State University
Oregon State University
CSRS, USDA
Colorado State University
New Mexico State University
University of Idaho
University of Nevada

WRCC-70: The United States-Canada Trade Agreement: Impacts on the Economy of the Pacific Northwest

Duration: Project to be finalized and submitted for approval.

OBJECTIVES

1. To uncover United States-Canada trade relationships involving Pacific Northwest Industries

2. To document existing tariff and non-tariff barriers affecting final goods and services, as well as factors of production, important to the Pacific Northwest.

3. To identify how changes in the trade barriers will affect employment, prices, trade, and investment in the Pacific Northwest.

PARTICIPANTS

Oregon State University
niversity of Idaho
CSRS, USDA
University of Alaska
Washington State University

APPENDIX TABLE 1. Total Expenditures, Goal VI (Expand Exports and Assist Developing Nations) and Economics (Field of Science 2630) by State Agricultural Experiment Stations, Including and Excluding A.I.D. Funds, United States, 1967-87.

	SAES Expenditures								
	Total			Goal VI			Economics		
Year	Including AID Funds	Excluding AID Funds	A.I.D. Funds	Including AID Funds	Excluding AID Funds	A.I.D. Funds	Including AID Funds	Excluding AID Funds	A.I.D. Funds
	dollars								
1967	308,836,680	308,567,351	269,329	925,016	915,748	9,268	16,393,936	16,334,191	59,745
1968	271,648,647	270,606,494	1,042,153	1,038,826	774,178	264,648	15,341,175	15,078,570	262,605
1969	294,295,055	292,738,496	1,556,559	1,281,253	772,019	509,234	16,521,080	16,000,428	520,652
1970	316,873,525	314,709,324	2,164,201	2,215,486	1,053,672	1,161,814	18,016,382	17,607,119	409,263
1971	338,880,313	336,902,521	1,977,792	1,667,227	856,707	810,520	21,135,567	20,868,581	266,986
1972	358,761,948	356,050,366	2,711,582	2,184,233	1,000,446	1,183,787	22,245,218	21,948,357	296,861
1973	387,496,915	384,610,156	2,886,759	2,235,754	674,209	1,561,545	22,894,599	22,345,156	549,443
1974	427,984,256	423,898,087	4,086,169	2,892,597	682,403	2,210,194	25,760,661	24,184,061	1,576,600
1975	486,378,710	482,206,267	4,172,443	3,074,173	1,166,226	1,907,947	28,383,144	27,482,900	900,244
1976	522,452,612	517,004,382	5,448,230	4,303,374	1,855,707	2,447,667	34,620,779	32,894,020	1,726,759
1977	601,828,254	594,207,943	7,620,311	3,672,984	2,182,079	1,490,905	36,441,367	35,690,285	751,082
1978	657,394,468	648,876,657	8,517,811	4,331,444	2,027,509	2,303,935	41,054,607	39,755,483	1,299,124
1979	726,234,643	718,035,910	8,198,733	6,170,862	2,553,537	3,617,325	45,720,705	44,072,532	1,648,173
1980	812,651,519	804,843,635	7,807,884	6,930,280	3,243,995	3,686,285	50,201,111	48,325,805	1,875,306
1981	903,720,632	893,470,255	10,250,377	7,023,640	3,433,786	3,589,854	55,296,188	53,511,036	1,785,152
1982	966,438,779	952,297,359	14,141,420	7,856,071	3,049,821	4,806,250	58,799,925	56,752,268	2,047,657
1983	1,011,470,164	996,308,574	15,161,590	10,481,738	3,902,193	6,579,545	60,632,362	57,821,199	2,811,163
1984	1,078,654,338	1,059,342,685	19,311,653	13,337,076	4,792,142	8,544,914	64,946,232	61,866,077	3,080,155
1985	1,167,443,279	1,145,957,110	21,486,169	13,925,505	5,660,423	8,265,082	72,558,836	68,593,229	3,965,607
1986	1,232,127,904	1,212,195,498	19,932,406	15,475,798	7,097,269	8,378,529	77,979,360	72,994,520	4,984,840
1987	1,299,780,296	1,278,192,949	21,587,347	17,666,679	8,443,957	9,222,722	84,948,708	80,038,992	4,909,716

APPENDIX TABLE 2. RPA (Research Program Area) Expenditures within Goal VI (Expand Exports and Assist Developing Nations) by State Agricultural Experiment Stations, Including and Excluding A.I.D. Funds, United States, 1967-87.

	RPA											
	601			602			603			604		
YEAR	Including A.I.D.	Excluding A.I.D.	A.I.D. Funds	Including A.I.D.	Excluding A.I.D.	A.I.D. Funds	Including A.I.D.	Excluding A.I.D.	A.I.D. Funds	Including A.I.D.	Excluding A.I.D.	A.I.D. Funds
	dollars											
1967	639,094	639,094	0	0	0	0	285,922	276,654	9,268	0	0	0
1968	483,296	483,296	0	0	0	0	555,530	290,882	264,648	0	0	0
1969	505,807	484,843	20,964	49,539	0	49,539	725,907	287,176	438,731	0	0	0
1970	587,544	424,370	163,174	57,616	0	57,616	1,486,283	546,859	939,424	84,043	82,443	1,600
1971	539,852	448,255	91,597	0	0	0	1,084,410	371,627	712,783	42,964	36,824	6,140
1972	566,729	521,340	45,389	0	0	0	1,581,080	443,388	1,137,692	36,424	35,718	706
1973	518,007	317,062	200,945	5,849	5,849	0	1,679,571	321,863	1,357,708	32,327	29,435	2,892
1974	752,378	321,749	430,629	6,797	6,797	0	2,092,930	313,365	1,779,565	40,491	40,491	0
1975	685,232	638,939	46,293	13,808	11,769	2,039	2,291,329	431,715	1,859,614	83,803	83,803	0
1976	947,884	909,094	38,815	14,835	12,313	2,522	3,228,152	821,796	2,406,356	112,504	112,504	0
1977	1,002,720	1,002,720	0	22,251	22,251	0	2,581,124	1,090,219	1,490,905	66,889	66,889	0
1978	1,043,316	1,042,255	1,061	16,667	16,667	0	3,219,659	916,785	2,302,874	51,801	51,801	0
1979	1,261,202	1,261,022	0	30,980	30,980	0	4,822,815	1,205,670	3,617,145	55,865	55,865	0
1980	1,310,246	1,276,658	33,588	77,049	77,049	0	5,480,688	1,827,991	3,652,697	62,296	62,296	0
1981	1,475,055	1,465,853	9,202	70,729	70,729	0	5,414,400	1,833,748	3,580,652	63,456	63,456	0
1982	1,494,530	1,441,959	52,571	60,214	60,214	0	6,217,148	1,463,470	4,753,678	84,178	84,178	0
1983	1,800,553	1,791,978	8,575	28,437	28,437	0	8,451,146	1,880,177	6,570,968	201,601	201,601	0
1984	2,086,438	1,984,564	101,874	17,029	17,029	0	10,975,092	2,532,033	8,443,059	258,517	258,517	0
1985	2,849,457	2,636,555	212,902	22,928	22,928	0	10,526,637	2,476,493	8,050,144	526,483	524,448	2,035
1986	5,963,960	3,810,562	2,153,398	25,605	25,605	0	8,324,274	2,099,144	6,225,130	1,161,959	1,161,959	0
1987	6,595,848	4,319,950	2,275,898	92,745	91,011	1,734	9,555,213	2,610,124	6,945,089	1,422,873	1,422,873	0

RPA 601. Foreign Market Development.
RPA 602. Evaluation of Foreign Aid Programs.
RPA 603. Technical Assistance to Developing Countries.
RPA 604. Product Development and Marketing of Foreign Products.

