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AGRICULTURAL TRADE

Significance of High-Value Products as Agricultural Exports

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The Honorable Timothy J. Penny
The Honorable Fred Grandy
The Honorable Jim Nussle
The Honorable John Boehner
The Honorable Tim Johnson
The Honorable Richard Durbin
The Honorable Jill Long
House of Representatives

The Honorable Charles Grassley
The Honorable Thomas Daschle
United States Senate

As requested, we examined the status of U.S. exports of high-value agricultural products (HVP) as well as the economic benefits of exporting these products.[1]

Specifically, this report (1) presents background information on exports of agricultural HVPs and discusses the importance of a governmentwide strategy for guiding U.S. export promotion programs; (2) provides a brief analysis of U.S. and world trade statistics for HVPs; (3) examines the economic issues associated with the export of HVP and bulk commodities;[2] (4) presents a summary of types of export assistance programs and services provided by the U.S. Department of Agriculture (USDA) for HVP exports and addresses the USDA's progress on developing a long-term agricultural trade strategy; and (5) gives information on HVP export assistance provided by the top 10 agricultural exporting states.

Results in Brief

High-value products constitute a growing proportion of world agricultural exports, having increased from 66 percent in 1962 to 75 percent in 1990. However, while HVPs play a dominant role in world markets, as late as 1985 they constituted less than 50 percent of U.S. agricultural exports. For 5 out of the past 6 years the value of U.S. HVP exports slightly exceeded the value

[1]High-value products represent a complex and diverse range of agricultural products. They include unprocessed fruits and vegetables that employ low-skilled labor and are not technology intensive but require specialized packaging and transportation. They also include semiprocessed grains and oilseed that rely on semiskilled labor and greater technology and capital inputs. In addition, HVPs are comprised of highly processed products such as designer chocolates, prepared meats, and distilled beverages.

[2]Bulk commodities tend to use substantial amounts of natural resources and require similar amounts of technological and capital investments. Wheat, feed grains, oilseeds, rice, raw tobacco, and raw cotton are typical bulk commodities.

of U.S. bulk exports. In fiscal year 1992, the United States exported $42.3 billion of agricultural products throughout the world, of which $22.8 billion, or about 54 percent, were high-value exports, according to USDA's Foreign Agricultural Service (FAS) data. Although HVPs represent the leading growth sector in U.S. and world agricultural trade, we believe the role that HVP exports will play in furthering U.S. competitiveness in world markets cannot be considered in isolation from overall U.S. trade objectives. (See app. I for background information on classifying agricultural commodities.)

While the United States has experienced growth in HVP exports, it has consistently ranked second to the European Community (EC) as the world's largest exporter of HVPs. Over the past 3 decades, the U.S. share of world HVP exports, excluding intra-EC trade, has increased from 10.8 percent in 1962 to 15.1 percent in 1990. During these same years, the EC's share increased from 13.5 percent to 22.5 percent. While the value of both the U.S.' and the EC's exports of HVP grew faster than the world rate during this period, the EC had the most rapid gains. After adjusting for inflation, EC exports of HVPs grew at an estimated annual average growth rate of 4.7 percent compared with the 3.7 percent for the United States from 1962 to 1990. According to USDA, the EC's success in capturing a large share of world HVP trade is directly related to its extensive use of direct export subsidies combined with an emphasis on HVP processing and aggressive marketing programs. (For further material regarding HVP and world agricultural trade statistics, see app. II.)

Economic benefits, such as increased employment, personal income, and tax revenues in both the farm and nonfarm sectors, are derived from exporting both bulk and high-value agricultural products. A 1989 study by the USDA's Economic Research Service (ERS) is frequently cited to support the proposition that the economic benefits of high-value exports exceed those of bulk exports.[3] However, we believe the analysis is not of value in developing an agricultural export promotion stratgy because key assumptions make the study's conclusions unrealistic. Further research is needed to fully understand and quantify the net economic benefits from HVP export promotion. (See app. III for a discussion of the economic issues associated with agricultural exports.)

USDA provides a variety of credit and subsidy programs, as well as export assistance and services, for buyers and sellers of U.S. agricultural

[3]Gerald Schluter and William Edmondson, Exporting Processed Instead of Raw Agricultural Products, U.S. Department of Agriculture, Economic Research Service, Staff Report No. AGES 89-58 (Washington, D.C.: Nov. 1989).

commodities. While these programs and services are available to exporters of HVPs, USDA has traditionally emphasized servicing bulk commodities. During the mid-1980s, USDA introduced new export assistance programs to focus on market development in response to increased foreign competition for HVPs. Nevertheless, a congressional report[4] stated that the USDA's export practices have not provided the marketing leadership needed to help U.S. agribusiness better compete in export markets. Therefore, Congress mandated in its 1990 Food, Agriculture, Conservation, and Trade (FACT) Act that USDA develop a long-term agricultural trade strategy and required a report to Congress on that trade strategy by October 1, 1991.

USDA submitted the long-term agricultural trade strategy on January 15, 1993. While the development of a long-term agricultural trade strategy could help guide USDA's export efforts, we believe that the level of federal support for the promotion of HVP exports should be based on an overall agricultural trade strategy that, in turn, is one component of a larger governmentwide export promotion strategy. (App. IV discusses USDA export assistance programs and services as well as the development of USDA's agricultural trade strategy).

In addition to getting federal help in promoting agricultural exports, exporters of HVPs can receive international market development assistance through a variety of state programs, according to officials from the top 10 agricultural exporting states.[5] While these states service bulk and HVP exporters, most focus their efforts on promoting HVPs as well as assisting small- and medium-sized businesses. However, the majority of the states reported that their international marketing programs operate on limited budgets, have few staff exclusively responsible for international agricultural market development, and rely on the USDA's attaches and trade officers for assistance overseas. (See app. V for information about HVP export assistance provided by the top 10 agricultural exporting states.)

Background

All agricultural products have some level of value added due to labor and capital invested between the farm and export market. Bulk commodities are raw agricultural products and have little value added after the farm gate other than relatively simple bulk transportation and handling costs.

[4]Food, Agriculture, Conservation, and Trade Act of 1990, Conference Report of the Senate Committee on Agriculture, Nutrition, and Forestry (Washington, D.C.: Government Printing Office, July 6, 1990).

[5]These states are California, Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, Ohio, and Texas.

HVP exports have further value added after the farm gate due to specialized handling, transportation, marketing, processing, or packaging of the raw commodity. However, not all HVPs are high in value added due to processing. For example, fresh fruits and vegetables are categorized as HVPs because they have a high value per unit relative to bulk products.

The basis for HVP trade is often not so much an exporter's comparative advantage in producing a product, as is common in the bulk commodity trade. Rather, HVP trade is usually based on an exporter's comparative advantage in processing and marketing the product. According to ERS the geographical proximity to markets is important because of the higher transportation costs and the greater perishability sometimes involved in HVP trade.

The HVP export market is made up of a large number of specialized or niche markets. There are considerably more importers of HVP products than of bulk products, and the HVP market is not dominated by a few suppliers. Trade in bulk commodities tends to be dominated to a greater extent by a few large firms or government trading programs that specialize in international marketing. Also, HVPs are frequently brand-name products identified with a particular manufacturer. On the other hand, bulk products have traditionally been viewed as generic products having little or no identification with a particular producer.

Countries tend to place trade barriers on the importation of HVPs to protect their domestic production. According to ERS, trade protection generally increases as the level of processing rises. Therefore, exports of bulk commodities are less susceptible to trade barriers than HVPs. In addition, sanitary and health concerns are often used as reasons to restrict HVP imports.

Scope and Methodology

To discuss HVP export programs and services, the long-term agricultural trade strategy, and the economic impact of increasing HVP exports, we met with USDA headquarters officials from FAS, ERS, the Economic Analyses Staff, the Extension Service, and the Agricultural Marketing Service. In addition, we reviewed USDA, Congressional Research Service publications, and independent studies. To learn about state export programs, we conducted telephone interviews with state officials representing their state's international marketing efforts for the top 10 agricultural exporting states.

FAS provided data on funding allocations for the various USDA export promotion programs. We compiled world agricultural trade statistics provided by the ERS' electronic database for 1962 through 1990. We did not independently verify for accuracy data that FAS and ERS provided. For this report, our analysis of trade statistics does not include intra-EC agricultural trade for two reasons: First, agricultural policy is unified under Europe's Common Agricultural Policy such that intra-EC trade can be viewed as comparable to U.S. interstate commerce; second, excluding intra-EC trade eliminates problems of double counting. For example, an HVP produced in Italy and exported through a port in the Netherlands could be included in both countries' export statistics.

In addition, our analysis of EC agricultural exports for all years is based on the current 12 country membership.[6] Moreover, our analysis of agricultural trade is based on value rather than volume. It is important to note that due to fluctutions in the prices of agricultural commodities, the value of agricultural trade may change from year to year, without a corresponding change in the volume traded.

We did our work between December 1991 and January 1993 in accordance with generally accepted government auditing standards.

Agency Comments

We discussed the facts presented in this report with USDA officials from FAS and ERS during the course of our work and incorporated their comments where appropriate. With regard to the 1989 ERS study comparing the economic benefits of HVP and bulk exports, an ERS official believes that the analytical assumptions and their limitations are clearly described in the study. However, he was concerned that the study's conclusions might be used to support policy decisions without giving consideration to the study's limitations.

We are sending copies of this report to the Secretary of Agriculture and other interested parties. We will make copies available to others upon request.

[6]The EC is comprised of Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain, and the United Kingdom.

Please contact me on (202) 512-4812 if you or your staff have any questions concerning this report. The major contributors to this report are listed in appendix VI.

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Contents

Tables

Figures

Abbreviations

AID	Agency for International Development
CMA	Centrale Marketinggesellschaft der Deutschen Agrarwirtschaft
COAP	Cottonseed Oil Assistance Program
DEIP	Dairy Export Incentive Program
EC	European Community
EEP	Export Enhancement Program
ERS	Economic Research Service
FACT Act	Food, Agriculture, Conservation, and Trade Act of 1990
FAO	United Nations Food and Agricultural Organization
FAS	Foreign Agricultural Service
FATUS	Foreign Agricultural Trade of the United States
GSM	General Sales Manager
HVP	high-value product
MPP	Market Promotion Program
P.L. 480	Public Law 480
SOAP	Sunflowerseed Oil Assistance Program
SOPEXA	Société pour l' Expansion des Ventes des Produits Agricoles et Alimentaires
USDA	U.S. Department of Agriculture

Classifying Agricultural Products

In order to examine world trade in high-value agricultural products (HVP), a system for classifying agricultural products is essential. However, because HVPs are not a homogeneous group of agricultural products, HVPs are not always classified similarly. In addition, some products are not consistently classified as agricultural products by U.S. Department of Agriculture (USDA) agencies and world organizations, making it difficult to compare studies. Moreover, some commodities that are of congressional interest and affected by USDA programs are not classified as agricultural products.

No Uniform Classification Scheme for HVPs

Several different classification systems are used to describe the spectrum of agricultural products that ranges from raw products produced on farms to designer chocolates found in department stores. In general, bulk commodities are essentially unprocessed products, including grains, oilseeds, and raw materials that do not require specialized transportation. HVPs are essentially everything else. However, several agricultural commodities are not consistently classified as either bulk commodities or HVPs. For example, cotton, leaf tobacco, soybeans, and hides and skins have all been classified as both bulk commodities and HVPs in studies using different definitions.

