TEMPERATE FRUIT AND VEGETABLE TRADE UNDER THE GATT

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GATT Research Paper 94-GATT 7
February 1994

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This material is based upon work supported by the Cooperative State Research Service, U.S. Department of Agriculture, under Agreement No. 92-38812-7261. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the authors and do not necessarily reflect the view of the U.S. Department of Agriculture.

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TEMPERATE FRUIT AND VEGETABLE TRADE UNDER THE GATT

Executive Summary

The Uruguay Round of the General Agreement on Tariffs and Trade (GATT), if negotiated to a successful completion, will affect world trading patterns. This paper summarizes and analyzes the structure of the international markets for fruits and vegetables, and projects changes in response to reforms likely to follow a successful GATT negotiation. The research focused on the European Community (EC), selected European Free-Trade Association (EFTA) nations, Thailand, Indonesia, Malaysia, Brazil, Chile, and Colombia.

The Dunkel Proposal for the current GATT round would "tariffy" current border policies, i.e. install a tariff rate with the "same" impact, and then gradually lower the tariff rates. The expected results from adoption of the Dunkel Text proposal under the GATT would include: (a) an increase in world trade; (b) a leveling of the global "playing field" to make it more competitive; (c) a decrease in consumer prices; and (d) taxpayer benefits from reduced support to agriculture.

Fruit and vegetables are important U.S. agricultural products. The United States imports over $20 billion in agricultural commodities every year, and fruits and vegetables account for from 10 to 25 percent of the total, or $2 to $5 billion per year. Fruit and vegetable exports are also important. U.S. agricultural exports in 1991 were almost $40 billion, with over $5 billion in fruits and vegetables. The countries described below account for 10 to 20 percent of fruit and vegetable trade with the United States. The remaining 80 to 90 percent is trade with Canada (36 percent), Japan (19 percent), Mexico (10 percent), and the rest of the world.

The specific results for countries in this study are varied. In Europe, the EC protects its fruit and vegetable producers to a greater degree than many other nations do. As a result, under a GATT accord, EC producers would face cutbacks in support levels. The EC is a major U.S. market and the

changes would benefit U.S. producers. The EFTA nations are a small market for U.S. fruits and vegetables. Most EFTA countries do not protect their fruit and vegetable sector, and would not have an important impact on trade patterns if the Dunkel Text is adopted.

In Asia, Indonesia and Malaysia would have to lower border protection levels; however, U.S. exports to these two countries are relatively small and these changes would have little impact from a U.S. perspective. Thailand is a major exporter of pineapples to the United States, but is not a GATT signatory; hence, the impact of GATT is not clear, but we expect it would be negligible.

Brazilian producers compete with U.S. producers for a share of the U.S. juice market, especially for frozen concentrated orange juice. A successful GATT round would allow Brazilian juice makers greater access to U.S. markets. Colombian fruit, primarily bananas, currently enters the United States without tariffs. Chile stands to gain most from a GATT agreement. Efficient Chilean producers would gain easier access to U.S. markets, particularly during the off-season for U.S. producers.

The general conclusion of this research is that successful completion of the Uruguay Round would result in increased world trade for fruits and vegetables. U.S. producers would face greater competition from Chile, Colombia, and Brazil on the world market. Nevertheless, since U.S. fruits and vegetables have only small seasonal tariffs in effect, we believe a GATT accord would have a negligible impact on U.S. producers.

Part I
EXISTING POLICIES FOR FRUIT AND VEGETABLES AND LIKELY IMPACTS OF A GATT AGREEMENT

Introduction

Instruments used for government intervention in markets vary among nations and between imported or exported goods. U.S. fresh fruit and vegetable producers receive little direct government support for their production, but are provided with some protection against import competition by the assessment of seasonal import tariffs for crops such as apples and grapes. European Community (EC) producers are guaranteed prices for some fresh fruits and vegetables through provisions set forth in the Common Agricultural Policy (CAP). Tariffs, along with a set of reference prices which act as minimum import prices, also protect EC producers against import competition, while export refunds encourage exports of surplus commodities. Conversely, in Chile, where commercial fresh fruit and vegetable production is primarily for export purposes, government policies are oriented toward enhancing the grower's ability to compete in the world market.

This paper represents a summary and analysis of the structure of the international markets for temperate fruits and vegetables. It also projects changes in response to reforms that would be implemented if an agreement to adopt the Dunkel Proposal were reached under the Uruguay Round of the General Agreement on Tariffs and Trade (GATT). The findings are presented in two main sections. The first summarizes and examines existing policies toward fruits and vegetables for the EC, selected countries in the European Free-Trade Association (EFTA), Thailand, Indonesia, Malaysia, Brazil, Chile, and Colombia. Each section covers specific commodities grown within a specific country or region. The choice of commodities was determined by agricultural trade value. Most sections contain tables summarizing border policies and relevant data on fruit and vegetable trade. The appendix provides more detailed extension of the data.

Part II of this report focuses on assessing likely market opportunities for U.S. fruit and vegetable exporters in Europe, South America, and Asia following the completion of the Uruguay Round. The report examines the likely impacts on fruit and vegetable trade under the GATT, assuming the agreement broadly follows the so-called Dunkel Text, but with no provision for changes in internal support mechanisms.

The GATT Agreement

The Uruguay Round of the GATT negotiated a proposal for trade liberalization as proposed by Mr. Arthur Dunkel, secretary of the GATT. The contents of the Dunkel Text are important for agriculture, and for fruit and vegetable trade. If approved and signed by the member nations, an agreement based on the Dunkel Text will require all border policies to be converted to equivalent tariffs. These are the highlights of the lengthy final text:

- The value of export subsidies will be reduced by a set percentage and the quantity of subsidized exports will also be reduced by a predetermined amount. The annual average over the 1986-88 period will be used as a base for the reductions.

- All nontariff barriers will be converted to bound tariffs. Domestic and world prices over the 1986-88 period will be used to calculate the tariff equivalents. Sufficiently high tariff levels will be established initially to prevent increased imports at the new tariff levels.

- All tariffs will be reduced by about one-third after a period of time.

- For all commodities with nontariff barriers, a minimum import access of 3 percent of domestic consumption will be required. In addition, access to domestic markets must be maintained at levels equal to those of the 1986-88 base for all nontariff barriers.

- Internal production subsidies must be reduced by a set percentage (20 percent) as measured by an aggregate measure of support (AMS). The reduction will be calculated from the 1986-88 base, but credits can be provided for subsidy cuts since 1986. Only support deemed trade-distortionary can be included in the subsidy cuts. No reduction is required if support is less than 5 percent of the value of output for a commodity or for the sum of sector-wide programs.

Fruits and Vegetables in the Dunkel Text

Fruits and vegetables fall into the category of products for which the calculation of an aggregate measure of support (AMS) is not "practicable" as defined under Annex 5 of the Dunkel Text. For

these difficult commodities, Annex 6 of the Dunkel Text defines domestic support equivalents. An "equivalent commitment" for the purposes of reduction would be calculated for individual fruit and vegetable products. The equivalent commitment would consist of: (a) an equivalent of the market price support, and (b) any nonexempt direct payments. An equivalent of market price support would be calculated for every product for which there is some form of domestic support (intervention buying, withdrawals from the market, producer subsidy) which keeps internal prices above international prices.

The Dunkel Text provides two methods for estimating this equivalent of the price gap between world and domestic price: (a) the administered internal price multiplied by the amount of production eligible to receive that price, excluding any budgetary payments made to maintain this gap, such as buying or storage costs; and (b) nonexempt direct payments as calculated by using the gap between the fixed reference price and the applied administered price multiplied by the quantity of production eligible, or by using budgetary outlays.

It is now considered unlikely that, even if the Dunkel Text were broadly adopted, the part dealing with internal support measures would be included in a GATT agreement. Thus, the main issue to consider is the impact of changes in border protection policies.