APPENDIX TABLE 3. Economics (Field of Science 2630) Expenditures by RPA (Research Program Area) in Goal VI (Expand Exports and Assist Developing Nations) by State Agricultural Experiment Stations, Including and Excluding A.I.D. Funds, United States, 1967-87.

YEAR	RPA 601 Including A.I.D.	RPA 601 Excluding A.I.D.	RPA 601 A.I.D. Funds	RPA 602 Including A.I.D.	RPA 602 Excluding A.I.D.	RPA 602 A.I.D. Funds	RPA 603 Including A.I.D.	RPA 603 Excluding A.I.D.	RPA 603 A.I.D. Funds	RPA 604 Including A.I.D.	RPA 604 Excluding A.I.D.	RPA 604 A.I.D. Funds
	dollars											
1967	565,166	565,166	0	0	0	0	102,764	93,894	8,870	0	0	0
1968	435,051	435,051	0	0	0	0	308,472	134,674	173,798	0	0	0
1969	422,182	413,814	8,368	49,539	0	49,539	553,346	153,799	399,547	0	0	0
1970	552,561	404,196	148,365	57,616	0	57,616	442,781	281,166	161,615	0	0	0
1971	494,820	403,223	91,597	0	0	0	286,788	180,195	106,593	0	0	0
1972	506,164	496,620	9,544	0	0	0	545,033	335,699	209,334	14,776	14,776	0
1973	459,875	282,106	177,769	5,849	5,849	0	472,518	158,530	313,988	20,893	20,893	0
1974	678,488	294,030	384,458	6,797	6,797	0	1,334,736	189,278	1,145,458	36,908	36,908	0
1975	648,582	602,288	46,294	13,808	11,769	0	1,040,007	275,187	764,820	79,439	79,439	0
1976	894,298	855,508	38,790	12,682	10,160	0	2,231,916	626,221	1,605,695	64,873	64,873	0
1977	959,143	959,143	0	19,579	19,579	0	1,534,353	889,030	645,323	1,663	1,663	0
1978	1,006,152	1,005,091	1,061	11,948	11,948	0	1,781,147	562,502	1,218,645	1,861	1,861	0
1979	1,229,596	1,229,416	180	27,518	27,518	0	2,057,704	579,926	1,477,778	3,605	3,605	0
1980	1,283,329	1,249,741	33,588	75,935	75,935	0	1,814,366	620,457	1,193,909	34,840	34,840	0
1981	1,405,629	1,396,427	9,202	65,397	65,397	0	1,756,604	639,484	1,117,120	42,463	42,463	0
1982	1,305,031	1,252,460	52,571	56,849	56,849	0	1,942,985	502,916	1,440,068	54,665	54,665	0
1983	1,532,515	1,523,940	8,575	24,768	24,768	0	2,712,523	431,280	2,281,243	52,575	52,575	0
1984	1,833,204	1,731,330	101,874	15,768	15,768	0	3,692,318	800,796	2,891,522	107,266	107,266	0
1985	2,557,520	2,344,618	212,902	18,774	18,774	0	4,525,287	1,170,371	3,354,916	160,509	160,509	0
1986	5,637,087	3,483,689	2,153,398	25,605	25,605	0	2,349,685	650,579	1,699,106	666,303	666,303	0
1987	6,335,646	4,059,747	2,275,899	92,745	91,011	1,734	2,507,137	820,860	1,686,277	727,126	727,126	0

RPA 601. Foreign Market Development.
RPA 602. Evaluation of Foreign Aid Programs.
RPA 603. Technical Assistance to Developing Countries.
RPA 604. Product Development and Marketing of Foreign Products.

APPENDIX TABLE 4. A.I.D. Fund Expenditures by Goal, State Agricultural Experiment Stations, United States, 1967-87.

Goal[1/]	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
											percent										
0		.66	0	0	.27	.33	9.35	5.04	5.34	0	0	0	0	0	0	0	0	0	0	0	0
I		1.46	2.20	4.44	15.94	7.45	16.48	14.71	11.94	14.43	27.01	12.97	7.08	6.07	18.47	11.37	11.00	13.51	15.25	11.20	8.43
II	20.29	25.17	16.94	1.73	2.27	2.23	.58	2.28	3.36	5.10	6.59	6.46	18.16	8.12	5.86	6.85	7.67	5.56	8.34	9.17	10.53
III	20.42	5.87	15.51	9.59	10.75	9.90	1.55	4.40	10.19	19.28	22.53	19.48	20.86	28.53	33.58	40.53	33.55	28.45	29.99	23.20	17.56
IV		5.31	7.12	14.90	12.87	16.68	4.86	9.60	11.21	7.29	5.54	5.14	5.75	3.69	2.38	1.01	.32	.94	2.52	4.03	13.29
V	55.85	20.42	7.90	0	0	0	0	.01	.07	.09	0	0	.16	1.34	1.64	.40	.23	.11	.73	3.88	3.46
VI	3.44	25.39	32.72	53.68	40.98	43.66	54.09	54.09	45.73	44.93	19.56	27.05	44.12	47.21	35.02	33.99	43.40	44.25	38.47	42.03	42.72
VII		4.21	.71	.03	.09	3.33	2.47	1.84	.62	1.90	3.01	2.00	2.07	2.60	1.32	.68	1.70	1.39	2.92	3.29	2.85
VIII		1.37	1.34	1.93	2.68	1.82	1.77	2.41	3.93	.62	.64	.76	.40	1.15	.97	1.08	1.42	1.29	1.47	2.70	.75
IX	____	10.14	15.57	13.71	14.16	14.60	8.85	5.61	7.62	6.37	15.11	26.14	1.41	1.28	.76	4.08	.71	4.50	.31	.47	.40
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

1/ Goal titles are as follows:

0. An early administrative classification that was discontinued.
I. Insure a stable and productive agriculture for the future through wise management of natural resources.
II. Protect forests, crops and livestock from insects, diseases and other hazards.
III. Produce an adequate supply of farm and forest products at decreasing real production costs.
IV. Expand the demand for farm and forest products by developing new and improved products and processes and enhancing product quality.
V. Improve efficiency in the marketing system.
VI. Expand export markets and assist developing nations.
VII. Protect consumer health and improve nutrition and well-being of the American people.
VIII. Assist rural Americans to improve their level of living.
IX. Promote community improvement including development of beauty, recreation, environment, economic opportunity, and public services.

FIGURES

Figure 1. Total Expenditures by State Agricultural Experiment Stations on Goal VI (Expand Exports and Assist Developing Nations), Including and Excluding AID Funds, Million Dollars, 1967-87.