A number of schemes are available to classify high-value products, often based on the level of processing. One classification scheme simply labels HVPs as "processed" or "unprocessed." The USDA's Foreign Agricultural Service (FAS) classification system divides HVPs into two categories: intermediate and consumer oriented. Intermediate products are generally semiprocessed commodities. Consumer-oriented products are end products that are essentially ready for consumption: they include highly processed and high-value unprocessed products. The Economic Research Service (ERS) uses another scheme (see table I.1), which aggregates HVPs by level of processing (i.e., unprocessed, semiprocessed, and highly processed).

Table I.1: Types of Bulk Versus High-Value Product Commodities

Type of commodity	Product
Bulk	Unprocessed grains and oil seeds (e.g., wheat, rice, corn, soybeans)
	Raw cotton
	Raw tobacco
High-value products	
Unprocessed	Fresh fruits, nuts, and vegetables
	Honey
	Live animals
	Eggs
Semiprocessed	Wheat flour
	Vegetable oil
	Oilseed cake and meal
	Animal oil and fats
	Fresh, chilled, and frozen meats
	Hides and skins
	Coffee
	Cocoa
	Refined sugar
Highly processed	Prepared or preserved meats, fruits, and vegetables
	Dairy products (e.g., butter, cheese)
	Beverages
	Beer, wine, and distilled spirits
	Cereal preparations
	Dried fruits
	Chocolate, spices
	Cigarettes

Comparing Agricultural Trade Statistics Is Difficult

There are difficulties in comparing studies prepared by different international, federal, and state agencies. Aside from problems encountered in using different systems to classify high-value products, certain products are not consistently reported as agricultural products when trade statistics are compiled. For example, FAS statistics are restricted to agricultural commodities under the jurisdiction of USDA. As a result, distilled spirits and cigarettes are not included. In contrast, the USDA's Economic Research Service uses export and import data compiled by the Food and Agricultural Organization (FAO) of the United Nations. FAO

agricultural statistics include cigarettes and distilled spirits in its analyses of agricultural trade.

Furthermore, exports of fishery and forestry products are of congressional interest and are affected by USDA programs. However, these products are not included in analyses of agricultural trade and export statistics by FAS, ERS, or FAO because they are not considered to be agricultural products. USDA agencies supplement their analyses of agricultural statistics with separate fishery and forestry statistics.

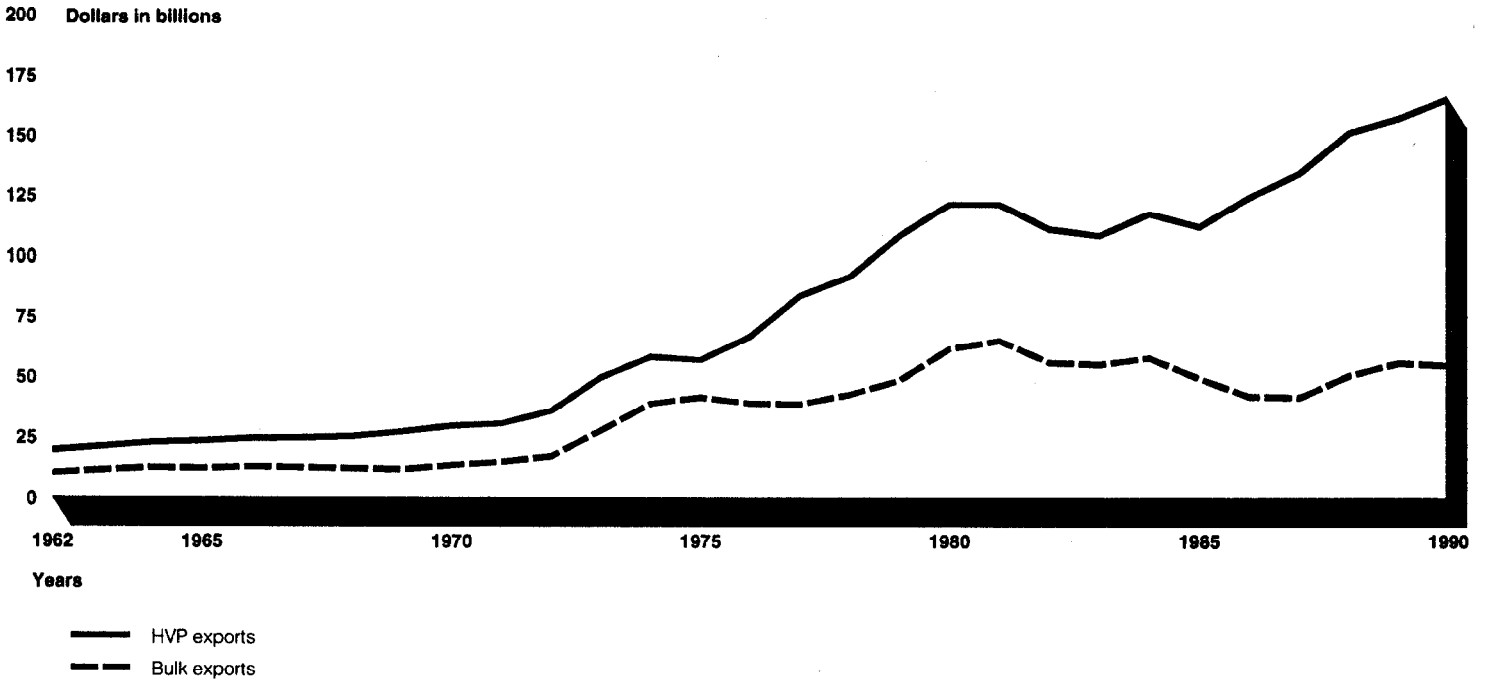
To accurately capture world agriculture trading patterns, the statistics and graphs presented in this report use ERS data, which are based on FAO statistics. These statistics include cigarettes and distilled spirits, and do not include fishery or forestry products.

U.S. High-Value Products and World Agricultural Trade

During the 1970s, a period of significant growth in world agricultural trade, two distinct markets for U.S. farm products emerged—markets for bulk and markets for high-value products. According to ERS, a rise in income and population generated a demand for agricultural products that many countries could not produce locally. Also, international credit became more readily available, which encouraged many foreign-exchange-poor countries to finance food imports with credit.

In the early 1980s, stagnant global economic growth, coupled with restricted international credit and severe debt problems in a number of countries, caused a significant falloff in world trade. Exports of both HVP and bulk commodities declined until the mid-1980s when their trends diverged, with exports of HVPs increasing sharply and bulk exports remaining stagnant. In 1990, HVPs accounted for 75 percent of world agricultural exports, with an export value of $165 billion (see fig. II.1).

Figure II.1: Worldwide Agricultural Exports of HVP and Bulk Products in Dollars, 1962-1990



Note: Intra-European Community (EC) trade has been excluded from export trade data and our analysis for all years is based on the current 12 country membership.

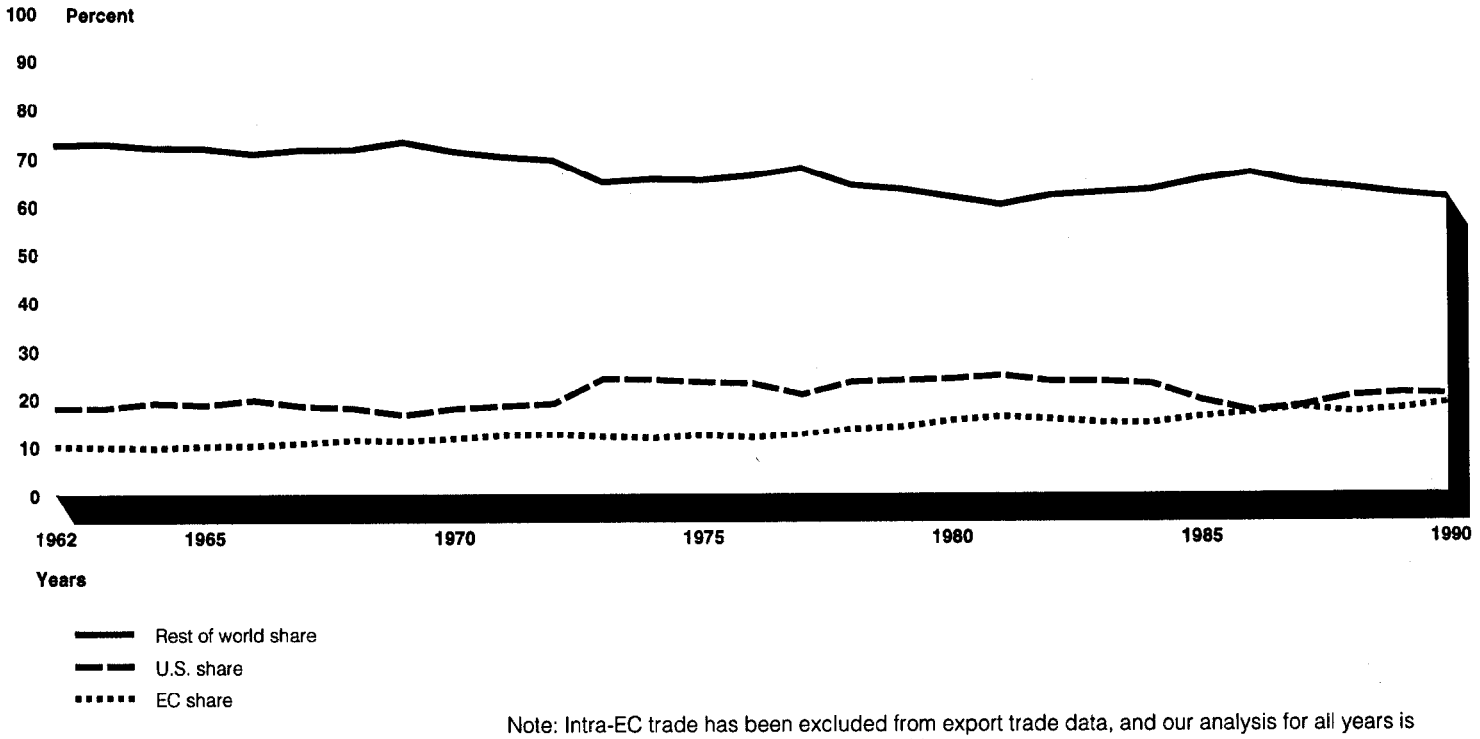
Source: GAO calculations based on data from USDA's Economic Research Service.

According to ERS, consumer demand to upgrade and diversify diets contributed to the increased exports of highly processed agricultural products as well as fresh fruits and vegetables in the mid-1980s. Exports of semiprocessed agricultural products also rose in order to supply demand for goods used in local production of highly processed, consumer-ready products. Other factors that influenced the expansion of HVP trade included technological improvements in transportation, marketing, and product handling.

The United States and the European Community Lead World in Exports of HVPs

While the United States has consistently ranked as the world's largest exporter of bulk commodities and total agricultural products, it has consistently ranked second to the European Community (EC) as the world's largest exporter of HVPs (see figs. II.2, II.3, and II.4).