The effects of a GATT agreement on fruit and vegetable trade will vary among commodities and among the specific countries or regions. GATT reform will affect importing countries with higher rates of border protection, such as Thailand and Indonesia, in the form of lower prices to consumers and higher volumes of trade. Chile, Brazil, and Colombia will also enjoy benefits from a GATT accord in the form of expanded trade, since they already have low rates of protection on imports and are net exporters of fruit and vegetables. The EC has some phytosanitary restrictions on fruits and vegetables, but also supports the export of fruit and vegetables through subsidies, and through preferential agreements with former colonies; the EC will thus experience some changes under the

Uruguay round. The nations of EFTA will face slightly reduced seasonal tariff levels for some of the fruits produced locally, and will thereby have to compete with the EC and American fruit producers. The United States has relatively low border protection levels, which are in many cases applied only seasonally. Nevertheless, many fruit and vegetable crops receive assistance through USDA programs and federal marketing orders. Changes in border policies as a result of GATT will, for the most part, cause higher volumes of fruit and vegetable trade. Internal domestic policies for most countries, including the United States, will remain largely unchanged.

U.S. Fruit and Vegetable Policies and Trade

This section presents a brief overview of some aspects of U.S. fruit and vegetable trade, a description of major U.S. policies, and expectations concerning the interactions between a North American Free Trade Agreement and a GATT treaty.

U.S. Trade

The United States is a major producer and a net exporter of a variety of fruits and vegetables. U.S. exports of fresh fruits and vegetables are nearly evenly split between the two commodity groups. In 1991, 49 percent of U.S. exports were fruits and 51 percent were vegetables. Major U.S. export markets for fresh fruits and vegetables include the Pacific Rim countries (e.g. Japan, Korea, Hong Kong, Taiwan, and Canada). Major fresh fruit and vegetable imports consist of bananas, grapes, and tomatoes. The United States is the world's largest importer of bananas and orange juice. Mexico and Chile are major off-season suppliers of fresh tomatoes, peppers, cantaloupes, cucumbers, grapes, apples, pears, and other fruits to U.S. markets when domestic commercial production is limited to regions with a temperate climate.

During 1991, the value of U.S. agricultural exports was about $39 billion; fruit and vegetable exports accounted for over $5 billion (12 percent of total U.S. agricultural exports) during the same period. U.S. fruit and vegetable exports to regions in this study totaled about $861 million during

1991.[1] The largest markets for U.S. fruit and vegetable exports described in this study are the EC, EFTA, Malaysia, and Thailand (Table 1). U.S. imports of world agricultural commodities totaled $22.7 billion; imports of fruit and vegetables were worth $4.3 billion. The United States ia a major importer of fruits and vegetables from the EC, Brazil, Chile, and Thailand (Table 2). Only about 10 to 25 percent of the total value of U.S. fruit and vegetable trade occurs with the countries in this study (Tables 5, 6). To put matters in perspective, it must be noted that during 1991, the largest importers of U.S. fruits and vegetables were Canada, Mexico, and Japan, which purchased almost two-thirds of all U.S. fruit and vegetable exports; Canada (36 percent), Japan (19 percent), and Mexico (10 percent).

Table 1. U.S. Fruit and Vegetable Exports to Regions in this Study

	Total U.S. Agricultural Exports	Fruits and Vegetable Exports	Percent of Total
	(Million Dollars)	(Million Dollars)	
EC	6,916	660.0	9.5
EFTA	552	105.4	19.1
Brazil	254	21.6	8.5
Chile	70	2.6	3.7
Colombia	117	5.3	4.5
Thailand	287	26.9	9.4
Malaysia	154	33.4	21.7
Indonesia	298	6.1	2.0
TOTAL	8,648	861.3	10.0

Source: FATUS, 1991.

[1] A more detailed breakdown is provided in the data appendix.

Table 2. U.S. Fruit and Vegetable Imports to Regions in this Study

	Total U.S. Agricultural Imports	Fruits and Vegetable Imports	Percent of Total
	(Million Dollars)	(Million Dollars)	
EC	4,400	557.2	12.7
EFTA	401	68.0	17.0
Brazil	1,286	263.4	20.5
Chile	443	375.0	84.7
Colombia	787	10.2	1.3
Thailand	518	221.1	42.7
Malaysia	299	4.9	1.6
Indonesia	685	46.9	6.8
TOTAL	8,619	1,546.7	17.5

Source: FATUS, 1991.

Table 3. U.S. Policies toward Selected Vegetable Commodities

Commodity	Tariffs
Vegetables	
Potatoes	$0.008/kg.
Tomatoes	Various rates applied seasonally
Onions	$0.013/kg.
Cabbages	5.5 percent applied seasonally
Lettuce	$0.009 applied seasonally
Carrots	17.7 percent
Cucumbers	Various rates applied seasonally

Source: USDA/FAS, Tariff Schedule, 1991.

Table 4. U.S. Policies toward Selected Fruit Commodities

Commodity	Tariffs
Fruits	
Coconuts	Free
Bananas	Free
Dates	$0.165/kg.
Figs	$0.099/kg.
Pineapples	$0.006/kg.
Guavas	$0.083/kg.
Oranges	$0.022/kg.
Lemons	$0.028/kg.
Limes	$0.028/kg.
Grapefruit	$0.022/kg. applied seasonally
Fresh grapes	$1.41/cubic meter applied seasonally
Raisins	$0.022/kg.
Melons	20 percent applied seasonally
Apples	Free
Pears	Free from April to June
Apricots	$0.004/kg.
Peaches	Free from June to November
Plums	Free from January to May

Source: USDA/FAS, Tariff Schedule, 1991.

Table 5. U.S. Imports of Fruits from Countries in this Study

	Country	Percent of Total	Value Thousands U.S. Dollars
Fresh Fruits			
Grapes	Chile	78	198,825
Citrus	Spain	20	16,077
Mangoes	Brazil	2	1,313
Berries	Chile	8	3,951
Apples	Chile	17	8,055
Strawberries	S. America	9	4,499
Pineapples	Thailand	5	1,988
Peaches	Chile	9	32,681
Pears	Chile	32	9,098
Avocados	Chile	89	15,974
Plums	Chile	99	15,007
Other	Chile	13	2,882
Fruit Juices			
Apple	EC	25	76,430
	Chile	13	39,371
Orange	Brazil	82	240,523
Pineapple	Thailand	34	31,067
Grape	Brazil	10	2,221
	Chile	10	1,806
Lemons	Brazil	20	2,209
Limes	Brazil	33	979

Source: USDA/FAS, trade database, 1991.

Table 6. U.S. Exports of Fruits from Countries in this Study

	Country	Percent of Total	Value Thousands U.S. Dollars
Grapefruit	EC	59	60,193
Other Citrus	EC	12	77
Apples	EFTA	19	51,309
Berries	EC	9	9,453
Cherries	EC	16	9,934
Plums	EFTA	8	4,639
Pears	EC	13	7,960
Other noncitrus	EC	15	9,702
Raisins	EC	45	81,932
	EFTA	10	19,254
Prunes	EC	55	69,441
	EFTA	11	13,907
Orange Juice	EC	17	30,394
Grapefruit Juice	EC	23	9,154

Source: USDA/FAS, trade database, 1991.

U.S. Policies

The United States does not maintain regular price or income support programs for fruits or vegetables. Nevertheless, fruit and vegetable growers are eligible to receive disaster relief for crop losses stemming from major catastrophes. The relief usually occurs in the form of low-cost loans or, in some cases, replacement of lost trees.

Most of the major fruits and vegetables produced in the United States are subject to either state or federal marketing orders. Federal law enables marketing orders to provide for more orderly marketing of domestic fruits and vegetables through the establishment of grades, minimum quality standards, and standardized packaging.[2] Increased farm income and reduction of price volatility are other major goals of the marketing orders. Three types of policies may be used: (a) limiting supply through reserves and quotas, (b) quality and size restrictions, and (c) enhancing demand through market promotion. Of the 44 federal marketing orders in existence, 36 cover fruits and vegetables. The effect of marketing order policy tools as barriers to trade has not been extensively analyzed and will not be dealt with in this report. The enabling legislation specifies that imports must meet the same quality standards as the domestically produced commodity. Many fruit and vegetable crops have also received assistance through the U.S. Department of Agriculture's Targeted Export Assistance/Market Promotion Program (TEA/MPP). During 1992, approximately $100 million was spent on TEA/MPP efforts. Some commodities governed by marketing orders include potatoes, tomatoes, onions, cucumbers, oranges, and grapes.