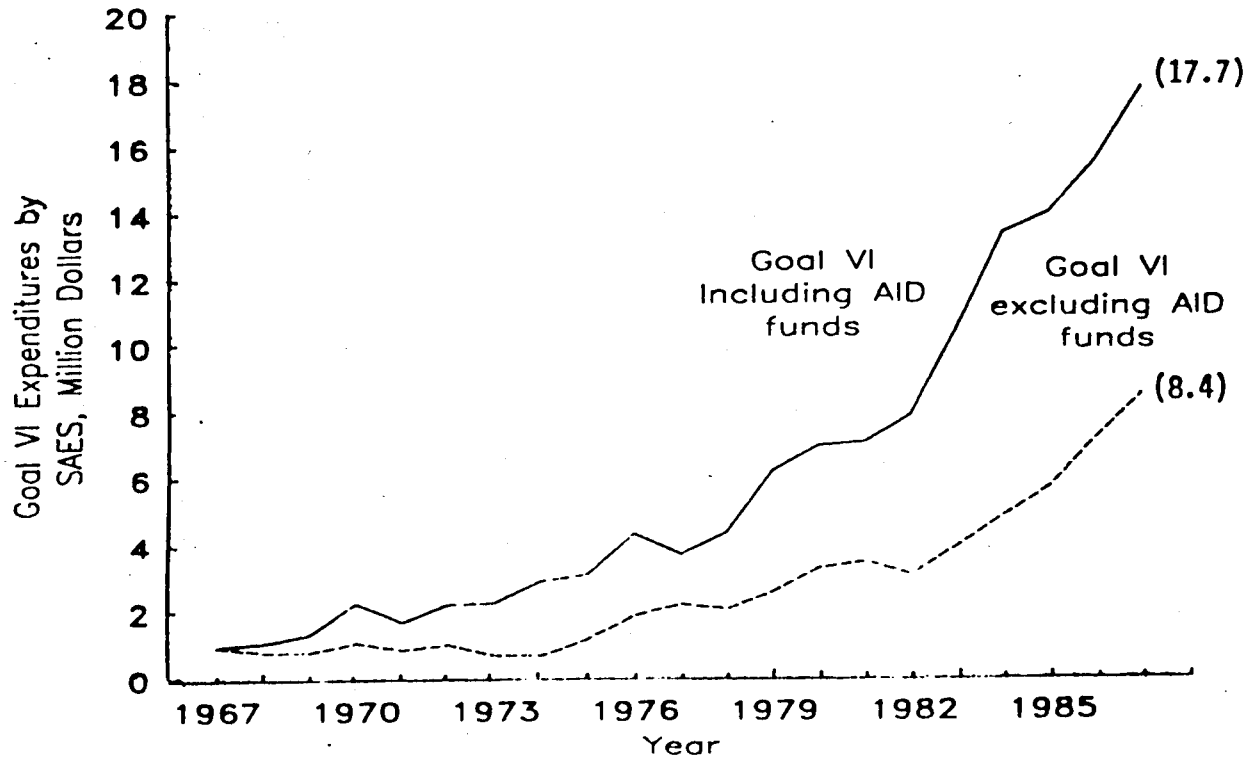


Figure 2. Percent of Total Expenditures by State Agricultural Experiment Stations on Goal VI (Expand Exports and Assist Developing Nations), Including and Excluding AID Funds, 1967-87.

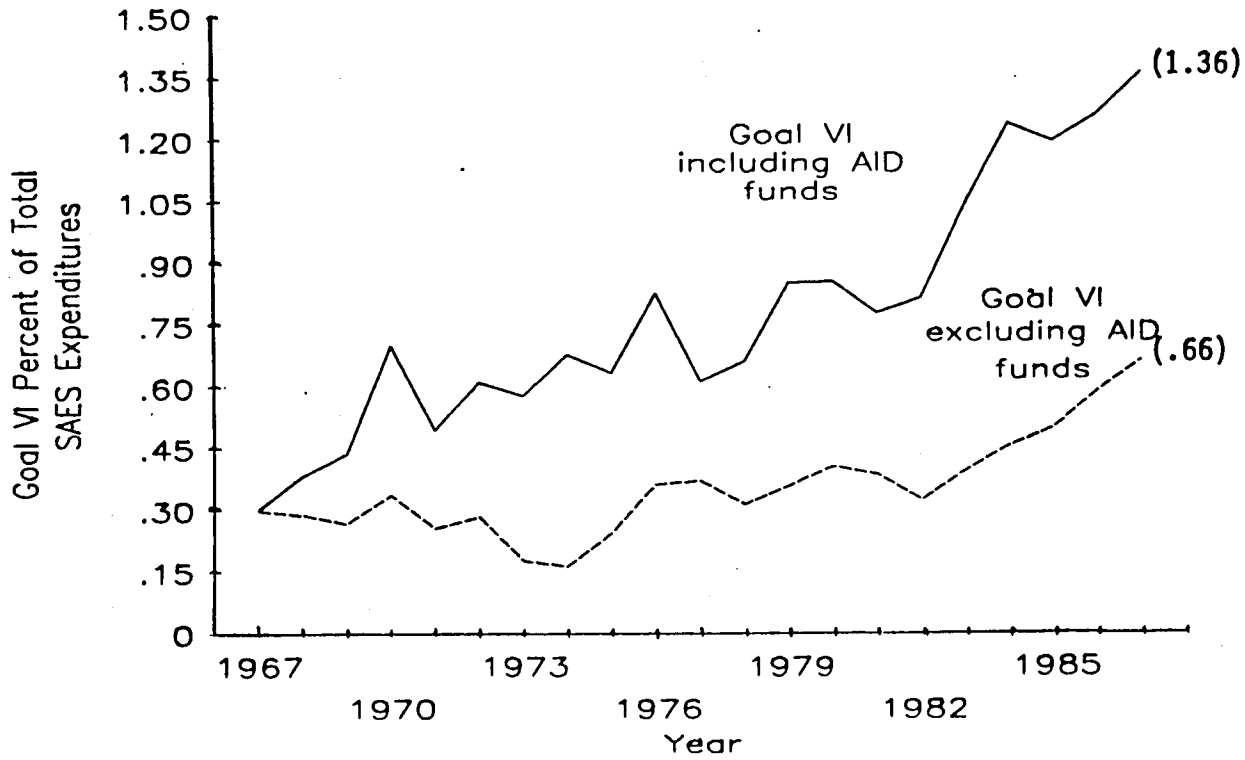


Figure 3. Percent of Goal VI (Expand Exports and Assist Developing Nations) Expenditures at State Agricultural Experiment Stations from AID and Non AID Funds, 1967-87.