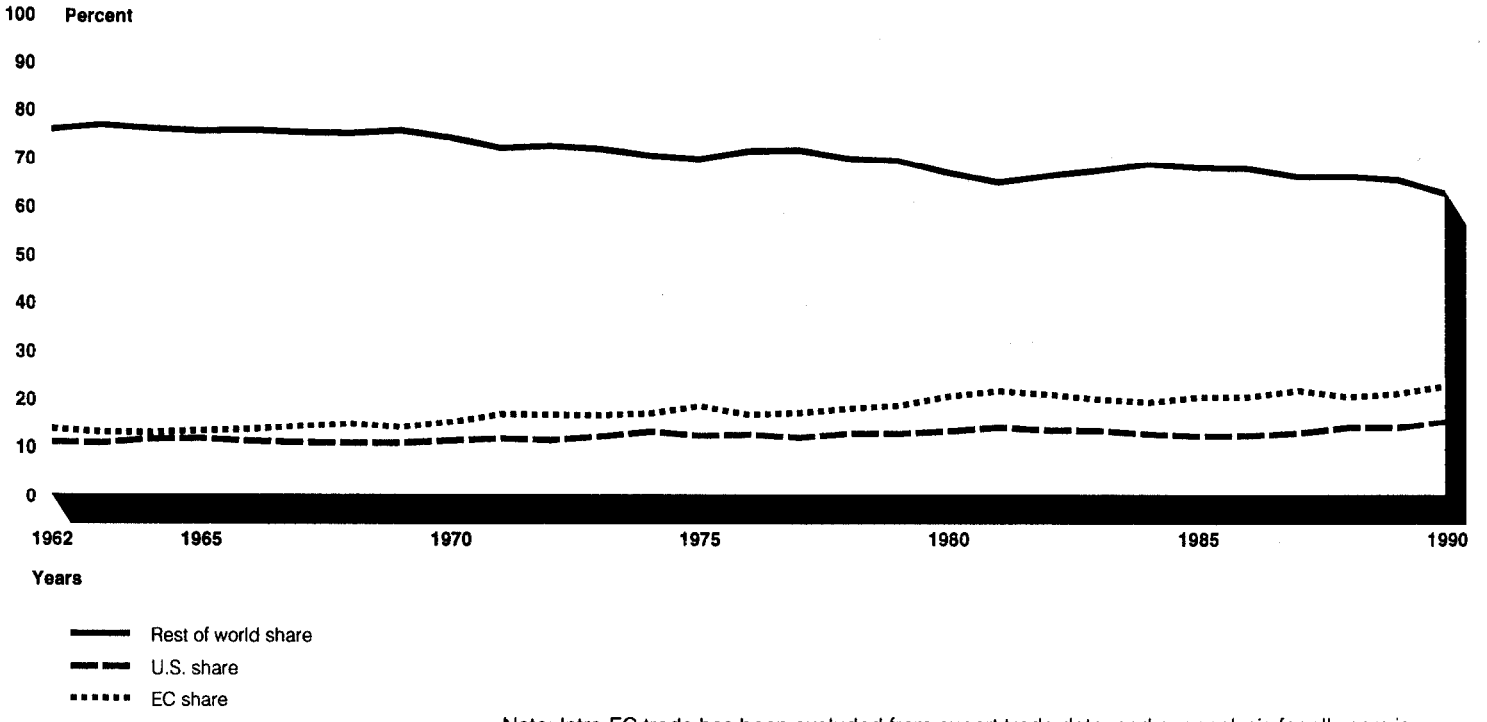
Figure II.2: U.S., EC, and Rest of World Shares of Total Worldwide Agricultural Exports, 1962-1990



Note: Intra-EC trade has been excluded from export trade data, and our analysis for all years is based on the current 12 country membership.

Source: GAO calculations based on data from USDA's Economic Research Service.

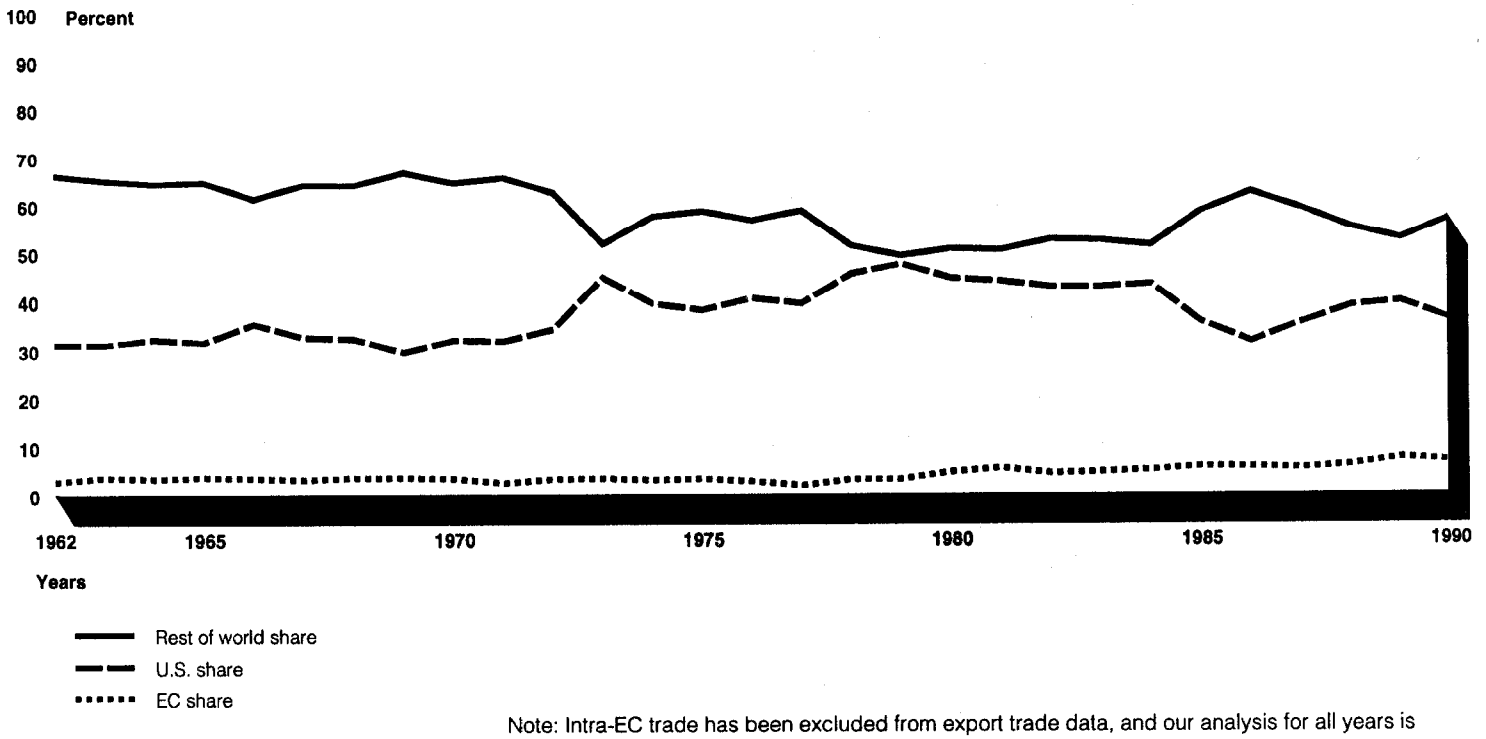
Figure II.3: U.S., EC, and Rest of World Shares of Worldwide HVP Agricultural Exports, 1962-1990



Note: Intra-EC trade has been excluded from export trade data, and our analysis for all years is based on the current 12 country membership.

Source: GAO calculations based on data from USDA's Economic Research Service.

Figure II.4: U.S., EC, and Rest of World Shares of Worldwide Bulk Agricultural Exports, 1962-1990



Note: Intra-EC trade has been excluded from export trade data, and our analysis for all years is based on the current 12 country membership.

Source: GAO calculations based on data from USDA's Economic Research Service.

The next largest exporters of HVPs were eight countries that held shares of the world HVP market ranging between 2.4 percent and 4.8 percent, excluding intra-EC trade in 1990 (see table II.1).

Table II.1: Leading World Exporters of HVP Export Trade, 1990

Exporter country	Dollars (in billions)	Percent of world HVP exports
World	$165.2	100.0
EC[a]	37.1	22.5
United States	25.0	15.1
Australia	7.9	4.8
Brazil	6.8	4.1
China	6.8	4.1
Canada	4.7	2.8
Thailand	4.6	2.8
New Zealand	4.4	2.7
Argentina	4.4	2.7
Malaysia	4.0	2.4

[a]Intra-EC trade excluded.

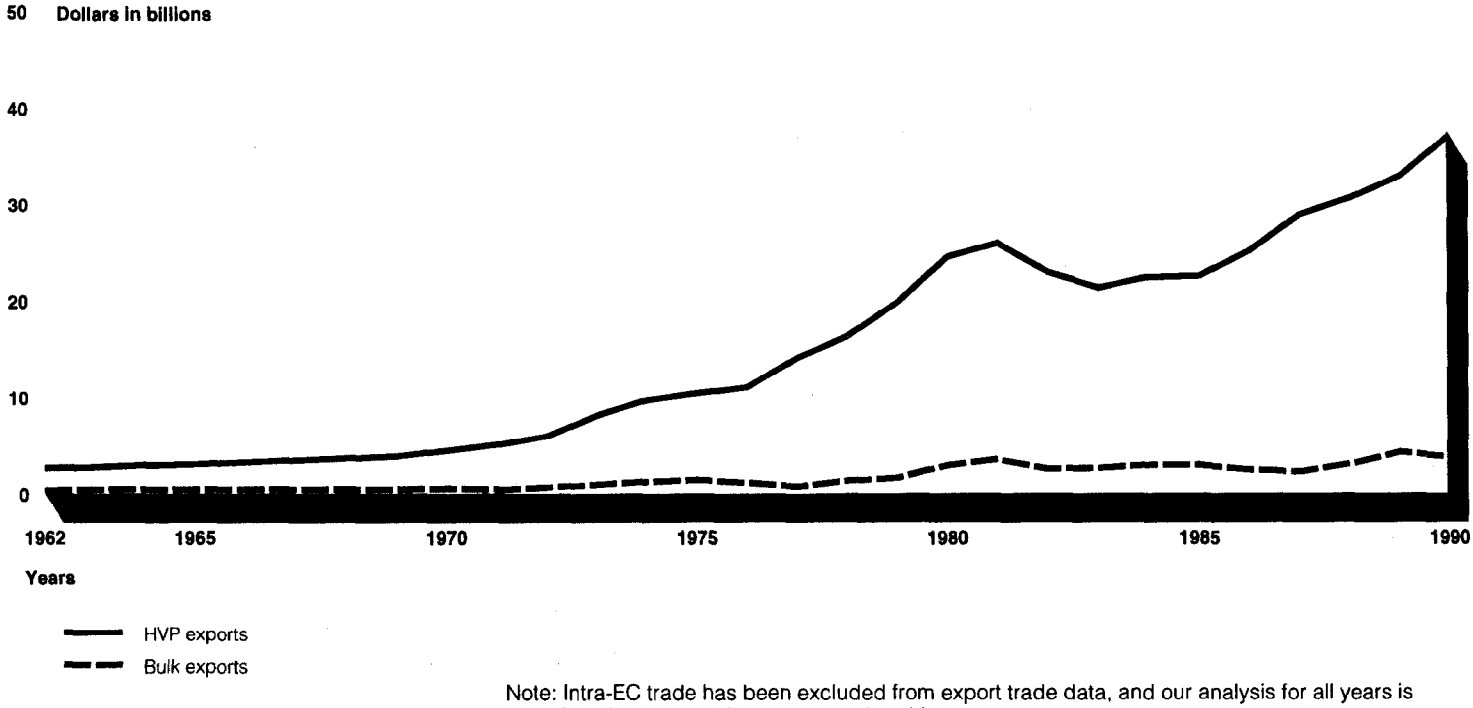
Source: GAO analysis of the USDA's ERS data.