The strong growth in U.S. fruit and vegetable exports has been attributed to an opening up of foreign markets and reduction of nontariff barriers (Tables 7, 8). A GATT agreement would provide

[2] Marketing orders also allow the introduction of checkoffs to provide funds for research and promotion, particularly at the state level.

Table 7. U.S. Fruit Imports

	Total Ag. Imports	Fresh or Frozen Fruit	Prepared or Preserved Fruit	Fruit Juice
		(Million Dollars)		
1980	17,366	206	215	144
1981	16,772	221	220	292
1982	15,341	277	230	468
1983	16,627	313	246	455
1984	19,334	364	303	808
1985	19,968	464	357	917
1986	21,452	520	352	726
1987	20,402	638	348	731
1988	20,954	659	383	824
1989	21,749	686	408	727
1990	22,770	826	403	990
1991	22,719	897	448	785

Source: FATUS, 1991.

Table 8. U.S. Fruit Exports

	Total Ag. Exports	Fresh	Dried	Fruit Canned	Frozen	Juice
			(Million Dollars)			
1980	41,223	739	214	128	n.a.	218
1981	43,339	855	224	126	n.a.	246
1982	36,627	796	204	103	n.a.	230
1983	36,099	829	177	90	n.a.	220
1984	37,084	758	161	73	14	220
1985	29,041	743	169	55	11	189
1986	26,222	851	202	66	16	149
1987	28,709	939	238	69	25	187
1988	37,080	1,093	269	80	28	265
1989	39,909	1,133	268	76	32	268
1990	39,363	1,486	318	90	42	351
1991	39,191	1,561	337	116	34	355

Source: FATUS, 1991.

additional sales opportunities for U.S. producers. Increases of around 5 percent in the value of export of fruits and vegetables would likely result from a GATT agreement. New markets, particularly for apples, pears, and grapefruits, would open in many developing countries that have been off-limits because of import bans or restrictive licensing arrangements. In important markets such as Japan, Taiwan, and Korea, U.S. fresh oranges, table grapes, wine, and other products would profit from reduced tariffs.

Reduced U.S. import protection would not have a major impact on fruit imports as U.S. tariff rates are already low (Tables 3,4). Lower tariff rates on frozen concentrated orange juice could lead to lower domestic prices with U.S. producers concentrating on high-quality juice production. Restrictions on the use of sanitary and phytosanitary measures as trade barriers would benefit U.S. exporters of fruit since some countries like Taiwan and Korea restrict imports under the questionable premises of food, plant, or animal safety. U.S. tariff levels on vegetables are also very low or zero, and would not be greatly affected under GATT. In addition, major U.S. competitors already enjoy access to U.S. markets through the Caribbean Basin Initiative (CBI) and the General System of Preferences.

GATT and NAFTA

On August 12, 1992, the United States, Canada, and Mexico concluded negotiations on the North American Free Trade Agreement (NAFTA). The agreement will eliminate trade barriers including tariffs, quotas, and licenses among the three signatories. These features of the agreement would affect the U.S. fruit sector:

- Mexico's 20 percent tariff on most fruits will be phased out in 5 years for pears and apricots, and 10 years for peaches and apples;
- the 20 percent tariff on fresh strawberries will be eliminated immediately;
- import licensing requirements for grapes will be replaced by a 20 percent tariff;

- a ceiling of 55,000 tons of apples will be allowed into Mexico at the NAFTA tariff rate; and

- U.S. tariffs, which are already less than 2 percent ad valorem equivalent for many fresh fruits, including pears, apricots, peaches, grapes, plums, strawberries, and bananas, would be eliminated or phased out over the 10-year transition period.

The current trade patterns under NAFTA are revealing. In 1991, the U.S. exported $55 million worth of noncitrus fruit to Mexico, and imports from Mexico amounted to $202 million (Appendix Tables). The imports included mangoes, strawberries, and grapes, while the exports were fresh apples, fresh pears, and fresh peaches. With a NAFTA, the U.S. exports of fresh fruits will undoubtedly increase, as will U.S. imports of Mexican products. Canada's primary role in the NAFTA is as an importer. Canada will be able to choose between U.S. and Mexican products, resulting in stiffer competition between U.S. and Mexican fruit and vegetable producers.

The effects of a NAFTA on vegetable production, particularly for tomatoes and tomato paste, has been heatedly debated. U.S. producers claim that Mexico's lower production costs will give Mexico an unfair competitive advantage, resulting in possible bankruptcy and loss of jobs for U.S. companies. Mexico's climate allows for the production of numerous crops like cabbages, tomatoes, cucumbers, peppers, garlic, dried beans, and carrots. If significant numbers of Mexican producers improve their technology, U.S. producers will likely face stiffer competition. Nevertheless, numerous U.S. producers are taking advantage of low-cost Mexican labor, and shipping products into the United States, Canada, and other world markets.

The repercussions of a GATT agreement on NAFTA, or vice versa, are well-illustrated in the market for oranges and orange juice. Approximately 30 to 50 percent of the orange juice consumed in the United States is imported either from Mexico (10 percent of imports) or from Brazil (80 percent of imports). Under a NAFTA, U.S. imports of oranges from Mexico (2.7 percent of total consumption) will increase. Thus, the elimination of U.S. duties on Mexican orange juice and a

GATT accord will make competition with Brazil more intense, exposing U.S. orange juice producers to competition with Brazilian and Mexican producers.

The United States, Canada, and Mexico have established sanitary and phytosanitary requirements to prevent entry of disease and pests. However, U.S. fruit and vegetable producers remain concerned that Mexico's less stringent regulations (affecting the use of chemicals, the environment, labor, etc.) on the production of fruits and vegetables will harm the competitiveness of the industry. Hence, trade between Mexico and the United States and Canada will still face some nontariff barriers.

In conclusion, adoption of a NAFTA will have two effects: (a) trade volume in North America will increase, forcing U.S. producers to compete with Mexican producers; and (b) under a GATT agreement, Chile and Brazil will also seek to enter the lucrative, but increasingly competitive, North American market. However, if a GATT accord is signed, efficient Chilean producers, in particular, may also compete against Mexican farmers for a share of the U.S. market.

European Community Fruit and Vegetable Policies and Trade

This section discusses current EC trade patterns for fruits and vegetables, the existing policies, and likely consequences in the EC markets if the Dunkel Text were adopted under GATT. The topics include import access, export subsidies, internal support, effects of new EC policies on U.S.-EC trade, and phytosanitary issues.

EC Production

Spain, the Netherlands, France, and Italy are the four major EC producers and exporters of fresh fruits and vegetables. In Spain, the combination of optimal growing conditions and irrigation permits extended production of a wide variety of fruits and vegetables. Since Spain joined the European Community in 1986, the country has become the EC's primary supplier of certain fruits and vegetables: onions, garlic, dried beans, watermelons, cantaloupes, oranges, and strawberries. The Netherlands has become a major producer and exporter of greenhouse tomatoes and cucumbers.

Italy's production of fruits and vegetables occurs on small farms in the southern part of the country; key Italian crops include artichokes, tomatoes, and table grapes. France is a major producer of cauliflower, dried beans, carrots, and wine grapes. During 1990, Italy produced approximately 13 million metric tons of vegetables and 17 million tons of fruit. During the same period, Spain accounted for 11 million tons of vegetables and 14 million tons of fruit. Italy and Spain together provide over 50 percent of the EC's fruit and vegetable production.

What the Dunkel Text means for EC Fruits and Vegetables

The EC supports prices for fresh fruits and vegetables through CAP provisions. These provisions compensate producers for withdrawing selected commodities from the market during periods of surplus, and provide export rebates to encourage exports. In addition, in order to protect EC producers from low-priced imports from third countries, a reference price system is employed for apples, apricots, aubergines, pears, peaches, table grapes, lemons, tomatoes, oranges, mandarins, and cauliflower. The reference price system is separate from the EC's tariff system. Should the import price for a particular commodity on a representative EC market fall below the reference price, the importer is assessed an additional levy or countervailing duty equal to the difference between the reference price and the import price.