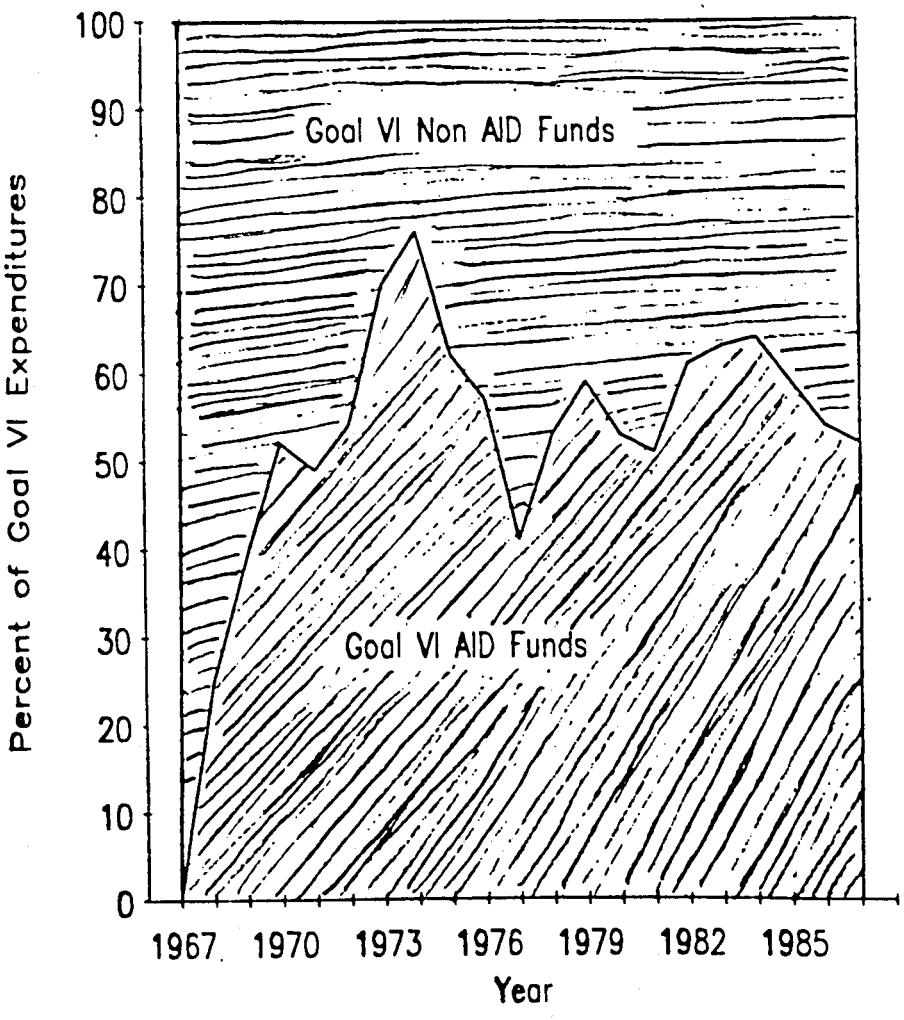
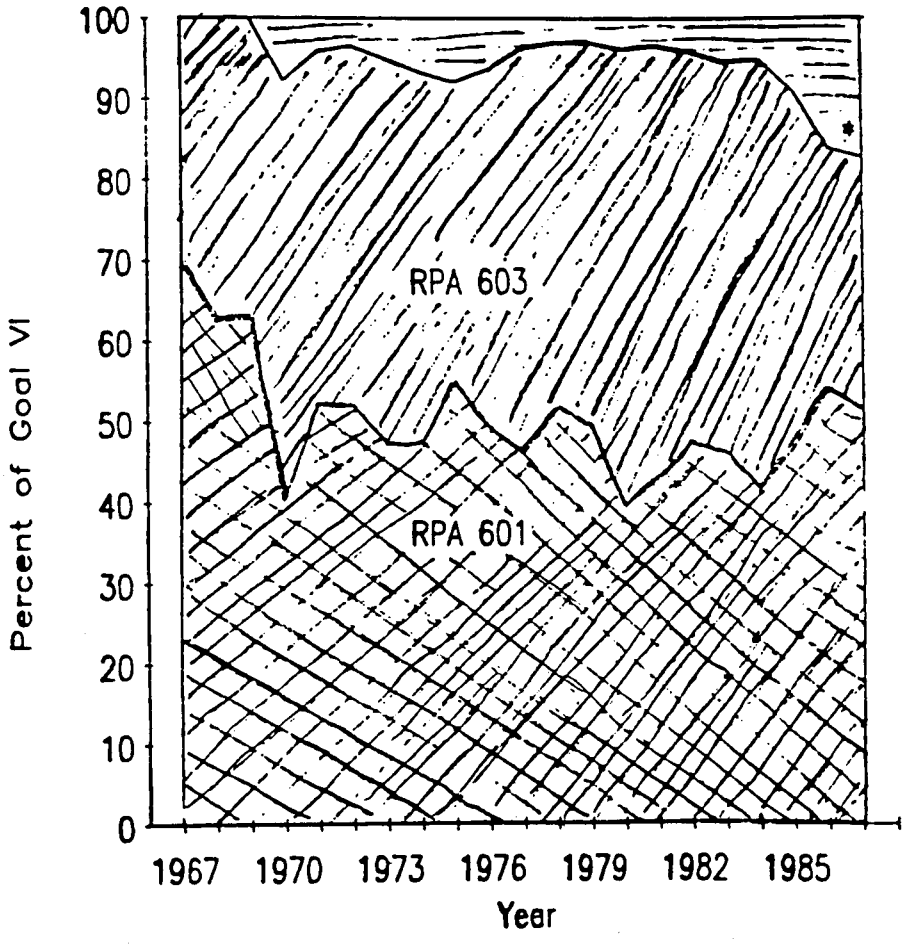


Figure 4. Percent of Goal VI (Expand Exports and Assist Developing Nations) by RPA, Excluding AID Funds, at State Agricultural Experiment Stations, 1967-87.



* RPAs 602 and 604

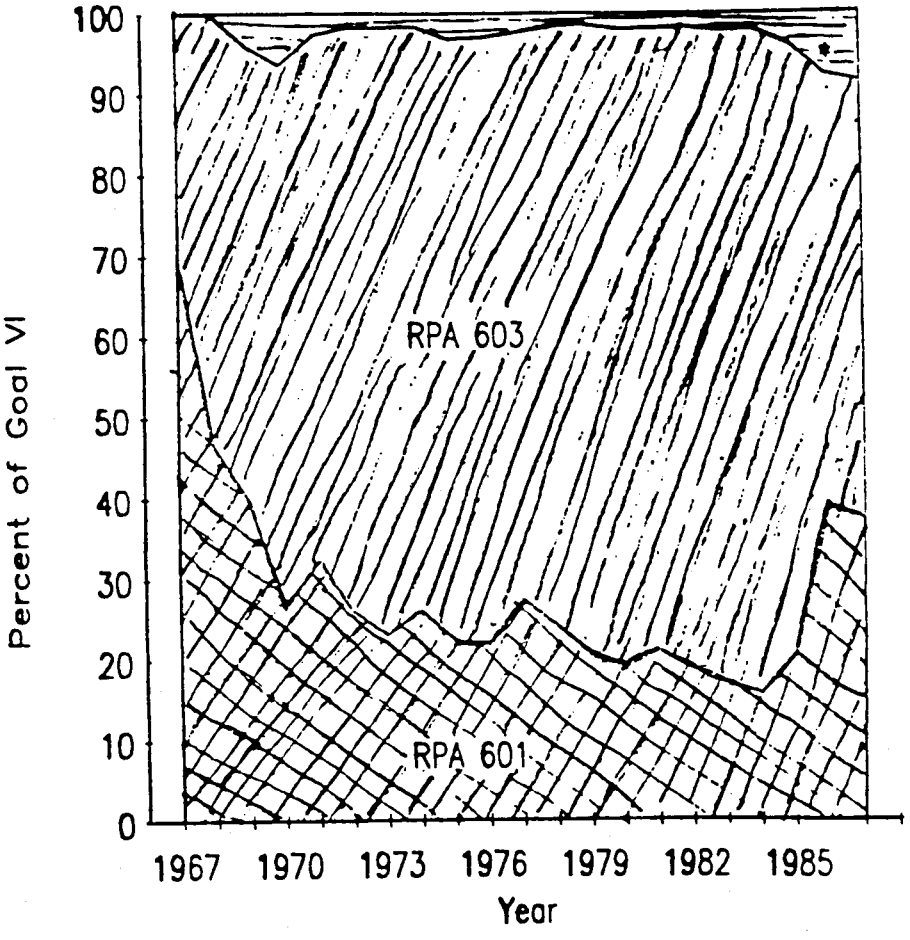
RPA 601. Foreign Market Development

RPA 602. Evaluation of Foreign Aid Programs

RPA 603. Technical Assistance to Developing Countries

RPA 604. Product Development and Marketing of Foreign Products

Figure 5. Percent of Goal VI (Expand Exports and Assist Developing Nations) by RPA, Including AID Funds, at State Agricultural Experiment Stations, 1967-87.