Some economists include intra-EC trade in their analyses of world agricultural trade statistics. This inclusion significantly widens the gap between the EC and the U.S. share of world HVP trade: For 1990, the U.S. share decreases to 9.8 percent, and the EC share increases to 50 percent (of which 71 percent is traded between member countries). However, other economists believe a more accurate picture of global trade and competitiveness is presented when intra-EC trade is excluded from their analyses. The EC's unified Common Agricultural Policy has created a single market within the EC for agricultural products by assuring uniform regulations for imports from third countries. Furthermore, this policy has created within the EC a market for agricultural goods akin to that of a single country. An analysis of world agricultural trade that excludes intra-EC trade views trade between EC members as comparable to U.S. interstate commerce. In addition, excluding intra-EC trade eliminates problems of double counting. For example, HVPs produced in one EC country and exported through the port of a second EC country could be included in both countries' export statistics.

High-value products dominate EC agricultural exports. Excluding intra-EC trade, the EC exported $37 billion in HVPs in 1990, which accounted for 90.9 percent of its total agricultural exports (see fig. II.5). In contrast, HVPs have historically constituted less than 50 percent of the U.S.' total export value until 1986, when HVPs captured a 50 percent share. In 1990, the

United States exported $25 billion in high-value products, which constituted 56.1 percent of the total agricultural exports for the United States (see fig. II.6). In fiscal year 1991, the top 10 export markets for U.S. HVPs were, in descending order: Canada, Japan, the EC, Mexico, South Korea, Hong Kong, the former Soviet Union, Taiwan, Saudi Arabia, and Venezuela.

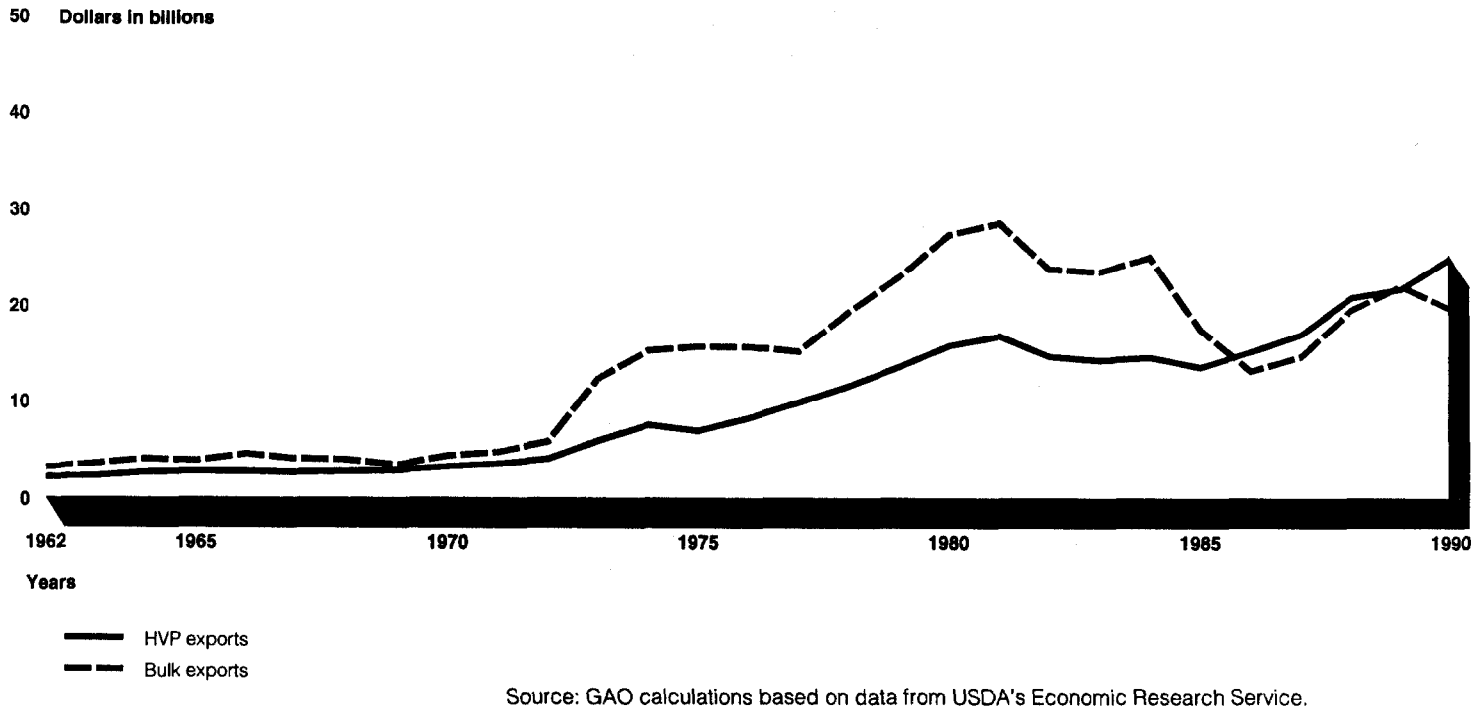
Figure II.5: European Community Agricultural Exports of HVP and Bulk Products in Dollars, 1962-1990



Note: Intra-EC trade has been excluded from export trade data, and our analysis for all years is based on the current 12-country membership.

Source: GAO calculations based on data from USDA's Economic Research Service.

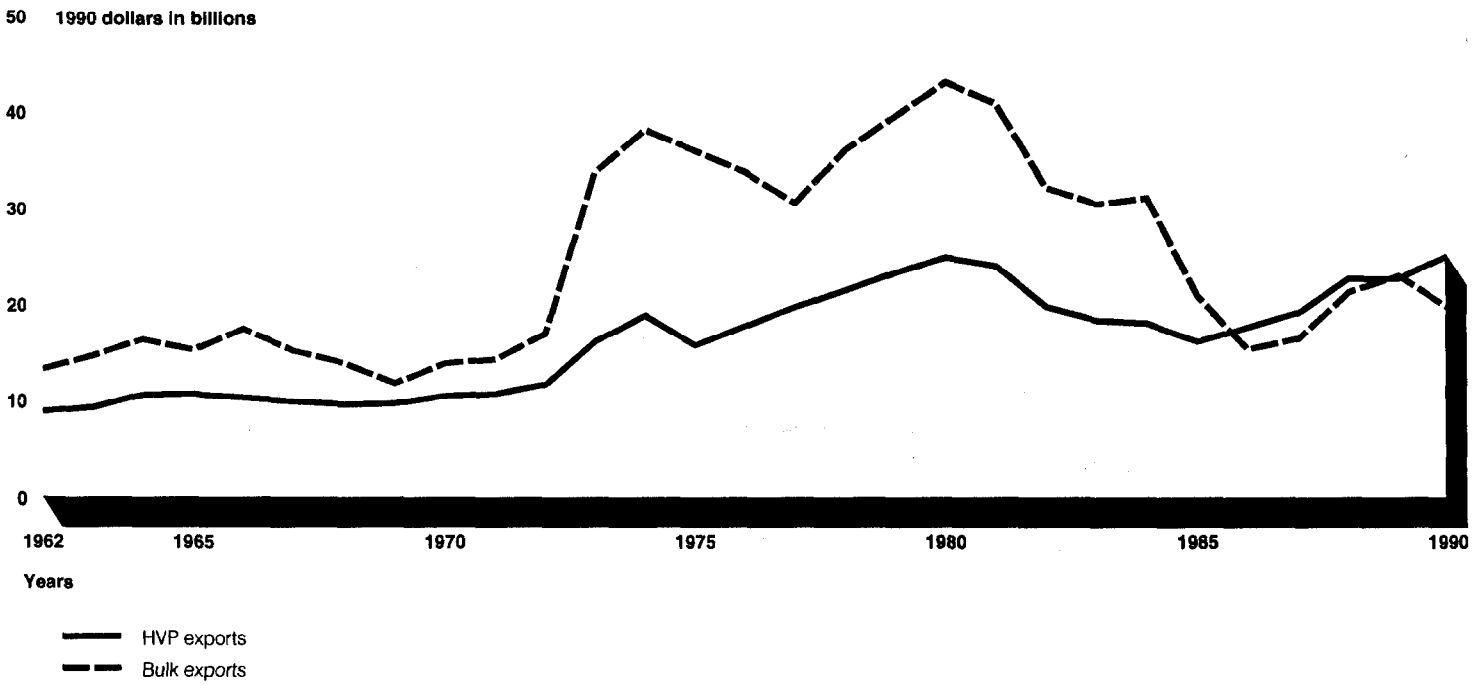
Figure II.6: U.S. Agricultural Exports of HVP and Bulk Products in Dollars, 1962-1990



Source: GAO calculations based on data from USDA's Economic Research Service.

Adjusting HVP exports for general price inflation shows no growth in the real value of HVP exports during the 1980s (see figs. II.7, II.8, and II.9). The constant dollar value of U.S. HVP exports in 1990 barely surpassed the value of HVP exports in 1980, when the United States attained a record high before suffering reversals. After adjusting for inflation, U.S. exports of HVPs grew at an annual average growth rate of 3.7 percent compared to 4.7 percent for the EC and 2.7 percent for world HVP exports from 1962 to 1990.