Export refunds to encourage exports may also be used to dispose of surplus fruit and vegetables if commodities meet set quality standards. Refunds vary seasonally and according to export destination, but are usually based on relative prices received in the EC and in third-country export markets. In an effort to increase efficiency of the fresh fruit and vegetable sectors, CAP provides funds for the development of producer marketing organizations.

Import Access

The Dunkel Text would require the EC to tariffy its border protection measures for fruits and vegetables. These include import licensing requirements, minimum import prices, and voluntary

restraint agreements. According to the Dunkel Text, the tariff equivalents for fruits and vegetables would have to be established at a detailed disaggregated level, i.e. at the six-digit level. In addition to tariffication, import access would have to be increased. For those commodities imported in small quantities, a minimum access commitment of 3 percent of domestic consumption, increasing to 5 percent, would have to be guaranteed.

The Dunkel Text calls for expanded import access to be provided on a most-favored-nation basis. This would pose problems for the EC, which has preferential trade arrangements with a number of countries on fruits and vegetables, e.g. special access for Mediterranean citrus and for bananas from former colonies. In particular, the full tariffication under the Dunkel Text poses a problem for the EC's banana import policy due to a conflicting agreement with Caribbean producers. The EC is trying to negotiate a waiver for bananas.

Export Subsidies

Export competition for fruits and vegetables is complicated by the fact that a large part of fruit and vegetable exports consists of processed products. The EC grants export refunds to producers of both fresh and processed fruits and vegetables (Table 9). According to the EC Commission, export subsidies for fresh fruits and vegetables are considerably larger than those provided for processed products.

The Dunkel Text places limits on the total value of export subsidies the EC can grant its exporters, but does not cap the total volume of exports for any particular commodity. This could allow the EC to circumvent the Dunkel limitations by choosing to offer a greater degree of support to certain commodities. In addition, the per unit export subsidy on the primary agricultural product incorporated in a processed product cannot be greater than the per unit subsidy on the processed product. However, the Dunkel Text contains no restriction on how high the export subsidy shall be set.

Table 9. EC Export Subsidies on Fresh and Processed Fruit and Vegetables

	Fresh	Processed	Fresh	Processed
	(Million ECU)		(1,000 Tons)	
1986	112.1	12.4	1,293	208.1
1987	100.7	17.2	1,174	209.0
1988	97.4	17.1	1,093	216.8
1989	102.7	15.7	1,080	186.0
1990	101.7	14.7	1,100	183.7
Avg.	102.9	15.4	1,148	200.8

Note: 1 ECU = $1.18 as of March, 1993
Source: EC Country List, March 1992.

Table 10. U.S. Exports of Horticultural Products to the EC

Year	1986	1987	1988	1989	1990	1991
			(Million Dollars)			
Fruit and Preps.	176.8	257.3	309.3	308.2	333.1	385.0
Grapefruit	34.3	47.7	62.1	62.4	42.4	61.9
Raisins	38.5	54.8	61.6	62.1	69.5	81.0
Orange Juice	11.2	17.2	26.5	27.7	32.6	28.8
Nuts and Preps.	357.3	391.7	507.7	452.7	479.7	502.2
Almonds	190.9	207.4	341.9	277.6	274.4	326.1
Vegetable and Preps.	134.5	171.1	173.1	202.0	224.7	304.3
Pulses	63.7	89.3	69.2	87.7	80.5	97.8

Source: FATUS, various issues.

Impacts of New EC policies on U.S. Trade

The impact of new EC policies on U.S. fruit and vegetable trade will depend on: (a) the size of any exemption from reducing support for fruits and vegetables allowed the EC; (b) whether the import access and export subsidy disciplines would be sufficient to guarantee the U.S. market access, even with EC production changes brought about by support at current or increased levels.

In the horticultural products category, grapefruits, orange juice, dried fruits, and nuts are the most significant U.S. exports to the EC. While this trade is influenced by seasonal supply conditions on both sides of the Atlantic, it has generally increased since 1986 (Table 10).

The United States has two unresolved fruit and vegetable trade disputes with the EC. The canned fruit dispute centered around EC subsidies to its processors of canned fruits, particularly peaches, which more than offset the higher EC peach price. This subsidy has limited U.S. canned fruit sales to the EC. Under any GATT agreement, the current import access levels would reflect this distortion. The United States has a canned fruit agreement with the EC, but the EC has not been scrupulous in applying the terms of this agreement.

A U.S.-EC dispute on citrus fruit centers on preferential access for certain Mediterranean countries. U.S. citrus exports are placed at a competitive disadvantage by these access terms, and current import access levels would again reflect the existing EC preference arrangements. The citrus dispute has not been resolved, but was essentially shelved as part of the Spanish Accession agreement.

Internal Support

If a reliable measure of internal support for fruits and vegetables cannot be calculated, it will not be possible to determine how much the EC would have to cut support from current levels in order to meet a 20 percent change from the base. An examination of producer price indices for some fruits and vegetables indicates that prices have increased consistently since 1985. These increases, coupled with an increase in production, might mean that the AMS reduction foregone would be greater than

20 percent (Table 11). Budgetary expenditures in the sector have also increased since 1986 (Table 12).

Fruit and vegetable production in the EC might expand as the result of CAP reform or new EC policies. CAP reform could cause farmers to shift part of their crop area into vegetable or fruit production because such acreage would not count as part of their arable base, and would therefore not be subject to the 15 percent set-aside requirement that will be enforced on grain and oilseed production.

The EC could use "AMS credit" it has accumulated in other sectors (because of CAP reform) to increase support to the fruit and vegetable sector. This would allow the EC to change production mixes in some member states. For example, the EC has initiated a program to convert areas under certain tobacco varieties to other production. Production of fruits, vegetables, and nuts could be promoted on this area. Fruit, nuts, and citrus fruit in particular, are produced primarily in the southern member states, and increased support to these countries is an EC goal. The EC could also use "AMS credit" to increase support for development of new horticultural production in these areas. The processing subsidies for orange juice and other processed products could also be increased.

Import Access

The EC now protects its fruit and vegetable sector by a system of *ad valorem* tariffs, which may vary seasonally and from country to country. In addition to these tariffs, a reference price system which sets minimum import prices operates to protect EC producers during their main marketing period. The minimum import prices equal the reference price, plus the full tariff. Import protection is the major tool in supporting internal EC fruit and vegetable prices. Therefore, effective disciplines on import access, such as lower rates of protection and guaranteed minimum access, could cut internal support in the absence of counteracting EC policies.

Table 11. Nominal Price Indices for EC Fruit and Vegetables

Year	1985	1986	1987	1988	1989	1990
Fruits	100	111	105	113	116	131
Fresh Fruit	100	110	103	112	115	129
Dessert Apple	100	113	96	92	109	n.a.
Dessert Pears	100	136	115	130	149	n.a.
Citrus Fruit	100	88	85	95	88	n.a.
Oranges	100	93	94	109	99	n.a.
Nuts and Dried Fruit	100	119	123	121	119	120
Nuts	100	121	123	114	102	98
Dried Fruit	100	113	123	143	168	174
Fresh Vegetables	100	100	113	115	123	137
Cabbages	100	90	101	107	116	n.a.
Tomatoes	100	106	118	127	137	n.a.
Beans (Green)	100	106	121	132	124	n.a.

Source: Eurostat.