* RPAs 602 and 604

RPA 601. Foreign Market Development

RPA 602. Evaluation of Foreign Aid Programs

RPA 603. Technical Assistance to Developing Countries

RPA 604. Product Development and Marketing of Foreign Products

Figure 6. Economics (Field of Science 2630) as Percent of State Agricultural Experiment Station Expenditures on Goal VI and RPAs 601 and 603, 1968-77 and 1978-87, Including AID Funds

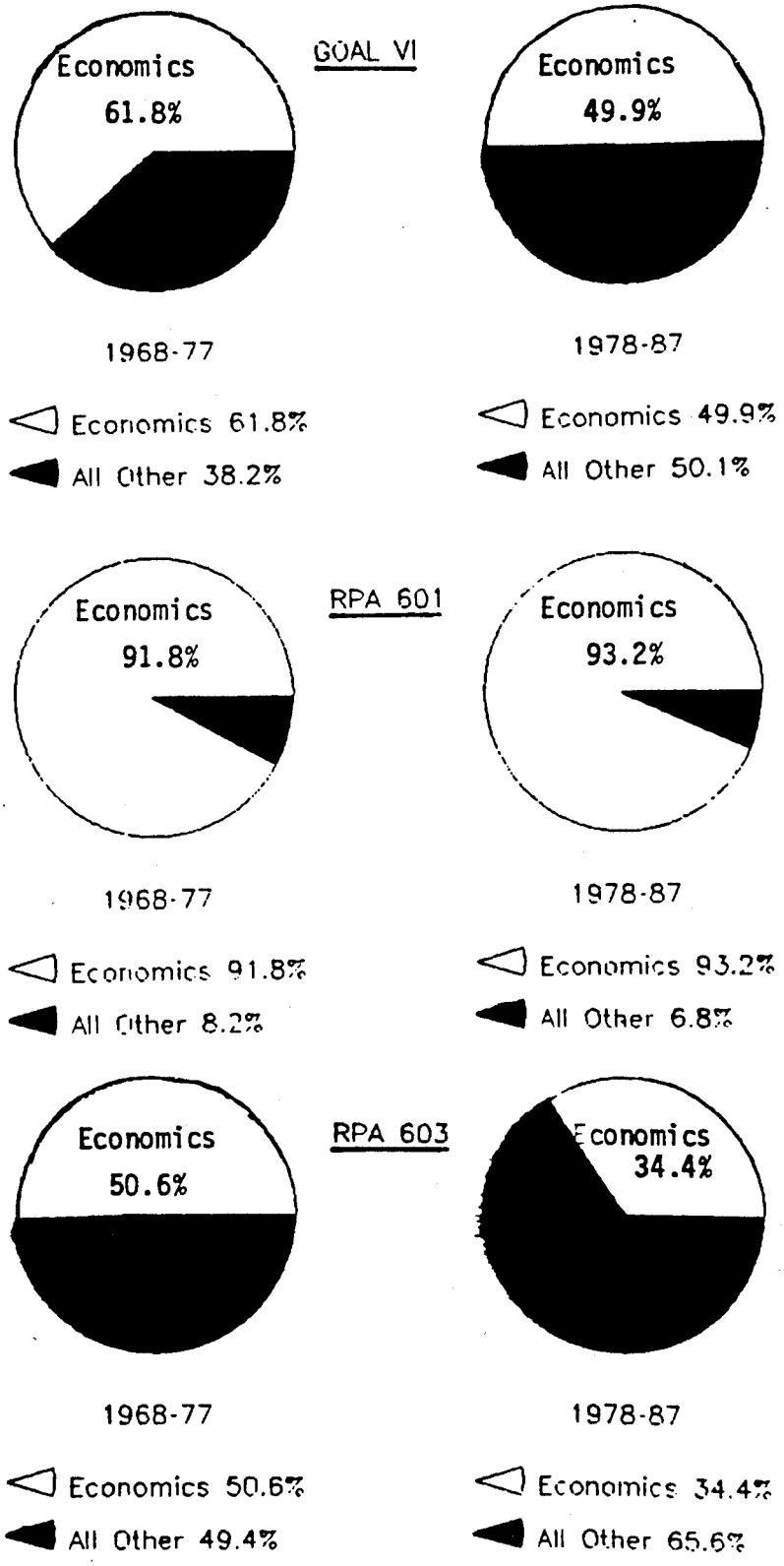


Figure 7. Goal VI (Expand Exports and Assist Developing Nations) Economics Expenditures as Percent of All Economics (Field of Science 2630) Expenditures at State Agricultural Experiment Stations, Including and Excluding AID Funds, 1967-87.