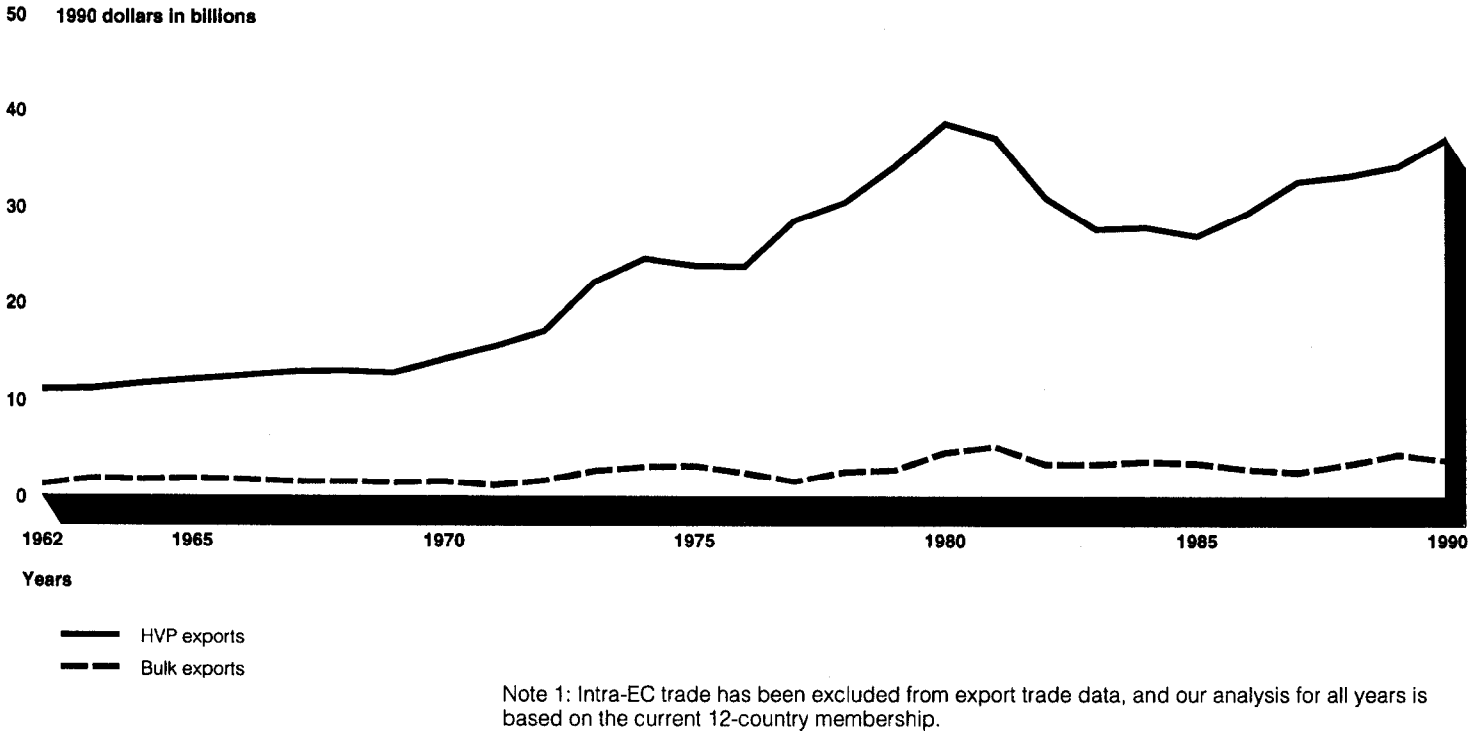
Figure II.7: U.S. Agricultural Exports of HVP and Bulk Products in 1990 Dollars, 1962-1990



Note: Data converted to 1990 U.S. dollars using the U.S. gross domestic product deflator.

Source: GAO calculations based on data from USDA's Economic Research Service.

Figure II.8: European Community Agricultural Exports of HVP and Bulk Products in 1990 Dollars, 1962-1990

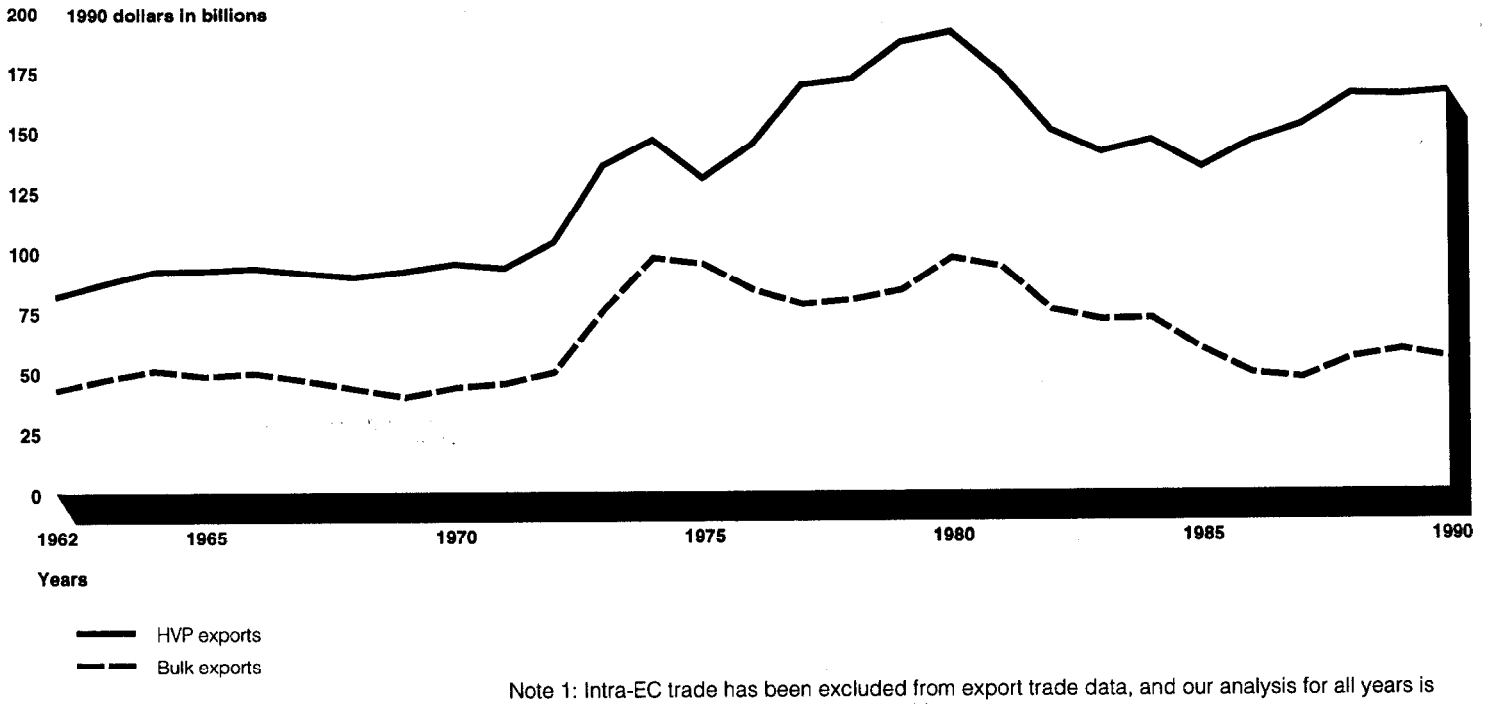


Note 1: Intra-EC trade has been excluded from export trade data, and our analysis for all years is based on the current 12-country membership.

Note 2: Data converted to 1990 U.S. dollars using the U.S. gross domestic product deflator.

Source: GAO calculations based on data from USDA's Economic Research Service.

Figure II.9: Worldwide Agricultural Exports of HVP and Bulk Products in 1990 Dollars, 1962-1990



Note 1: Intra-EC trade has been excluded from export trade data, and our analysis for all years is based on the current 12-country membership.

Note 2: Data converted to 1990 U.S. dollars using the U.S. gross domestic product deflator.

Source: GAO calculations based on data from USDA's Economic Research Service.

When comparing broad categories, the composition of the EC's HVP exports is more concentrated at the highly processed end of the HVP spectrum than are U.S. exports of HVPs. According to USDA documents, the EC continues to lead the world in exporting consumer-oriented agricultural products (i.e., highly processed and unprocessed HVPs) even though U.S. exports of consumer-oriented products have doubled in value between 1986 and 1990. The U.S. share of world consumer-oriented agricultural products was about 13 percent in 1990 compared to 27 percent for the EC.

The majority of EC consumer-oriented exports are meat products such as beef and pork; dairy products such as dried milk and cheese; and a variety

of fresh and processed horticultural products, including wine and chocolate. Most U.S. consumer-oriented agricultural exports are horticultural products, led by fresh fruits and vegetables, processed fruits and vegetables, tree nuts, and beef products. Shares of intermediate agricultural products were roughly equal for the EC and the United States throughout the 1980s. The EC is an important supplier of starches, refined sugar, and wheat flour, whereas the majority of U.S. intermediate agricultural exports are soybean meal, animals, and animal products such as hides and skins.

Import Markets for High-Value Products

While the EC and the United States are the world's leading exporters of HVPS, they are also the world's leading importers of HVPS. During 1987-1989, the EC imported an average value of about $39 billion in HVPS from nonmember countries, and the United States imported an average value of about $23 billion in HVPS, according to ERS analyses. The next largest importers of high-value products are Japan, the former Soviet Union, Canada, and Hong Kong. The leading country importers, however, are not necessarily the fastest-growing markets. According to ERS analyses, countries with the fastest-growing import rates for agricultural HVPS include South Korea, Taiwan, Saudi Arabia, and China.

The United States imported about $23 billion worth of agricultural commodities (bulk and HVP) in fiscal year 1991 to provide consumers with some agricultural products either not produced or not available in sufficient quantities in the United States, according to FAS. In addition, some domestically produced seasonal items are imported into the United States during the off season. In fiscal year 1991, $5.4 billion was spent on bananas, coffee, tea, and other tropical products that do not compete directly with the United States. The remaining $17 billion was spent on imports that may compete directly with U.S. products, such as meat, dairy products, fruits, nuts, vegetables, sugar, and wine. Since 1980, agricultural imports that compete with U.S. products have grown annually by 4.7 percent, whereas noncompeting farm product imports have been declining at an annual rate of 2 percent.

Economic Issues Involving HVP and Bulk Agricultural Exports

Government and public interest in high-value exports has been partly motivated by the belief that promoting HVP exports will produce greater economic benefits than promoting bulk exports. While there may be valid reasons for the government to be interested in promoting HVP exports, we believe the impact of increased HVP promotion on the economy is unclear. Although the USDA's ERS has conducted some analyses of HVP agricultural exports, we believe that further research is needed fully to understand and quantify the net economic benefits from HVP export promotion.

A 1989 ERS study is frequently cited to support the proposition that the projected economic benefits of HVP export promotion exceed those of bulk exports. However, we believe that the ERS' analysis has no value in developing an export promotion strategy because key assumptions render the study's conclusions unrealistic. Therefore, in our view, the study should not be used as the primary basis for encouraging increased government export assistance to high-value products. ERS also publishes a separate analysis each year of the actual economic output generated from agricultural exports. For 1991, the ERS analysis shows that actual HVP exports generated greater business activity and employment than bulk exports for every $1 billion of exports. However, the total income (wages, profits, and taxes) per employee and farm share of total income was greater for bulk exports. While the analysis demonstrates that certain benefits are associated with HVP exports, we believe the methodology cannot be used to predict what impact changes in government export assistance might have.

A decision by the government to reprogram export assistance to increase the exports of high-value products may change the distribution of economic benefits within and between the farm and nonfarm sectors. In addition, restricting an analysis of economic benefits to a comparison between HVP and bulk export promotion overlooks the benefits derived from nonagricultural exports that may better meet the government's social and economic goals. Hence, we believe that the analysis of whether to increase government support for the export of HVPs should be only one component of a governmentwide trade strategy and not strictly an agricultural policy decision.