Table 12. EC Outlays on Fruit and Vegetables in Total and as a Percentage of the Value of Production

	Total Outlays		Value of Production	Percent of Value of Production	
	Withdrawals	Internal Support		Withdrawals	Total Outlays
	(Million ECU)			(Percent)	
1986	338.0	909.0	20,940	1.6	4.3
1987	417.3	900.3	26,184	1.6	3.4
1988	169.2	643.6	28,043	0.6	2.3
1989	283.8	939.9	23,897	1.2	3.9
1990	304.4	1172.4	29,090	1.1	4.0

Note: 1 ECU = $1.18 as of March, 1993.
Source: EC Commission

Under the Dunkel Text, a single, bound tariff based on the difference between the internal and external prices would be set for each product. It is possible that the new tariff level may be higher than that currently faced by exporters during the off-season times of the year. In addition, the safeguard measures in the Dunkel Text provide flexibility for seasonal products such as fruits and vegetables. The maximum supplementary duty which can be imposed once the quantity safeguards are triggered is 30 percent of the existing duty; and once the price trigger has been tripped, the maximum supplementary duty is 52 percent of the existing duty. In effect, this flexibility could mean that seasonal protection of the fruit and vegetable sector is not eliminated by tariffication. Thus, exporters would continue to face higher tariffs for fruits and vegetables during the EC marketing seasons.

The Foreign Agricultural Service (FAS) examined the import access question for numerous commodities (Table 13). For horticultural products, FAS found that imports exceeded the 5 percent critical value established by the Dunkel Text. Thus, for these commodities, at least, the EC would not face minimum access commitments.

Table 13. EC Fruit Imports as a Percent of Consumption

	1986	1987	1988	Base 1986-88 Avg.
Fresh Fruit				
Apples	5.4	6.2	5.8	5.8
Grapes	0.2	0.3	0.5	0.3
Peaches	0.1	0.1	0.3	0.2
Pears	4.6	7.5	6.9	6.3
Lemons	5.0	3.7	3.9	4.2
Grapefruit	92.6	94.7	92.9	93.4
Oranges	15.7	17.9	16.7	16.7
Other				
FCOJ	88.7	88.4	90.8	89.3
Raisins	73.7	80.8	87.0	80.7

Source: USDA/FAS, unpublished document.

For those fruits and vegetables not subject to the minimum access commitments, the Dunkel Text establishes that current access opportunities should be no less than the average quantity imported in the 1986-88 base period. Furthermore, current access opportunities should be expanded during the implementation period. However, for those commodities where the EC has export subsidy reduction commitments, it may limit the expansion of current access.

U.S. exporters of fruits and vegetables may face higher tariffs during some times of the year, but there should be no reduction in the quantity access.

Export Subsidies

The EC has proposed aggregation of international trading categories for meeting the export subsidy reduction commitments. In its submission to the GATT, it combined fruits, vegetables, and nuts into one category. This group also included processed products such as tomatoes, whole or in pieces, prepared or preserved; cherries preserved by sugar; nut mixtures; and frozen and other orange juice. This aggregation of categories would give the EC considerable flexibility in disposing of surplus production.

The EC exports fresh and processed fruit and vegetable products. The Dunkel Text on agriculture does not dictate how the export subsidies for processed products shall be set, which could allow the EC to overcompensate producers of processed fruit and vegetable products. The EC could use its "AMS credit" to provide processing subsidies for fruit and vegetable products. These processing subsidies could fall into the internal support category, and thus not be counted in the total value of processed product export subsidies that is subject to the reduction commitment. Produce withdrawn from the market may be disposed of through processing, among other uses. Without disciplines on internal support, including cheap sales of withdrawn produce to processors, the EC may increasingly use the export market for processed products as a safety valve for dispersing surplus production.

Sanitary and Phytosanitary Measures

An agreement on sanitary and phytosanitary measures is important for the horticultural sector. The United States is currently embroiled in trade disputes involving sanitary measures for livestock products. Similar measures in the horticultural sector could impair access and lessen any expansion of U.S. product exports to the EC market.

Conclusions

Under the GATT, the EC will have to reduce its support for fruit and vegetable producers, but the exact magnitude of the change is difficult to predict (Table 14). Some of the minimum access commitments outlined by the Dunkel Text will affect the EC. In terms of export subsidies, the EC will have considerable flexibility in aligning itself with the Text, and can use its "AMS credit" to further protect fruit and vegetable producers. Nevertheless, it is possible that high-quality fruit and vegetable exports from the United States to the EC would increase, but we do not expect these increases to occur rapidly or to be very large.

EFTA Fruit and Vegetable Policies and Trade

The European Free Trade Association (EFTA) is composed of six members: Austria, Finland, Iceland, Norway, Sweden, and Switzerland. EFTA was created to be similar to the European Common Market; an economic area where trade could flow unrestricted. Because of their geographical proximity and the similarities in the economic goals of the EC and EFTA, these two economic areas are each other's largest trading partners. At least one EFTA member, Austria, is requesting EC membership, and all members are interested in creating the so-called European Economic Space (EES). Below is a discussion of the fruit and vegetable trade patterns of EFTA, followed by a discussion of the implications of a GATT accord.

Fruit and vegetable production in the EFTA nations has remained essentially unchanged during the last three years. The principal constraint on the production of fruits or vegetables in the EFTA nations is their short growing season, owing to their high northern latitude. Very modest amounts of fruit and vegetables are produced in all EFTA countries except Iceland. Austria and Switzerland lead EFTA in both fruit and vegetable production (Table 16).

The EFTA nations imported $540 million in agricultural products from the United States during 1991. Switzerland and Sweden are the largest importers of U.S. agricultural products, as well as fruits and vegetables. During 1991, EFTA imported $72 million in fruit and $42 million in vegetables from the United States. This amounts to approximately 21 percent of total U.S. agricultural exports to EFTA (Table 15).

Table 14. EC Border Policies for Selected Fruits and Vegetables, 1992

Commodity	Percent Tariff and Fees	Percent *Ad Valorem* Equivalent	Other
Potatoes		15.0	
Tomatoes	2.75	14.5	Subject to countervailing duty under certain conditions.
Lettuce	2.05	14.5	
Onions		12.0	
Cucumbers	5.60	16.0	Subject to countervailing duty under certain conditions.
Peppers		20.0	
Bananas		20.0	Subject to countervailing duty under certain conditions.
Apples	2.03	10.7	Subject to countervailing duty under certain conditions.
Oranges		15.0	
Tangerines		20.0	Subject to countervailing duty under certain conditions.
Grapes		18.0	
Strawberries	3.00	16.0	
Stone Fruit		22.0	

Source: USDA, internal document.

Table 15. U.S. Agricultural Exports to EFTA, 1991

	Total Agricultural	Fruits	Vegetables	Percent of Total
		(Million Dollars)		
Iceland	9.7	2.8	1.9	48.5
Sweden	141.4	32.2	16.8	34.7
Norway	98.1	15.6	6.7	22.7
Finland	46.8	14.4	2.9	37.0
Austria	36.7	0.6	1.1	4.6
Switzerland	207.3	6.8	12.8	9.5
EFTA	540.0	72.4	42.2	21.2

Source: FATUS, 1991.

Table 16. EFTA Fruit and Vegetable Production

	1988	1989	1990
		(1,000 Metric Tons)	
Vegetables			
Austria	474	468	510
Finland	207	208	207
Iceland	2	2	2
Norway	200	192	181
Sweden	289	277	282
Switzerland	314	307	291
EFTA	1,486	1,451	1,473
Fruits			
Austria	1,252	995	953
Finland	93	95	96
Iceland			
Norway	124	134	119
Sweden	175	209	190
Switzerland	880	649	625
EFTA	2,524	2,082	1,983

Source: FAO World Trade, 1990.

Table 17. EFTA Fruit and Vegetable Imports, 1990

	Austria	Finland	Iceland	Norway	Sweden	Switzerland
			(Million Dollars)			
Tomatoes	40.0	26.7	6.0	15.0	65.3	50.2
Oranges						
Lemons	17.2	2.5	0.2	1.9	8.0	20.0
Apples	20.2	45.2	2.4	33.9	74.2	9.0
Grapes	41.9	12.0	1.5	20.8	29.8	50.4
Raisins	7.4	4.1	0.7	6.1	11.1	6.3
Pears	14.6	6.2	0.5	10.2	27.5	14.4
Peaches	26.4	4.6	0.2	4.7	16.4	39.2

Source: FAO World Production, 1990.