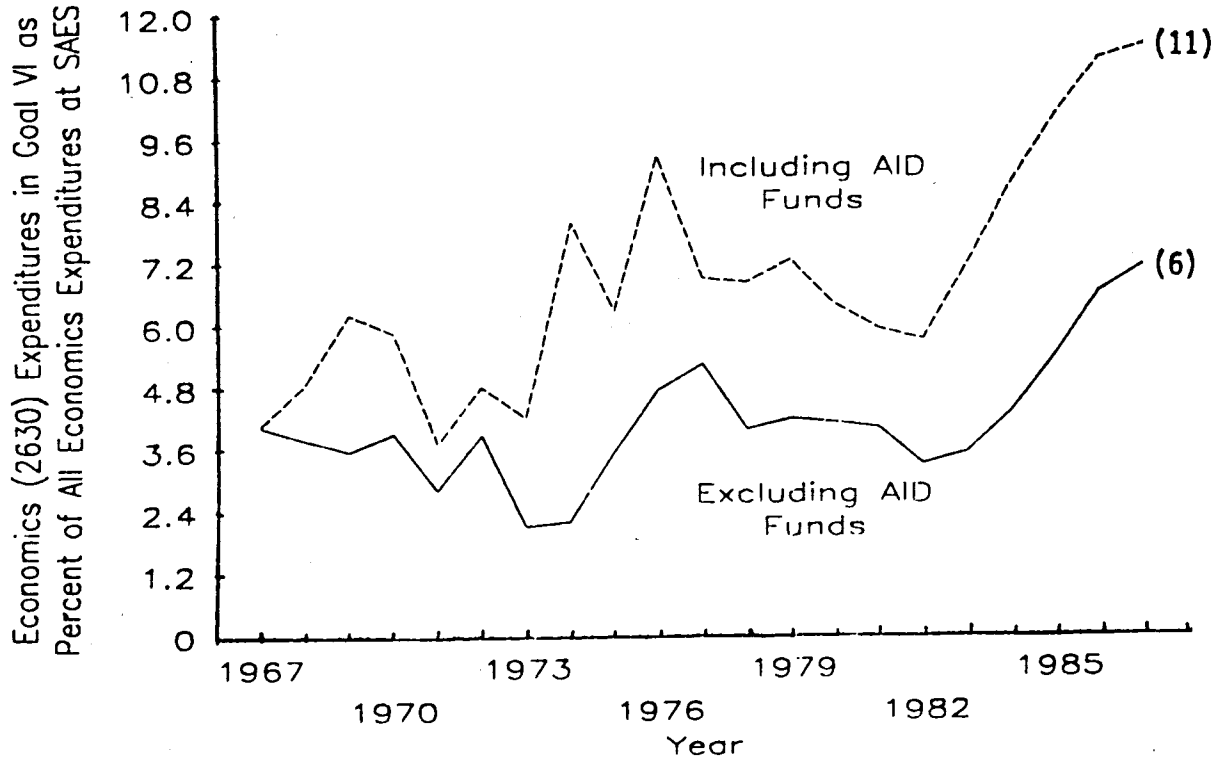
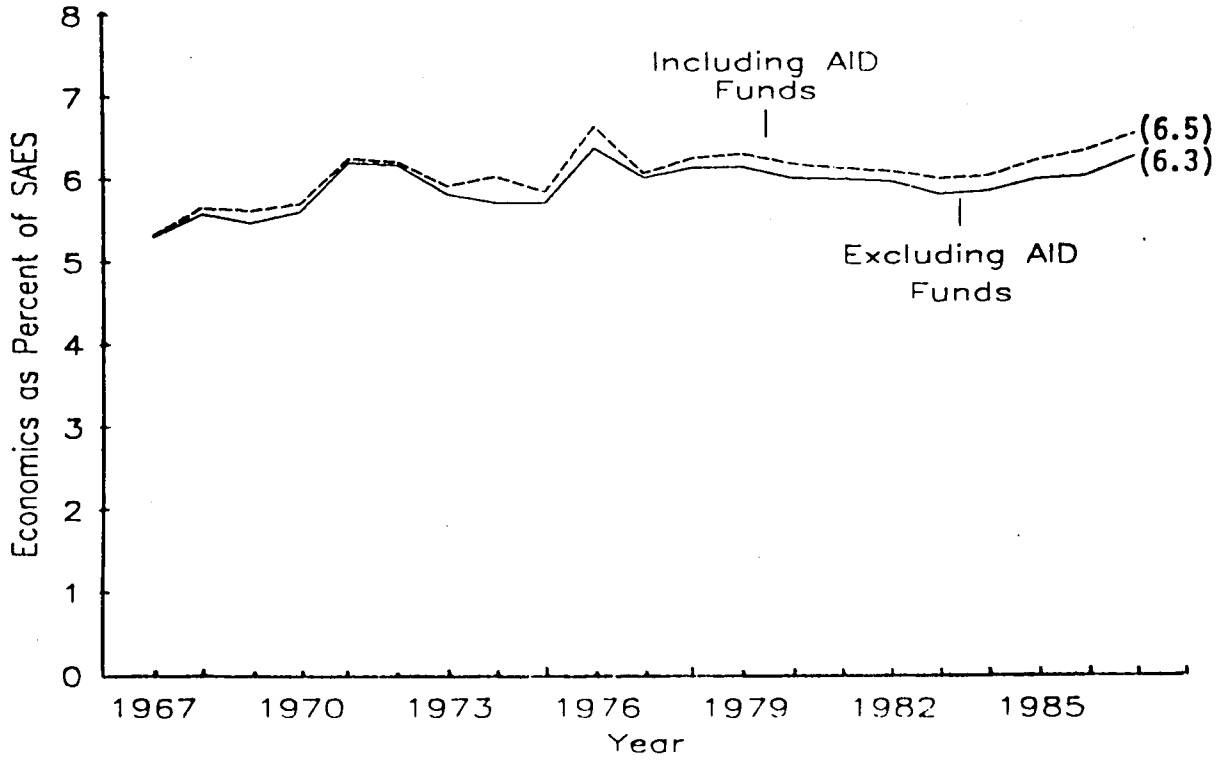


Figure 8. Economics (Field of Science 2630) Expenditures as Percent of All Expenditures at State Agricultural Experiment Stations, Including and Excluding AID Funds, 1967-87.



ACADEMIC PERSPECTIVES ON THE FUTURE DIRECTIONS OF AGRICULTURAL ECONOMICS PROGRAMS IN RESEARCH, TEACHING, AND EXTENSION IN INTERNATIONAL TRADE

Robert L. Thompson[4]

INTRODUCTION

I am not going to take any of the precious time that has been allotted to me to reiterate the importance of the globallization of the United States agricultural sector over the last fifteen years as far as the economic well being of the farm sector or the associated agribusiness community is con-cerned. Suffice as to say, the size of our farm sector and the American agribusiness of the future is going to depend on the volume of United States agricultural exports and our ability to compete in international markets. This alone should justify the involvement of schools of agriculture, and agricultural economic departments in particular, in international trade issues in their teaching, research, and extension programs.

In schools of agriculture, international issues mainly involve Third World economic development projects. We must change this orientation to include more about matters of the current international trade concerns of the United States agricultural economy.

In this paper I plan to touch on the teaching, extension, and research issues in that order. I will then wrap up with a few closing comments on an issue that cannot be overlooked, and that is, the funding and resources to do this work.

TEACHING

At the end of high school, most Americans are economically illiterate, geographically illiterate, know no foreign language, and certainly are unprepared to understand the importance that international trade plays for us and the workings of the international economy and the implications that it has for the functioning of the American agricultural sector. As a result, in the core curriculum in our schools of agriculture, we need to work in more of an international content into the courses that every student takes.

We have elective courses in foreign languages, international trade, and foreign economic development in virtually all schools of agriculture. But most of our students do not elect those courses. We ought to make it impossible for a student to get

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[4]Robert L. Thompson is Dean of the College of Agriculture, Purdue University, West Lafayette, Indiana.

through the basic courses in agricultural economics, the basic crop course or the basic animal science course without receiving some broader appreciation of the global agricultural system in which most of the graduates of tomorrow are going to have some knowledge. They may well not be employed overseas (but more will be at some point in their career) but they are going to have to worry about competition from imports, with international transfers in technology, about whether it rains in Brazil, and how United States soybean markets are going to behave, and so on and so on. Thus, we ought to make it impossible for any student to get out of the basic courses without some broader understanding of international factors. This means basically stating the facts.

Similarly, we need to reduce the rigidity in our curriculum. We are having more and more required courses in almost all of our curricula. This makes it impossible to generate a well balanced student when they graduate. A broad range of elective courses can help prepare students for the rapidly changing environment (which they are going to have to upgrade).