Projected Benefits From Increased HVP Exports Are Uncertain

We believe that the overall effect on the economy of promoting high-value products versus bulk exports is still uncertain. There is considerable confusion over the nature of the economic benefits associated with HVP exports. Moreover, available studies have not conclusively shown that HVP exports are more beneficial to the economy than bulk exports. A 1987 Congressional Research Service review found that available research was incomplete and inadequate and further said that the net gain or loss from expanded HVP exports was unclear.[1] In updating this review of the literature, we also found that available research on the subject remains limited.

The ERS Study

A 1989 ERS staff study, Exporting Processed Instead of Raw Agricultural Products, updates earlier ERS studies and is frequently used to support the view that the economic benefits received from promoting HVP exports exceed those from promoting bulk exports. However, the study is not of value in developing an agricultural export promotion strategy because of key assumptions underlying the study's conclusions, and we believe the study should not be relied on as the basis for increased government export assistance for high-value products.

The 1989 ERS study concludes that if the study's assumptions hold, a "prize" awaits a nation that successfully exports high-value products. For example, rather than exporting $1 million of wheat, if the United States instead turns that wheat into flour that is exported, the domestic economy might gain $9 million in additional business activity, as well as employment for 109 additional workers, according to the study. In addition, personal income, gross domestic product, and tax revenues are also expected to increase.

In the ERS analysis, further processing always increases the economic activity and employment associated with a product's export. Of the five pairs of HVP and bulk commodities analyzed by ERS, the transformation of exported corn into exports of dressed poultry has the largest expansionary effect. If $1 million of bulk corn exports is used as feed for poultry that are then exported as dressed poultry, ERS calculates that this activity would generate an additional 583 jobs and an additional $42 million in business activity.

[1]Susan B. Epstein and Charles E. Hanrahan, Exports of High-Valued Agricultural Products: Trends and Issues, Congressional Research Service, 87-636 ENR (Washington, D.C.: July 24, 1987).

The ERS study qualifies its conclusions by stating that the computed output and employment effects should be viewed as potentially available and as representing the maximum effect of increased exports. ERS cautions that the critical assumptions made for its analysis should be considered before the export of processed goods instead of raw materials is emphasized. We believe the assumptions used by ERS and needed to achieve these computed maximum effects are demanding and unlikely to be realized. Therefore, they render the study's conclusions unrealistic.

First, ERS' conclusion is based on the assumption that the United States would be able to export additional high-value products without depressing the price of those products. However, economic theory suggests that their prices will fall if the increase is large enough. Moreover, high-value products are more susceptible to trade barriers and phytosanitary (plant and animal health) rules that restrict world trade in HVPs. While the ERS study acknowledges these concerns, we believe the prospect of a "new and permanent demand" is unlikely; this possibility should not be underestimated.

Second, the ERS analysis assumes that all the inputs, including capital, infrastructures, and any labor needed to transform a bulk commodity into an HVP export, are currently unemployed. With this assumption, HVP exports can be increased without affecting input prices or taking inputs away from other sectors of the economy, such as manufacturing and financial services. In other words, the ERS study assumes that there is no "opportunity cost" to increasing HVP production and exports, i.e., no other production will have to be given up. Simply put, the alleged gains from an increase in HVP exports in place of bulk exports are derived entirely from the assumed productive efforts of unemployed workers and capital. With such an analytical approach, the most economically beneficial exports will always be the ones that use the most unemployed resources because there are no opportunity costs.

Third, the ERS analysis is based on a 1977 input-output model of the economy that quantifies the structure of relationships between sectors (e.g., agricultural, manufacturing, and transportation). However, the structure of any economy is not fixed but changes over time. The 1989 ERS study does not take into account changes in the economy that have occurred over the last decade. It is not clear that using 1977 input-output data without any modifications to reflect today's economy more directly will provide a valid basis for evaluating export strategies in the 1990s.

Finally, the study assumes that export multipliers derived from the input-output model methodology are appropriate tools to measure the economic benefits of HVP promotion. The methodology assumes that employing more people and resources to export HVPs is unambiguously good for the economy, but fails to consider whether employing the same resources and government assistance monies elsewhere in the economy yields greater benefits. In 1988, the Assistant Secretary for Economics at USDA concluded that the multiplier arguments used by proponents of HVP export subsidies were the "economic equivalent of a perpetual motion machine"[2] because they always treat further processing as economically more beneficial. Furthermore, according to the Assistant Secretary, the input-output multiplier arguments fail to recognize that to the extent that a subsidy (e.g., government export assistance) reallocates resources to less than optimal use, the overall economic impact is negative. Thus, to the extent that there are no economic justifications for a subsidy, multiplier arguments fail to recognize that a subsidy to a particular industry comes at a cost to the whole society.

In addition, input-output models may not yield good projections. For example, firms that produce HVPs may view the government's support for HVP promotion as temporary. Consequently, they may raise output by increasing the hours of existing employees instead of hiring more people. Also, the input-output model used by ERS does not distinguish between domestic and imported inputs in the production process. If HVP production uses more imported inputs than does bulk production, some of the projected employment and economic benefits really go to foreign workers and nations.

ERS Estimates Economic Benefits Based on Actual Exports

ERS also publishes a separate analysis each year of the estimated economic output generated from actual agricultural exports. In the September/October 1992 issue of Foreign Agricultural Trade of the United States (FATUS), ERS reported its estimates for 1991. The FATUS estimates indicate that actual HVP exports in 1991 generated greater business activity and employment than bulk exports per $1 billion in exports. However, the income generated per person employed in bulk exports exceeded that of HVP exports. In addition, the farm share of total income associated with bulk exports was greater than that of HVP exports. While the FATUS analysis estimates economic activity generated from actual exports, it is not a simulation analysis that can be used to analyze the potential impact of

[2]Ewen M. Wilson, "A Choices Debate: Export Subsidies on Value-Added Products; Effects May Differ From Policy Objectives," Choices, (second quarter 1988), pp. 5-7.

policy changes. The FATUS analysis of business activity and employment is based on actual bulk and HVP exports and is not an analysis of the impact of changes in government export assistance. The FATUS analysis is based on an input-output model that is subject to some of the same qualifications as the 1989 ERS study.

The FATUS analysis calculates an annual export multiplier to estimate the total economic activity generated during the year as a result of actual agricultural exports that have already occurred. On the other hand, the 1989 ERS study projects economic activity that might occur if HVP exports are expanded based on a key assumption that unemployed resources are to be used to meet a new and permanent expansion of export demand. Although the FATUS calculations and the ERS study both rely on an input-output model of the economy, the FATUS analysis uses a different methodology and a model based on more recent data. The FATUS calculations trace the business activity, income, and employment ascribed to the actual composition of bulk and HVP exports each year. However, the level of employment and activity ascribed to HVP and bulk exports does not imply that those workers would have been unemployed without the exports in these sectors.

For 1991, ERS estimated that $1 of HVP exports generated an additional $1.63 of economic activity in the economy, while bulk exports of $1 generated an additional $1.08 of economic activity. HVP exports employed 23,000 persons for every $1 billion in exports, with 35 percent being the farm share. Bulk exports employed 20,500 persons for every $1 billion in exports, with 39 percent being the farm share. Approximately 8,000 farm jobs were generated for every $1 billion in exports for both HVP and bulk products in 1991.

FATUS measures total income in the form of wages, profits, and taxes generated by exports of HVP and bulk products. This total income measure is equivalent to the value added by the exporting sector.[3] ERS' analysis indicates that bulk exports generated greater income, or value added, per employed person compared to HVP exports. For 1991, the income was approximately $48,800 for each person employed in sectors related to bulk exports, while the income was about $43,500 for each person employed in sectors related to HVP exports. In addition, the ERS analysis shows that total income derived from bulk exports is distributed differently between the farm and nonfarm sectors compared to HVP exports. The farm share of

[3]Income attributed to agricultural exports should be reduced to account for imported inputs used in production. Due to a lack of data, we were unable to make this adjustment.

total income from bulk exports was 38 percent, while the farm share from HVP exports was 20 percent. Farm income was $47,400 per farm job for bulk exports, but only $25,000 per farm job for HVP exports. Income for persons in nonfarm sectors related to HVP exports ($53,300 per nonfarm job) was greater than that for bulk exports ($50,000 per nonfarm job).

The FATUS estimate of economic activity due to 1991 agricultural exports is based on a newly available 1982 input-output model of the economy. In contrast, the FATUS estimate for 1990 relied on the same 1977 input-output model of the economy as the 1989 ERS study. FATUS recalculated its estimates for 1990 based on the new input-output model. These calculations resulted in substantial changes in the estimated export multipliers and reduced the estimated economic output associated with HVP and bulk exports for 1990. Specifically, a comparison of the export multipliers calculated by FATUS using the old and the new input-output model found that the estimated economic activity for 1990 decreased by 5 percent for HVP exports and 28 percent for bulk exports.

Additionally, for its 1991 estimate of employment caused by agricultural exports, FATUS incorporated changes in labor productivity that previously had been ignored in FATUS computations for prior years. The combined effect of the newer input-output model and productivity adjustment reduced the size of employment associated with agricultural exports. The adoption of these two changes reduced the number of employed persons associated with HVP exports for 1990 by 9 percent and for bulk exports by 28 percent when FATUS recalculated its estimates for 1990.

Potential Reasons to Promote HVP Exports

There are a number of reasons why the government may want to consider emphasizing HVP exports within existing export promotion programs. The HVP share of world trade was about $165 billion in 1990, which represented about 75 percent of global agricultural trade.[4] World HVP trade is continuing to grow more rapidly than bulk trade; however, HVP exports are expanding more slowly than world trade in nonagricultural products. HVP export growth is expected to continue as world income rises. It makes sense for businesses to pursue growing markets.

Some HVP products may be subject to fewer swings in price and demand as compared to bulk products and thus may offer more stable market outlets.

[4]Intra-EC trade has been excluded from these statistics. If intra-EC trade were not excluded, the HVP share of world trade would have been about $256 billion in 1990, which represented about 80 percent of global agricultural trade.

However, we found research[5] which concluded that, in general, HVP prices are not more stable than prices of bulk commodities.

HVP market and product characteristics may also provide a rationale for government emphasis of HVP exports. HVP products are more easily differentiated through advertising, marketing, and product development. These are activities in which the United States may have a competitive advantage. Furthermore, the promotion of HVP exports offers the United States an opportunity to redirect its approach to agricultural exports from a production orientation, which emphasizes exporting surplus production to overseas markets, toward one that emphasizes producing products for export in response to international demand. In addition, U.S. promotion of HVP exports can counter EC agricultural policy. According to ERS, about 75 percent of EC export subsidies have been for HVPs, while about 10 percent of the subsidy value of the U.S. export enhancement programs are for HVPs.

Employment Issues Concerning HVP Exports

Although HVP export promotion is often advocated as a way to enhance employment, several considerations may influence the government's decision to increase support for HVP exports. To the extent that HVPs rely on further processing, the benefit of increased government assistance for HVP exports may primarily accrue to manufacturers, and not farmers. In addition, increased HVP employment may consist of unskilled and low-wage labor, depending on the specific commodity promoted. The government may prefer to invest in promoting exports that employ higher-skilled and higher wage labor. Furthermore, rural and farm communities will only receive a portion of any increased economic activity from increased HVP exports because much of the food processing in the United States takes place in coastal states and urban areas outside the traditional bulk-producing farm belt.