The effects of the Dunkel Text on EFTA will be nearly imperceptible. Not only do the EFTA nations import most of their fruits and vegetables, but they also do not support their production (Table 17). Sweden and Finland recently abandoned their seasonal bans on apple imports after bilateral talks with the United States. Norway maintains its seasonal ban on apple imports despite a GATT ruling against it. Thus, a GATT accord will not significantly affect U.S. exports of fruit and vegetables to EFTA. In a post-GATT world, EFTA may increase its imports of U.S. fruits and vegetables, but as European producers become more efficient, they will have a shorter distance to ship their products.

Thai Fruit and Vegetable Policies and Trade

Thailand is not a signatory to the GATT, but the Thai government does recognize principles of nondiscriminatory trade practices in a bilateral treaty with the United States. With a *per capita* income of less than US$1,000 and a relatively well-developed agricultural base, Thailand is not viewed as a good potential market for U.S. products

Thailand has signed two major trade treaties: the Thailand-American Treaty of Amity and Economic Relations, and the Treaty of Friendship, Commerce, and Navigation. The latter agreement endorsed standards regarding the protection of persons, their properties, and interests. It also reaffirmed the principles of nondiscriminatory treatment in trade and shipping, and agreed to accord nondiscriminatory treatment to foreign citizens and corporations involved in commercial and industrial activities.

Thailand bases its tariff system on the Customs Cooperation Council Nomenclature (CCCN), more commonly known as the Brussels Tariff Nomenclature. Most duties are *ad valorem,* with only a few exceptions (Table 18). In many instances the Thai government publishes both *ad valorem* and specific tariff schedules, but the one yielding the highest revenue is often the one enforced. The *ad valorem* tariff calculation includes the value of the imported commodity, transportation, port duties, and royalties.

The importance of agricultural trade in Thailand's economy fell through the late 1980s. In 1985, agriculture accounted for 6 percent of total imports and 45 percent of total exports. In 1990, agriculture fell to 5 percent of imports and 23 percent of exports. Fruit and vegetable trade has shown the opposite movement.

Table 18. Border Policies of Thailand

Commodity	Policy
Fresh Vegetables	55 percent tariff or B 5.5/kg; other preferences.
Frozen Vegetables	55 percent tariff.
Citrus	66 percent tariff or B 44/kg.; other preferences.
Apples and Pears	66 percent tariff or B 44/kg.; other preferences.
Fresh Stone Fruit	66 percent tariff or B 44/kg.; other preferences.
Other Fruits	66 percent tariff or B 44/kg.; other preferences.

Source: USDA *The World Market in Fresh Fruit,* 1990.

During the 1985 to 1990 period, Thai fruit and vegetable imports rose by almost 300 percent while exports almost doubled. U.S. agricultural exports to Thailand in 1991 were valued at $287 million, of which fruit exports totaled $13 million and vegetable exports were $14 million. In 1991, U.S. imports of fruits and vegetables from Thailand totaled $221 million (Table 19). Pineapple imports totaled over $80 million, and are assessed tariffs ranging from 0.64 cents to 1.31 cents per kilogram.

Under a GATT agreement, the changes in U.S. trade with Thailand would be negligible. Thailand is not a signatory of the GATT and the value of potentially higher U.S. exports to Thailand are small compared to increased trade elsewhere. Thus, a lowering of U.S. tariffs could allow for increased pineapple imports; however, the lower tariff rates are negotiated separately with Thailand.

Indonesian Fruit and Vegetable Policies and Trade

Indonesia traditionally has been a significant market for some U.S. high-value products in spite of the relatively low *per capita* income of US$ 560 per year. In recent years, due to balance of payments problems and declining oil prices, Indonesia has imposed import restrictions on numerous high-value commodities. Also because of its great reliance on oil revenues, Indonesia is expected to increase its imports and reduce protection levels if oil prices rise.

Table 19. Agricultural Trade of Thailand

	1985	1986	1987	1988	1989	1990
			(Million Dollars)			
Imports						
Total Merchandise Trade	9,251.6	9,180.5	11,652.3	19,288.5	25,019.1	32,746.0
Agricultural Products	547.9	571.1	771.9	1,056.6	1,248.9	1,601.1
Food and Animals	235.9	260.4	33.5	455.8	518.7	624.1
Live Animals	5.7	10.9	26.1	34.5	25.7	27.7
Meat and Meat Preps.	1.2	1.3	1.7	1.9	2.9	4.0
Dairy Prods. and Eggs	81.1	80.0	96.3	129.7	128.3	163.9
Cereals and Preps.	57.4	50.7	60.1	90.5	120.4	133.7
Fruits and Vegetables	17.6	14.5	16.9	28.2	43.8	66.8
Sugar and Honey	0.7	0.8	0.8	3.7	5.1	5.6
Coffee, Tea, and Cocoa	8.1	10.0	12.3	12.7	15.9	19.4
Feedingstuffs	46.0	70.0	95.8	128.7	147.8	172.5
Misc. Food	17.9	22.4	28.4	25.8	28.7	30.4
Exports						
Total Merchandise Trade	7,122.4	8,872.1	12,987.4	15,926.6	20.056.0	22,972.0
Agricultural Products	3,202.7	3,596.0	3,949.0	5,045.5	6,010.2	5,387.8
Food and Animals	2,500.7	2,838.2	2,964.6	3,776.7	4,776.5	4,231.6
Live Animals	7.4	4.9	2.8	3.2	2.3	3.1
Meat and Meat Preps.	63.2	136.1	180.9	204.7	247.8	314.2
Dairy Prods. and Eggs	10.3	15.3	24.5	15.1	15.4	25.3
Cereals and Preps.	1,189.7	1,189.9	1,092.9	1,585.0	2,001.1	1,332.5
Fruits and Vegetables	884.8	1,047.8	1,183.6	1,337.5	1,430.6	1,520.8
Sugar and Honey	260.2	318.6	363.8	410.7	786.5	749.2
Coffee, Tea, and Cocoa	45.4	77.8	53.5	59.0	88.26	7.8
Feedingstuffs	10.7	19.3	23.8	115.8	146.2	144.2
Misc. Food	29.0	28.5	38.7	45.9	58.6	74.6

	Imports			Exports		
	1985	1986	1987	1988	1989	1990
Onions				3.7	4.7	4.8
Apples	6.6	16.0	26.8			
Grapes	0.7	0.5	0.9			
Pears	2.0	2.1	2.2			

Source: FAO Trade Yearbook, 1990.

Indonesia has been a member of the GATT, and was also active in the Tokyo round where it signed the Supplementary Protocol. Much like Thailand, Indonesia follows the CCCN in applying both specific and *ad valorem* tariffs. Duties imposed are calculated on an *ad valorem* basis but are allowed to change if world prices differ by more than 10 percent from domestic prices for a period longer than three months (Table 20).

During the mid-1980s, agriculture lay stagnant in an Indonesian economy driven primarily by oil exports. During the latter part of the 1980s, however, Indonesia's total merchandise imports doubled from $10 billion in 1980 to $20 billion in 1990. At the same time, Indonesian agricultural imports rose from $904 million to $1.6 billion (Table 21). Indonesia's primary import is grain, but fruit and vegetable imports doubled from 1985 to 1990. U.S. 1991 agricultural exports to Indonesia were valued at $298 million. U.S. fruit exports were only $6.6 million, while vegetable exports totaled $3.8 million.

Table 20. Border Policies of Indonesia, 1992

Commodity	Policy
Fresh Vegetables	66 percent tariff, 10 percent levies, licensing, and phytosanitary restrictions.
Frozen Vegetables	60 percent tariff, 10 percent levies, licensing, and labeling regulations on consumer packs.
Citrus	60 percent tariff, 10 percent levies, licensing, and phytosanitary restrictions.
Apples and Pears	60 percent tariff, 10 percent levies, licensing, and phytosanitary restrictions.
Fresh Stone Fruit	60 percent tariff, 10 percent levies, licensing, and phytosanitary restrictions.

Source: USDA, *The World Market in Fresh Fruit*, 1990.