We need to provide more opportunities for students not only for study of broader programs but also for overseas internships. We do a pretty good job in a lot of our programs developing cooperative programs so students can obtain some practical experience out in the real world of work on how industries operate. But there are very few foreign internships that are available. They are expensive and they are difficult to put together. Increasingly, the companies that hire our graduates are realizing that we are not preparing students adequately for employment in the world of agribusiness today. Private firms are also willing to seek creative new ways of working with us to create not only new product opportunities, but also internships. One of the skills that our students are going to need is the practical skills of living and working overseas, as well as operating under foreign languages.

We need more overseas sabbaticals for our faculty. We cannot expect faculty members to be prepared to include more international content in their curriculum if they have not had long term overseas experiences themselves. In fact, it only comes from experiences like sabbaticals and foreign institutions.

Our VIP programs have been effective in getting our faculty members into Third World countries in the past, but we have not had similar means of getting them into Japan, into China, and into Western Europe.

Finally, we need more international content into our courses. What is needed is not to just trade theory, but the nuts and bolts of international marketing. I am not confident that we have the people in the United States that are prepared to teach international marketing courses. We may very well have to go to New

Zealand, to Holland, to Denmark, and to other small countries where marketing is by definition international marketing. This type of action will likely be required to obtain the competence needed for international marketing courses.

EXTENSION

The challenge of extension education is to raise the economic and international literacy of our adult population, not just limited to rural populations. The public is gullible to intuitively plausible but fallacious arguments put forth by special interests seeking economic rents at the expense of the unprepared and unsuspecting public. As a result (and that is always the result of economic illiteracy and international illiteracy) public directives are unable to penetrate those seemingly plausible arguments that are fallacious.

In the past about the only involvement of extension in international programs has been the IFYE (International Farm Youth Exchange) program, which has gotten a lot of rural youth overseas. The first IFYE group went overseas in 1946. Extension staffs have also organized people to people tours to get rural adults overseas to view foreign agriculture. But beyond IFYE programs and people to people tours, there has not been much international content in most of our agricultural extension programs.

More recently, our outlook programs provide world reports on crop conditions. But we need to do much more. We need to increase the present understanding of our public in existing policies and the impacts and functions of international markets, both overseas and in the United States. We also need to make clear to our public that the United States is also a center of this scheme of market interventions and policy exhortations.

We need to teach our farm organizations the implications that being a large trading country has on our freedom of action in domestic policy making. We cannot unilaterally legislate a minimum price below which we will not sell and then announce to all our competitors four years in advance and expect <u>not</u> to lose market share. But yet, most of our farm organizations in 1981 supported a farm bill which did exactly that.

In international marketing extension, we need to be working with small and medium sized firms, particularly those that add value to the raw agricultural commodities. We need to assist these firms with the nuts and bolts of export marketing. There are a lot of niche markets throughout the world that could be penetrated, but many firms are afraid to get into the game. These firms do not have the confidence and they do not have the world experience. There are some excellent opportunities, however.

We need to teach our farm fellows that international technology transfers are a two way street. We did not have any wheat varieties in the United States with natural resistance to rust. All rust resistant varieties in the United States are based upon germ plasma brought from Africa. But yet a lot of our agricultural organizations believe that we are giving away our technology and not getting anything in return.

We need some public education just on the fact that there are gains from specialization and exchange. That there is a difference between comparative and absolute advantage. Obviously, we are not going to teach basic trade theory in those terms. But we need to convey an intuitive feel for the gains from specialization and exchange and what comparative advantage is all about.

We need to convey the importance of Third World economic development upon the expansion of markets. We also need to convey the effect of globalization of world markets upon structural adjustments of United States agriculture. We need to help our farm organizations sort through the options and define the policy implications of that globalization. Moreover, we need greater appreciation of the role of exchange rates in determining trade flows.

Finally, extension has got to use new delivery media. I am concerned to learn from county agents that they cannot get farmers out to meetings on international trade topics or international economics. I believe that this problem is tied to the problem of extension today - - lack of alternative media or different ways of accomplishing their objectives. I think, for example, that the federal Extension Director ought to march down the street and get together with the head of the Public Broadcasting System. They ought to mutually look at the opportunities for taking some money off the top to produce documentaries that could be run on PBS to reach a broader audience. Most of our public today gets most of its information through the medium of television, not through going to local county meetings. While the cost of video productions is extremely expensive, the cost incurred per potential person reached is extremely low compared to sending extension specialists several hundred miles down the road to conduct poorly attended local meetings.

RESEARCH

A lot of what we have done on international trade research is too theoretical and too sterile and not very relevant to meeting the needs of policy formation or increasing exports. There is no sense of urgency of getting our analysis completed on time and communicated in lay terms to policy makers and people in the trade. Much of our research is based on modeling that predicts adjustments

that are not necessarily credible with people who know how these markets really work or how certain foreign economies really work.

What then are the research needs? We certainly need people who not only have the rich tool kit of theoretical concepts and quantitative methods, but who also have spent time learning how international commodity markets work, as well as understanding the policy implications. Gaining those additional skills will require a lot of money and extended overseas travel and residence. Obtaining these necessary resources has been difficult for Colleges of Agriculture.

Let me now list several subject areas where I believe our research is falling short and certainly more is needed. We need research on the likely adjustments from global trade liberalization. We are well into this new GATT Round and yet we do not have a professional consensus on what the adjustments will be or how big they will be or even necessarily the direction of adjustments for different commodity markets in different countries.

Macroeconomic linkages we all agree are now important, as shown in Ed Schuh's famous 1974 paper. While we recognize the importance, we have not done a very good job of coming to a consensus on the magnitude of the linkages among macroeconomic shocks and the readjustments on our agricultural economy.

We have not reached a consensus in the profession on the price responsiveness of export demand. In fact, we do not even have an agreement on whether it is elastic or inelastic any longer. That is probably the single most important parameter in determining our own optimum agricultural policy in this decade. If you really believe that it is inelastic in the long run then of course supply controls make sense because then you can extract economic rents from the rest of the world forever. But with 100 countries or more in the world that grow wheat and price responsiveness of farmers in every country I have seen studied, I find it extremely difficult to believe that the price responsiveness is inelastic in the long run. Members of our profession, however, are willing to argue this point.

We have not done very well in international marketing research, i.e., understanding foreign markets and what those foreign markets want to buy from American firms by tailoring products to meet the needs of those markets. How many television sets would SONY have sold in the United States if they used the same approach to export marketing as many American firms do? Those sets would be wired with 50 cycle, 100 volt current and would have only Japanese labels on the dial; the only instructions on the box would be written in Japanese. That is the approach that many American firms take to export marketing. SONY did its marketing research and understood what it took to sell in the United States market.

We need more international marketing research as opposed to international trade theory research. We need a lot more Americans who understand the structure of foreign agricultural markets, in both competing countries as well as in those foreign markets where we sell. We need to understand the structure of demand and how it is likely to change over time. We also need to understand the structure of agricultural production and how it is likely to adjust to changes in relative prices, as well as technological changes. We also need to understand political determinants of agricultural trade policies in those countries. We need better understanding of the determinants of international competitiveness of the American agricultural sector.

Economists alone are not going to be able to provide the answers to these issues. We have to conduct multidisciplinary work in cooperation with other social scientists around the world. As agricultural economists, we are simply not credible on our own in doing all the research outlined. We need to document and measure the linkage between Third World economic development and United States agricultural export growth potential.