An assessment of the costs and benefits of promoting HVP exports requires additional research and a careful weighing of the value added to a commodity per unit of input. Further research is needed to fully understand and quantify the net economic benefits of increasing HVP export promotion. Moreover, we believe that an assessment of the economic benefits associated with increased government export assistance that is restricted to a comparison between HVP and bulk exports overlooks the contributions made by the nonagricultural sector, which

[5]Eric Monke, "High Value Products: Should the U.S. Add More Value to Its Exports?" (Paper written at the University of Arizona, Department of Agricultural Economics, 1986).

may meet the government's social and economic goals more successfully. Therefore, in our view, the question of whether to increase the export of HVPs is only one component of a governmentwide trade strategy and not strictly an agricultural policy decision.

U.S. Department of Agriculture Export Assistance Programs and Services

The United States has a comparative advantage in the production of bulk commodities, and its agricultural policy has historically emphasized these products. Although USDA devotes significant money and staff to programs and services for exporters of both bulk and high-value commodities, they are not allocated on the basis of any agencywide strategy or set of priorities. Most foreign competitors spend less on promoting HVPs than does the United States, and some spend their funds in a highly targeted manner, using an integrated marketing approach. To increase the competitive position of U.S. agricultural commodities in the world market, Congress mandated that USDA develop a long-term agricultural trade strategy and report on the strategy by October 1, 1991. USDA submitted its long-term trade strategy on January 15, 1993. While a long-term agricultural trade strategy is essential in order to allocate funds efficiently for agricultural export programs, we believe the level of federal support for the promotion of HVP exports should be based on an overall agricultural trade strategy that, in turn, is one component of a larger governmentwide export promotion plan.

USDA Export Assistance Programs

U.S. agricultural export assistance programs are designed to accomplish a number of overlapping domestic, trade, humanitarian, and foreign policy objectives. USDA employs four basic methods to increase agricultural exports: price reduction through bonus payments, provision of export credit, food aid, and nonprice promotional assistance. While USDA export assistance programs are available to support the export of HVPs, the predominant beneficiaries of these programs have been bulk commodities (see table IV.1 for the HVP share of USDA programs).

Table IV.1: USDA Export Programs by Dollar Value and Percent HVP, Fiscal Year 1991

Dollars in millions

Program	Total program value	Total HVP value	Percent HVP
Bonus payments			
EEP	$916.6	$70.4	7.7
COAP	5.2	5.2	100.0
SOAP	10.2	10.2	100.0
DEIP	39.3	39.3	100.0
Export credit guarantees			
GSM-102	3,999.7	904.7	22.6
GSM-103	111.6	19.9	17.8
Concessional sales			
P.L. 480 Title I	395.3	117.6	29.7
Donations			
P.L. 480 Title II	461.3	251.9	54.6
P.L. 480 Title III	181.3	18.4	10.2
Section 416(b)	227.6	77.6	34.1
Promotion			
MPP	200.0	157.1	78.6

Legend

COAP = Cottonseed Oil Assistance Program
DEIP = Dairy Export Incentive Program
EEP = Export Enhancement Program
GSM = General Sales Manager
MPP = Market Promotion Program
SOAP = Sunflowerseed Oil Assistance Program

Note: USDA/FAS advised GAO that these are the best estimates of export program data that could be obtained for the various programs on a fiscal year basis. Since there are many different agencies involved in export programs, and each gathers information for the programs it administers based on its unique needs, information for one program may not be directly comparable to that collected for another. Some estimates are registered sales, some are export value reported by the Agricultural Stabilization and Conservation Service, and others are estimates reported by exporters. Also, different agencies make their reports at different times.

Source: USDA for EEP, COAP, SOAP, DEIP, GSM-102, GSM-103, Public Law 480 Title I, Section 416(b), and MPP; Agency for International Development (AID) for Public Law 480 Titles II and III.

Bulk commodities account for the vast majority of export sales occurring under the USDA's Export Enhancement Program (EEP) and its General Sales Manager (GSM)-102 and –103 programs. Smaller USDA programs, such as the

export incentive programs for cottonseed oil, sunflowerseed oil, and dairy products, are dedicated exclusively to the promotion of HVP exports. In addition, the Market Promotion Program (MPP) devoted almost 80 percent of its funding to support efforts to develop international markets for high-value exports in fiscal year 1991. A description of each of the major USDA export assistance programs is presented in the following paragraphs:

Export Enhancement Program: Initiated in 1985, this program enables U.S. exporters to meet prevailing world prices for "targeted" agricultural commodities and destinations as a way to regain market share where U.S. agricultural sales have been lost to heavily subsidized exports from the EC. EEP pays cash to U.S. exporters as bonuses, allowing them to sell U.S. commodities at lower and presumably more competitive prices. The major objectives of the program are to challenge unfair foreign trade practices, expand U.S. agricultural exports, and encourage other countries that export agricultural commodities to undertake serious negotiations on solving agricultural trade problems. Prior to November 1991, generic certificates, instead of cash, were paid to exporters as bonuses under the program. These certificates could be redeemed for a like value of designated government-owned commodities.

The 1990 Food, Agriculture, Conservation, and Trade (FACT) Act directed the Secretary of Agriculture to set as an objective to expend at least 25 percent of the EEP funds for the promotion of high-value agricultural commodities each year. Since the program's inception, EEP has assisted the export of 12 commodities: wheat, rice, sorghum, barley, wheat flour, semolina, frozen poultry, poultry feed, barley malt, table eggs, dairy cattle, and vegetable oil. However, bulk wheat exports have dominated the program. For the first time, two new EEP initiatives for canned peaches and pork were announced by USDA in June and August 1992. Certain factors limit HVP sales under EEP, including restrictive program guidelines, foreign policy considerations, and cumbersome administrative processes.[1] Only 8 percent of the EEP bonus payment value was devoted to HVP exports in fiscal year 1991, according to our analysis.

Other USDA Export Bonus Programs: USDA manages three other programs that are similar to EEP in that they provide exporters with bonuses to facilitate U.S. exports for specific commodities: the Cottonseed Oil Assistance Program (COAP), the Sunflowerseed Oil Assistance Program (SOAP), and the Dairy Export Incentive Program (DEIP). Established in the mid-1980s, these programs subsidize U.S. exports of targeted commodities to make them price competitive in selected overseas markets. During fiscal year 1992, COAP, SOAP, and DEIP programs began paying bonuses in cash. Before fiscal year 1992, bonuses to exporters under COAP and SOAP were paid in in-kind commodities, whereas bonuses under DEIP were paid in generic certificates that could be redeemed for a like value of

[1]Agricultural Trade: High-Value Product Sales Are Limited in Export Enhancement Program (GAO/RCED-93-101, Apr. 16, 1993).

government-owned commodities. By program design, 100 percent of the export assistance under these programs is for high-value exports.

Export Credit Guarantee Programs: U.S. government-offered credit guarantees essentially protect U.S. agricultural exporters against the risk of default on payments by foreign banks on loans made to purchase U.S. farm exports. Only foreign buyers with foreign exchange constraints are eligible for the U.S. credit guarantee programs. Initiated in 1981, GSM-102 guarantees repayment of short-term loans (6 months to 3 years) made to eligible countries. GSM-103, established in 1985, is similar to GSM-102 in many respects but covers repayment of intermediate-term loans for periods of more than 3 years up to 10 years. Types of agricultural commodities exported using U.S. government-offered credit guarantees include wheat, rice, barley, soybeans, corn, cotton, beef and chicken products, wood products, almonds, dairy products, soybean products, table eggs, wheat flour, and live animals. In fiscal year 1991, grains dominated the GSM-102 and –103 program exports, while HVPs represented 23 percent and 18 percent of GSM-102 and –103 program exports, respectively.

Food Aid Public Law 480 (P.L. 480) (Titles I, II, III): The FACT Act of 1990 reauthorized one of the oldest of the current U.S. export assistance programs, dating back to 1954. All three titles of the Food Aid program are aimed at the food aid needs of developing countries. Title I is administered by USDA and provides U.S. government financing of U.S. agricultural exports to developing countries on concessional credit terms with low interest rates and maximum repayment terms of 30 years. While Title I targets countries that demonstrate food aid needs, it also targets countries that offer a good chance of becoming commercial markets for U.S. farm goods. Titles II and III are administered by AID and provide donated government-owned agricultural commodities to alleviate famine, provide disaster relief, combat malnutrition, and encourage economic and community development. These donations are distributed either through recipient governments, private voluntary organizations, or the World Food Program. Commodities designated under the Public Law 480 Food Aid program during fiscal year 1991 included wheat, corn, grain sorghum, rice, vegetable oil, wheat flour, dry edible beans, cotton, tallow, soybean meal, and wood products. High-value products represented 30 percent of the Public Law 480 Title I sales in fiscal year 1991, and 55 percent and 10 percent of the Titles II and III donations, respectively.

Section 416(b): This program donates surplus U.S. government-owned agricultural commodities to needy countries to encourage agricultural reform. Donations have included dairy products, wheat, flour, other grains, and soybeans. However, such shipments depend on the availability of surplus government-owned commodities. In fiscal year 1991, 34 percent of section 416(b) products were high-value commodities.

Market Promotion Program: Established by the FACT Act of 1990, this program is the successor to the Targeted Export Assistance program, which began in 1985. MPP is an export promotion program designed to help U.S. producers and trade organizations finance promotional activities for U.S. agricultural products overseas. The program was created to encourage the development, maintenance, and expansion of exports of U.S. agricultural products, and priority is given to those commodities that have been adversely affected by unfair foreign trade practices. Promotional activities financed by MPP vary from commodity to commodity and include market research, consumer promotion activities, advertising, and demonstration projects such as the construction of a three-story wood building. The cost of the program is shared between USDA and producer-funded nonprofit agricultural trade associations or private companies. MPP primarily assists the promotion of high-value products such as fruits, nuts, and processed goods. In fiscal year 1991, about 79 percent of the funds spent under MPP went to promote U.S. high-value products overseas.

USDA Services for Exporters

USDA provides a variety of services to assist exporters of agricultural products. However, in a January 1991 report, we concluded that USDA agencies rarely employ strategic marketing and that a USDA-wide approach is needed to assist U.S. agribusinesses in competing more effectively worldwide.[2] At USDA, marketing coordination has traditionally involved ad hoc information-sharing and lacked organized interagency planning.

The USDA's FAS has primary responsibility for promoting exports of U.S. agricultural products. FAS is organized by commodity groups, and each of the seven commodity divisions represents both bulk and related HVP products. A separate division, the AgExport Services Division, is responsible for developing and implementing policies, services, and programs for HVPs. The commodity divisions still provide the specific marketing support for their related HVPs.

FAS also maintains an overseas network of attache posts and agricultural trade offices. The network's mission is to expand foreign markets for U.S. agricultural commodities through commodity reporting, trade policy work, and market development. FAS overseas staff facilitate the USDA's export assistance programs, collect and disseminate information on market trends, inform U.S. exporters of sales opportunities, and bring U.S. exporters into contact with foreign buyers.