Table 21. Agricultural Trade of Indonesia

	1985	1986	1987	1988	1989	1990
			(Million Dollars)			
Imports						
Total Merchandise Trade	10,259.1	10,718.4	12,370.3	13,248.5	16,359.6	21,837.0
Agricultural Products	903.5	934.7	1,124.0	1,319.3	1,622.2	1,591.1
Food and Animals	533.7	586.2	600.8	626.7	883.0	812.9
Live Animals	8.2	17.0	25.9	27.2	26.1	16.8
Meat and Meat Preps.	5.8	7.5	6.3	6.7	6.3	10.5
Dairy Prods. and Eggs	64.9	56.6	53.7	74.8	79.7	81.3
Cereals and Preps.	296.1	308.5	306.4	266.6	388.6	323.2
Fruits and Vegetables	23.8	33.6	31.6	66.7	43.3	59.7
Sugar and Honey	5.5	21.1	32.1	42.9	118.0	132.1
Coffee, Tea, and Cocoa	52.1	14.1	15.3	8.1	8.9	16.7
Feedingstuffs	66.8	112.3	110.1	115.0	192.1	159.5
Misc. Food	10.5	15.6	19.5	18.9	20.1	23.5
Exports						
Total Merchandise Trade	18,586.7	14,805.0	17,135.6	19,218.5	22,158.9	25.675.0
Agricultural Products	2,475.2	2,528.3	2,769.9	3,323.0	2,962.6	2,802.4
Food and Animals	1,147.0	1,439.3	1,244.2	1,337.4	1,309.5	1,317.6
Live Animals	0.8	0.1	0.6	3.2	6.8	13.8
Meat and Meat Preps.	6.6	13.2	9.0	18.1	15.8	13.8
Dairy Prods. and Eggs	0.0	0.1	1.6	5.1	9.7	16.6
Cereals and Preps.	74.1	35.6	19.3	18.0	56.4	34.6
Fruits and Vegetables	74.6	82.7	130.9	188.2	162.0	247.9
Sugar and Honey	22.5	40.0	37.9	29.7	26.7	40.5
Coffee, Tea, and Cocoa	900.9	1,190.8	963.4	981.5	921.4	840.3
Feedingstuffs	64.8	71.8	43.9	88.6	100.3	93.3
Misc. Food	2.6	5.0	7.7	4.9	10.7	17.1

	Imports			Exports		
	1985	1986	1987	1988	1989	1990
Onions	1.7	5.8	5.3			
Raisins	0.7	0.6	0.6			
Pears	0.0	0.4	0.9			

Source: FAO Trade Yearbook, 1990.

A GATT accord would have a sizable impact on Indonesian border policies. The tariff rates would be lowered, resulting in higher trade. However, the net effect for U.S. fruit and vegetable producers would be small since grain is Indonesia's primary U.S. import. Indonesian fruit and vegetable imports from the United States totaled less than $10.4 million. A successful Uruguay round would benefit the U.S. grain sector, but not necessarily fruit and vegetable producers.

Malaysian Fruit and Vegetable Policies and Trade

The Malaysian government has kept trade controls to a minimum. Nontariff barriers are not extensively used, but include licenses, anti-dumping regulations, customs and health measures; all intended to shield local producers from global competition.

Malaysia's principal trading partners include Japan, Singapore, the EC, and the United States. Malaysia is a member of the GATT and during the Tokyo round also signed the Supplementary Protocol. Malaysia uses CCCN in assessing specific and *ad valorem* tariffs which are calculated on the c.i.f. value of goods. Agricultural products, however, have specific tariff rates (Table 22).

Table 22. Border Policies of Malaysia

Commodity	Policy
Fresh Vegetables	M$9.84/ton or 5 percent tariff and 5 percent surtax
Fresh Citrus	M$661.4/ton and 0-5 percent surtax.
Grapes	M$661.4/ton and 5 percent surtax.
Apples and Pears	M$661.4/ton and 5 percent surtax.
Fresh Stone Fruit	M$661.4/ton and 5 percent surtax.
Other Fruit	M$330.7/ton-661.4/ton and 5 percent surtax.
Nuts	$0/kg.-0.22/kg. and 0-5 percent surtax.
Other Vegetables	5-30 percent tariff and 0-5 percent surtax.

Source: USDA, *The World Market in Fresh Fruit,* 1990.

The total value of all imported and exported Malaysian merchandise trade has nearly doubled in the last five years. Malaysia's principal agricultural imports are grains, sugar and honey, and fruits and vegetables. Grain imports totaled about one-fourth of Malaysian agricultural imports in 1990 (Table 23). U.S. exports of agricultural commodities to Malaysia during 1991 totaled $154 million; fruits accounted for $16 million of this amount and vegetables totaled $19 million. Primary United States exports are citrus fruits and a variety of fresh fruits. The principal vegetable exports are miscellaneous frozen vegetables and potatoes.

A successful Uruguay Round of the GATT will mean slightly lower prices for Malaysian consumers. Malaysian tariff rates are already relatively low, and further decreases in border protection will not result in greatly expanded trade. U.S. producers would see few benefits from lessened protection of Malaysian fruits and vegetables. Although Malaysian imports of fruits and vegetables have been increasing during the last five years, Malaysia remains a small importer, accounting for only a fraction of the U.S. export market.

Brazilian Fruit and Vegetable Policies and Trade

Brazil is the world's largest exporter of processed citrus. Production has shown unprecedented growth in the last decade, with almost all of the increase coming from production of bulk frozen concentrated orange juice (FCOJ). Unlike the U.S. orange juice industry producers, Brazil is heavily dependent on export trade. In 1990, most Brazilian orange juice was exported.

Brazil's large citrus production is achieved by about 5,000 small, owner-operated groves. While the government of Brazil is not directly involved in transactions, its subsidy programs, export licensing, credit programs, and various tax incentives have considerable impact on the citrus industry.

Table 23. Agricultural Trade of Malaysia

	1985	1986	1987	1988	1989	1990
			(Million Dollars)			
Imports						
Total Merchandise Trade	12,261.6	10,822.2	12,675.5	16,551.0	22,469.1	29,252.2
Agricultural Products	1,456.9	1,300.2	1,488.1	1,852.9	2,068.5	2,131.2
Food and Animals	1,131.3	1,020.5	1,054.4	1,325.8	1,490.2	1,509.2
Live Animals	15.7	16.0	17.0	22.0	24.4	28.4
Meat and Meat Preps	72.8	65.3	71.1	74.9	81.7	98.8
Dairy Prods. and Eggs	98.0	97.8	114.7	172.4	200.9	193.2
Cereals and Preps.	394.3	290.6	306.3	454.7	523.2	509.7
Fruits and Vegetables	216.0	202.0	202.9	225.5	230.7	227.9
Sugar and Honey	133.9	140.7	139.8	174.6	206.1	231.3
Coffee, Tea, and Cocoa	61.5	57.3	47.0	54.0	52.8	52.0
Feedingstuffs	72.8	83.7	86.8	95.7	117.6	108.3
Misc. Food	66.3	67.3	68.7	52.9	53.6	60.5
Exports						
Total Merchandise Trade	15,314.6	13,845.5	17,916.8	21,110.0	25,053.0	29,410.9
Agricultural Products	3,717.9	3,305.0	4,082.7	5,181.9	4,636.7	4,013.2
Food and Animals	570.2	630.4	805.2	897.2	922.3	932.7
Live Animals	24.4	35.9	63.0	92.3	112.9	119.4
Meat and Meat Preps.	5.5	3.5	8.7	9.5	10.6	10.4
Dairy Prods. and Eggs	16.8	17.8	25.6	37.0	39.4	51.3
Cereals and Preps.	32.3	19.6	25.1	43.4	43.3	40.2
Fruits and Vegetables	89.2	81.0	98.9	116.0	129.9	135.7
Sugar and Honey	18.9	29.9	43.8	43.5	84.4	98.0
Coffee, Tea, and Cocoa	286.6	322.8	416.8	418.2	342.0	318.1
Feedingstuffs	59.2	75.0	67.8	83.6	101.9	101.9
Misc. Food	37.3	45.1	55.5	54.5	59.7	59.6

	Imports			Exports		
	1985	1986	1987	1988	1989	1990
Onions	32.2	35.3	31.5			
Oranges	27.7	28.6	26			
Lemons				0.4	0.4	0.4
Apples	21.1	15.2	17			
Grapes	5.4	8.4	8			
Raisins	2.0	2.0	2.1			
Pears	8.6	6.3	5.3			

Source: FAO Trade Yearbook, 1990.