The last point on my list (which is by no means complete) is that a lot of our agricultural policies in different countries do have stabilization objectives. For example, stabilization objectives are extremely important in Western Europe. Almost all of our analysis is done with deterministic models. Simulation analysis must become a part of the analysis of policies. Deterministic models cannot credibly address the problems of stabilization policies if you assume average weather conditions and average yields in foreign countries each year. This approach is simply not credible.

Resources for Agricultural Trade Research

As the moderator indicated, I became an Assistant Professor of International Trade and Agricultural Economics fifteen years ago. A couple years after my initial appointment, I was a founding member of the International Agricultural Trade Research Consortium, which was the beginning of a national regional project. Both data as well as financial support for international agricultural trade research were extremely scarce in those early years, except for USAID sponsored trade development efforts in the Third World.

It is indeed gratifying to see the progress that has been made via the increase in state and federal resources for international agricultural trade research. If we are limited in total resource availability for research, we are even further behind in putting resources into teaching and extension programs in international trade.

It is logical that the Congress is appropriating more funds for work in the international trade area, particularly via the International Trade Development Centers. I think that it is regrettable that the appropriations for this work in international trade, as well as appropriations for agricultural research in general, are increasingly being allocated through the pork barrel. This is going to make it very difficult for us to obtain the biggest bang for our buck from national research investments, whether they be in agriculture or any other area, if we use the pork barrel instead of scientific merit as the basis for allocating those resources.

There is one very exciting new development that I have been involved with recently that I want to mention briefly. I was appointed to the Board of Agriculture of the National Research Council just over a year ago. A major effort of the Board has involved putting together a new one half billion dollar national initiative for agricultural research. An exciting component of the national initiative is that one of the six priority areas for the competitive grants program is marketing policy and trade. Importance of international research is explicit in the proposal. While funding this large initiative may be a long shot (in these days of Graham-Rudman cuts) it is exciting that both Charles Hess and Clayton Yeutter of USDA are working very hard to make this national agricultural research initiative a Presidential initiative in the FY-1991 budget. This program recognizes the importance of food and agriculture in relation to our national resources.

It is going to take the efforts of every one involved (all of us in our profession as well as all our colleagues on our agricultural school campuses, working with our commodity organizations, members of Congress, and everyone else) to create a sufficient excitement on why we need a significant quantum increase in public investments for agricultural research in the United States. We in agricultural economics know that we have been starved in the 1980's from the competitive grants process as well as formula funding for research support. Here we have an opportunity for agricultural economists and all of our agricultural brethren to significantly increase budget support from the Congress and competitive grants programs.

INDUSTRY PERSPECTIVES ON FUTURE DIRECTIONS OF AGRICULTURAL ECONOMICS RESEARCH, TEACHING, AND EXTENSION PROGRAMS IN INTERNATIONAL TRADE

David Swanson[5]

My major purpose today is to confirm all that you have heard before. I am a consumer of your product. I am in a position to talk about some of the needs we have in industry and some changes that we in industry would like to see in the various models that you are producing for us to consume. If, indeed, one of the major lessons that American industry needs to learn is to study the foreign marketplace and produce a product that the marketplace wants, then it is appropriate to evaluate the products (services) of agricultural economics in this context. It is also important that you study your marketplace and try to be more responsive to industry needs.

It is a simple fact that the American universities in agriculture and business (from my perspective) are doing an inadequate job of preparing the managers of tomorrow. One of the elements where I have futilely, without effect or impact, used words like "shameful" is simply in the area of language. I cannot understand how someone wishes to have an international career and is not required to gain some fluency in a foreign language.

We, to a large extent, are turning over future management opportunities to foreign students and foreign executives who are learning these languages. These foreign students and executives are spending time in other countries, learning their cultures, and learning their languages.

We at Central Soya are part of a French-Italian based group. The last twelve months we have received ten requests from different components of the group, where students are required in their degree programs to spend a year working abroad on a program that has been mutually designed by the recipient company and the university. All of these requests have been from Europe. I cannot recall receiving that kind of request from any American university. I am, also, not aware of any American university that requires that kind of experience to receive a business degree or a degree in agriculture.

I simply would not have my job if I did not speak French fluently. It is that simple. My shareholders and my Board of Directors do not speak English and they are very unlikely to have a Chief Executive officer who cannot talk to them.

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[5]David Swanson is President and Chief Executive Officer at the Central Soya Company, Fort Wayne, Indiana.

As we get more and more foreign investment in the United States (and we are seeing more and more of that especially in agribusiness and food areas) what are we thinking about? That someone will always learn our language and that we do not have to understand their culture and how they think? That people will always come to us? I can guarantee that you cannot get to the top of an organization if you do not have the necessary language and cultural skills.

I have heard comments for years about the lack of an international feeling, not being an international person. An international feeling does not refer to someone's ability to speak Albanian or whatever language, but to the total experience of absorbing other cultures, understanding other cultures, being more open, and being more empathetic to different cultures and what their requirements are. We are simply just not doing the job.

There are three areas from the perspective of business that I would like to see more work done in education. One is to follow the comments of Dean Thompson. That is, you need to do a far better job to increase the economic and agricultural economic literacy of, at least, the leadership of this country and other countries. It is impossible to attempt to operate in agribusiness or production in a situation where exchange rates are said not to matter or where farm programs are guaranteed and you lose market share in oilseed production. You cannot do it. Coming up with market specialization and niche markets in the Pacific Rim is not going to solve the problems of American agriculture and agribusiness if we have stupidities being placed on us with programs from Washington, D.C. It is just that simple. It is your job to deliver that message.

I just came from a meeting of the American Soybean Association. I am not sure how many members of the Association really understand what is happening in terms of the restrictions on production and our loss of market share. The leaders nod as if they understand, but a lot of the membership certainly does not understand.

It seems to me that extension has got a major role to play in this kind of thing. We simply have got to have a more intelligent understanding of what is going on in the world if we are to get any constituency to save us from bad policy. It is that simple.

There are a lot of things that need to be understood. Our Secretary of State was caught muttering about consideration of an embargo against China. Will we ever learn?

Our growth market was the less developed countries until we slammed them with debt and choked them off. Now we do not have any markets left for a lot of our products. There is a lot we need to teach.

Another area that is of critical importance relates to the need for a lot of work in product development. The university system, the Land Grant System, is very well placed to do this work. Our company has worked on joint projects with Purdue University on market development for specialized soybean products. For example, it was a joint undertaking of industry and the universities to develop soy oil ink. There are many things like this that we simply need to do. There should be more joint efforts. We should have much more communication between industry and universities about what is needed and where are we going. Is this research something that will be useful or not useful?

The Trade Centers could provide a nice forum for evaluating perceived market opportunities overseas. Certainly, American industry does need a lot of help just in understanding that you cannot sell the same product overseas that you are making for the domestic market, period. You cannot do it. The Trade Centers can be very useful for smaller businesses, and even for some to the bigger companies.

A most important theme that is going to evolve over the next few years is the role of agriculture dealing with our environmental crises. A lot of the substitutions that will be forced upon us (by common sense and by willingness or wish to proceed through life without gagging and coughing) will come through agricultural solutions. A lot of work needs to be done via partnerships for environmental and/or industrial applications for agricultural products. This is where a lot of research needs to be focused.

Finally, I implore you to please see that some sort of language program is introduced into our educational system.