FAS provides a variety of other services to increase the exports of U.S. agricultural products. A trade lead program provides export market tips,

[2]U.S. Department of Agriculture: Strategic Marketing Needed to Lead Agribusiness in International Trade (GAO/RCED-91-22, Jan. 22, 1991).

and FAS publications highlight trade opportunities in export markets. FAS also manages a database that lists foreign buyers and U.S. suppliers, and sponsors or supports participation in international trade shows. The FAS' Trade Assistance and Planning Office is a single point of contact serving U.S. exporters who need foreign market information or believe they have been injured by unfair foreign trading practices.

Related services for exporters are also provided by other USDA agencies. ERS gives economic data, models, and research information about agricultural economies and policies of foreign countries and their trading relationships with the United States. The USDA's Extension Service manages "Going Global," a project that provides farmers and rural businesses with practical educational programs and user-friendly access to a database of international marketing information and services at more than 65 communities in 20 states. And the Agricultural Market Services of USDA administers the Marketing Improvement Program, a matching fund program that helps state agencies fund studies related to the marketing of agricultural products. While some studies pertain to marketing overseas, most studies funded under the program are related to domestic marketing issues.

Competitor Nations Promote Agricultural Exports Strategically

The United States spends more on HVP market development than do most of its competitor nations; however, these competitors appear to receive a greater return on their marketing investment, according to our report on market development efforts by competitor nations.[3] Many of our competitors—EC nations in particular—spend their funds in a highly targeted manner, using an integrated marketing approach. Foreign competitors have developed considerable expertise in identifying markets and emphasizing the use of market research to tailor promotions to consumer demand. Their market development efforts demonstrate a long-term commitment to individual markets, according to our analysis. This situation contrasts with the historical U.S. approach, which attempts to find markets for products that have already been produced, as well as to reduce U.S. exports during periods of strong domestic demand. According to some U.S. and foreign marketing representatives, some U.S. exporters appear to lack commitment to nurturing foreign markets.

Foreign competitors also have forged a close working relationship between the public and private sectors, according to our analysis. Foreign

[3]International Trade: Foreign Market Development for High Value Agricultural Products (GAO/NSIAD-90-47, Jan. 17, 1990).

competitors have created institutions managed by both public and private sector representatives to coordinate market development activities, including product research, development, production, and delivery. A greater acceptance of more government involvement in the marketplace exists in EC competitor countries, explaining in part the choice of single marketing organizations funded either by special taxation (e.g., production levies in Germany and France) or by general government funds (e.g., Italy, the United Kingdom, and Spain). In addition, some foreign marketing organizations promote virtually all agricultural products (France's SOPEXA and West Germany's CMA)[4] and are thus in a unique position to develop specific marketing plans based on overall market conditions and opportunities.

USDA Prepares a Strategic Plan

We believe that the level of federal support and the specific type of program to assist high-value product exports are presently not based on an overall agricultural trade strategy that, in turn, is one component of a governmentwide export promotion strategy or set of priorities. Consequently, taxpayers do not have reasonable assurance that the government's resources are being effectively used to emphasize sectors and programs with the highest potential return.

The FACT Act of 1990 required USDA to develop a long-term agricultural trade strategy and specified that a report be sent to the Congress by October 1, 1991, on the long-term trade strategy. Specifically, the act provided that the strategy should be designed to ensure (1) the growth of exports of U.S. agricultural commodities; (2) the efficient, coordinated use of federal programs designed to promote the export of U.S. agricultural commodities; (3) the provision of food assistance and the improvement in the commercial potential of markets for U.S. agricultural commodities in developing countries; and (4) the maintenance of traditional markets for U.S. agricultural commodities. In addition, the act mandated that USDA designate priority growth markets for bulk and HVP commodities and devise individual market development plans. USDA appointed FAS as the lead agency to prepare the required multiyear agricultural trade strategy, given the FAS' responsibilities in promoting agricultural exports, including HVPS.

On January 15, 1993, USDA sent its strategy to the appropriate committees of Congress. According to the document, USDA's long-term agricultural

[4]Société pour l'Expansion des Ventes des Produits Agricoles et Alimentaires (SOPEXA) and Centrale Marketinggesellschaft der deutschen Agrarwirtschaft (CMA).

trade strategy is not only a series of plans for individual markets but also a set of principles that will guide USDA decision-making. The strategy "contemplates the goals the government has for agricultural trade, the resources it can utilize, and the tactics it can employ in facilitating (as opposed to managing) such trade." One of the strategy's stated goals is to expand high-value and consumer-oriented agricultural exports in both absolute dollar value and as a percentage of total U.S. exports.[5]

Without the development of a long-term agricultural trade strategy and its integration into a comprehensive governmentwide export promotion plan, the USDA's individual export promotion programs will continue to lack a coherent rationale and justification, we believe. Promoting HVP exports offers the United States an opportunity to redirect its approach to agricultural exports from a production orientation, which emphasizes moving surplus production to overseas markets, toward one that emphasizes developing exports in response to international demand. However, the successful completion of a long-term trade strategy will not alone solve current problems, we believe. Without a comprehensive governmentwide export promotion plan, no assurance can be given that public resources are being effectively used.

[5]In a separate general management review of FAS, we are examining how well the trade strategy complies with the requirements of the legislation and how USDA intends to use the strategy to direct its programs and operations.

HVP Export Assistance Provided by Top 10 Agricultural Exporting States

The top 10 agricultural producing states are also the top 10 agricultural exporting states, accounting for approximately 60 percent of total U.S. agricultural exports with a value of over $20 billion, according to USDA (see table V.1).

Table V.1: Top 10 States' Export Value and Percent of U.S. Agricultural Exports, Fiscal Years 1988-90

Dollars in billions

	1988		1989		1990	
State	**Value**	**Percent**	**Value**	**Percent**	**Value**	**Percent**
California	$3.4	10	$3.6	9	$4.4	11
Iowa	2.8	8	3.0	8	3.2	8
Illinois	2.6	7	2.6	7	3.2	8
Nebraska	2.1	6	3.0	8	2.6	6
Texas	2.2	6	2.6	7	2.5	6
Kansas	2.3	7	2.8	7	2.2	6
Minnesota	1.8	5	1.8	4	2.0	5
Indiana	1.4	4	1.4	4	1.6	4
Missouri	1.1	3	1.2	3	1.1	3
Ohio	1.1	3	1.2	3	1.1	3
Total	**$20.8**	**59**	**$23.2**	**60**	**$23.9**	**60**

Source: Foreign Agricultural Trade of the United States, May/June 1991.

The majority of these states are geographically located in large soybean, feed grain, and wheat-producing regions in the United States. Except for California, the 10 states estimate their top 3 agricultural exports to be bulk commodities such as wheat, soybeans, and feed grains. Other than raw cotton, California primarily exports high-value products like almonds, grapes, oranges, and dates, according to California officials.

State officials can provide only rough estimates of state agricultural export statistics because of the wide variety of high-value products and the absence of a uniform classification scheme. Interstate trade, as well as the current system of reporting exports according to the port of exit rather than the place of origin, also hampers state efforts to compile exact export data. Currently, state agricultural export statistics are calculated by USDA. The methodology only provides rough estimates based on each state's share of total U.S production. For example, if California produces 30 percent of U.S cotton, then it is assumed that California constitutes about 30 percent of U.S. exports of cotton. The USDA's export data for states are only available by broad commodity group and do not distinguish

between bulk and high-value products (e.g., wheat and its processed derivatives are both placed under the same commodity group—"wheat and products").

Many of the top 10 states did not begin to promote agricultural exports actively until the 1980s. All 10 states assist agricultural exports through a variety of services such as in-store promotions, trade shows, advertising, hosting and sending trade missions, educating new-to-market businesses, traveling overseas for trade servicing, maintaining a trade leads database, and providing market information. Although such services are available to exporters of both bulk and high-value commodities, six states focus their efforts on promoting only high-value agricultural exports.[1] The states assist export businesses of all sizes; however, eight states target small- and/or medium-sized companies.[2] FAS does not have any field offices in the United States to support the international marketing activities of the states; however, if it did, eight states believed the domestic FAS offices would duplicate state services.[3]

According to state officials, the majority of their states have limited budgets and few staff dedicated exclusively to developing international agricultural markets (see table V.2). In 1992, 8 of the 10 states estimated their international agricultural marketing budgets to be $250,000 or less. The states do not receive federal funding to support their international agricultural marketing activities, according to officials from the top 10 states. Instead, their international marketing activities are funded through state sources. Nine states reported that their international agricultural marketing budgets are funded primarily through state general funds.[4] The majority of these states reported no growth or a decrease in their budgets over the last 3 years because of state financial problems. California, the nation's largest agricultural exporter, has experienced significant reductions in its international agricultural marketing budget. Over a period of 4 years, in response to the state's fiscal crisis, California's international agricultural marketing budget was reduced from a high of $5 million in 1989 to $900,000 in 1992. In contrast, Illinois does not use state general funds to support its international market development activities and has been insulated from state budget cuts. Funded through horse-racing

[1]California, Illinois, Indiana, Minnesota, Missouri, and Texas.

[2]California, Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, and Nebraska.

[3]California, Illinois, Indiana, Kansas, Missouri, Nebraska, Ohio, and Texas.

[4]California, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, Ohio, and Texas.

profits, the Illinois international agricultural marketing budget increased from $630,000 in 1989 to $1.5 million in 1992.

Table V.2: Top 10 States' International Agricultural Marketing Programs, Fiscal Year 1992

State	Year established	Budget	Staff
California	1986	$900,000	1
Iowa	1989	250,000	3
Illinois	1968	1,500,000	13
Nebraska	1988	25,000	0
Texas	1984	200,000	3
Kansas	1970	149,000	1
Minnesota	1985	200,000	2
Indiana	1967	90,000	1
Missouri	1976	250,000	7
Ohio	1991	100,000	4

Source: The above figures are based on estimates provided by state officials.

In general, the 10 states do not have a strong presence overseas to promote state agricultural exports. Only two states, Missouri and Illinois, had overseas staff dedicated to agricultural market development and promotion. Five states reported using other state agencies' overseas staff for international agricultural market development, while five others reported having little or no contact with other state agencies overseas for international marketing purposes. Although officials in three states believed state overseas staff are very important for the successful development of export markets, officials in the remaining seven states believed overseas staff to be less important. All 10 states relied on the FAS' agricultural trade officers and attaches for assistance in obtaining general marketing information on trade shows, foreign buyers, and market potential.

The states also promote agricultural exports through one of four state regional groups. These four state regional groups are nonprofit trade organizations formed by the states to promote the agricultural exports of the western, southern, midwestern, and eastern regions of the United States.[5] The state regional groups serve to link international buyers, U.S. exporters, state departments of agriculture, FAS, and attaches and

[5]WUSATA—Western U.S. Agricultural Trade Association; SUSATA—Southern U.S. Agricultural Trade Association; MIATCO—Mid America Agri-Trade Council; EUSAFEC—Eastern U.S. Agricultural and Food Export Council, Inc.

agricultural trade officers overseas. The majority of the top 10 agricultural exporting states reported that they frequently cooperate with their state regional group on foreign marketing efforts such as market research, trade missions, and trade shows. Many state officials, however, viewed the primary role of a state regional group as a gatekeeper who coordinates state exporters' access to federal funding for international market development activities under the USDA's Market Promotion Program.

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