Producers are eligible for subsidized credit to finance production expenses, while processors can receive subsidized credit to finance investment in new processing equipment.

Brazil establishes minimum reference prices for fresh citrus exports and for unharvested oranges destined for FCOJ exports. The reference price serves as a price floor paid by the processor to the fruit grower. The price, usually established in May or June, is then fixed for the entire season.

Brazilian Trade

U.S. agricultural trade with Brazil has shown tremendous growth during the last decade. In 1991, the United States imported $1.3 billion worth of agricultural products from Brazil. The imports of primary interest include melons, palm hearts, and guava and mango paste. The United States is Brazil's largest single customer for orange, lemon, and grape juice. In 1990, juice trade accounted for about one-third of Brazil's agricultural exports to the United States. Brazil imported about $254 million in agricultural commodities during 1991, of which 11 percent was in fruits and vegetables (Table 24).

Brazil's strong economic growth from 1985 to 1990 is reflected in its trade with other nations. The value of total merchandise traded by Brazil in 1985 totaled $39.9 billion, and had risen to $51.1 billion in 1990. Also in 1990, total merchandise imports accounted for $20.4 billion, while exports totaled $31.4 billion (Table 25). Agricultural imports and exports are significant in this growing economy. Almost 10 percent of total Brazilian imports are agricultural. The primary imported commodities are fruits, vegetables, grains, and meats. Brazil's main fruit imports are apples, grapes, raisins, and pears, most of which are purchased from Chile. Not surprisingly, oranges and lemons are the primary exports to the United States and Europe. Agricultural export trade totaled $8.9 billion in 1990, about one-fourth of total exports. Brazil's primary exports are fruits, vegetables, coffee, tea and cocoa, feed, and meat.

Table 24. United States-Brazil Fruit and Vegetable Trade

	1990	1991
	(1,000 Dollars)	
U.S. Imports from Brazil		
Fresh Melons	548	925
Guava/Mango Paste	1,379	2,374
Juices incl. Orange, Lime, Lemon, and Grape	538,448	250,208
Palm Hearts	5,078	3,691
Cashew Nuts	83,551	91,466
Total Fruit and Vegetables	652,091	368,101
Total Agricultural Imports	1,552,299	1,286,529
U.S. Exports to Brazil		
Apples	1,754	230
Pears	2,254	1,127
Dried Potatoes	133	777
Total Fruit and Vegetables	23,820	29,352
Total Agricultural Exports	175,313	253,946

Source: USDA/FAS Trade Database

Policies

Government intervention in Brazil's economy has also influenced its agricultural sector. Brazil has been plagued by severe external debt obligations along with other domestic economic woes. In 1985, a civilian government took over in Brazil. Much like many other Latin American nations, the agricultural sector led Brazil's economy in terms of growth due to the large volume of agricultural exports. The Brazilian government has instituted programs to encourage the production of import-substituting and export crops.

Table 25. Agricultural Trade of Brazil

	1985	1986	1987	1988	1989	1990
			(Million Dollars)			
Imports						
Total Merchandise Trade	14,346.5	15,554.6	16,578.6	16,047.0	18,263.0	20,363.0
Agricultural Products	1,365.6	2,467.4	1,437.1	1,047.5	2,220.8	2,092.9
Food and Animals	1,070.3	1,997.3	1,036.6	552.2	1,582.0	1,533.0
Live Animals	11.8	15.2	25.7	22.9	82.1	116.6
Meat and Meat Preps.	41.0	469.4	190.0	20.1	348.0	332.2
Dairy Prods. and Eggs	24.7	284.0	114.1	21.9	335.9	158.8
Cereals and Preps	864.7	967.4	495.6	297.2	533.4	648.4
Fruits and Vegetables	120.5	247.6	197.8	176.5	268.0	261.7
Sugar and Honey	1.2	2.6	2.6	2.5	3.5	2.7
Coffee, Tea, and Cocoa	3.3	4.2	5.5	6.3	6.6	5.4
Feedingstuffs	1.9	5.4	4.2	3.8	3.5	6.2
Misc. Food	1.4	1.6	1.1	1.0	1.0	1.0
Exports						
Total Merchandise Trade	25,639.0	22,349.0	26,225.0	33,783.0	34,383.0	31,390.0
Agricultural Products	9,422.0	7,652.8	8,540.1	9,886.3	9,525.6	8,880.7
Food and Animals	7,172.3	6,614.4	6,825.5	7,980.4	7,003.0	6,514.8
Live Animals	1.4	1.9	2.2	4.6	3.5	3.5
Meat and Meat Preps.	844.4	679.0	727.8	966.9	667.1	635.3
Dairy Prods. and Eggs	2.0	3.1	3.2	5.3	3.8	3.7
Cereals and Preps.	16.4	8.7	9.6	15.2	10.2	7.8
Fruits and Vegetables	1,000.7	925.7	1,088.3	1,424.4	1,311.6	1,767.7
Sugar and Honey	426.5	467.4	402.8	425.3	388.8	584.7
Coffee, Tea, and Cocoa	3,555.7	3,131.4	2,951.9	2,905.3	2,288.2	1,705.8
Feedingstuffs	1,302.6	1,361.1	1,592.7	2,187.4	2,315.0	1,784.8
Misc. Food	22.8	36.1	47.2	46.1	14.8	21.5

	Imports			Exports		
	1985	1986	1987	1988	1989	1990
Oranges				18.2	19.3	19.7
Lemons				1.0	1.1	1.0
Apples	32.0	50.0	45.0			
Grapes	5.0	13.2	16.5			
Raisins	7.0	14.5	7.6			
Pears	21.1	32.0	32.0			

Source: FAO Trade Yearbook, 1990

Agriculture is an important sector in the Brazilian economy, accounting for 10 percent of GDP, employing one-quarter of the labor force, and contributing over one-third of total export earnings. Through the turbulent 1980s, Brazil did not follow any consistent agricultural policy; instead it focused on short-term production goals of self-sufficiency. To achieve these goals, the government of Brazil has attempted a subsidized credit program and a minimum price program. Minimum prices and loan rates are established each year on a commodity-by-commodity basis to attain predetermined production levels. The credit program provides financing for production, marketing, and other investment activities. The minimum price program covering about 30 commodities works in a similar fashion to the U.S. nonrecourse loan program.

Brazil's trade policies have both supported and taxed producers. The government has the authority to regulate trade flow through outright import bans and licensing requirements. A value-added tax is assessed on all agricultural commodities at the state level, regardless of their final destination.

Since 1987, agricultural support in Brazil has declined. Fiscal problems have led to cutbacks in the subsidized credit and price support programs. A new economic plan (Collor Plan) portends changes in Brazil's agricultural sector. The plan calls for numerous market-oriented policies, rather than government dictated goals, and includes a move to floating exchange rates, removal of nontariff barriers (including state licensing), and new farm income taxes. In 1990, Brazil's currency was 30 to 50 percent overvalued. A shift to the floating exchange rate mechanism will stimulate the export sectors.

GATT Implications

For Brazil, the implications of a GATT agreement will be twofold: (a) increased demand from countries (primarily the United States) which protect their imports of Brazilian fruit juices; and (b) little increase in U.S. exports to Brazil over the pre-GATT levels. The United States is Brazil's largest market for fruit juices, while Brazil is only a small importer of U.S. fruits and vegetables. A GATT accord could result in increased competition for U.S. juice producers who presently enjoy seasonal tariffs. The effects on U.S. consumers would probably not be measurable.

Chilean Fruit and Vegetable Policies and Trade

Over the last 25 years, Chile's economic policy goals have changed dramatically. Both the public and private sectors have been buffeted by shifting domestic policies as well as by shocks from the international economy. As a result, agriculture has undergone some profound changes.

Chile's trade barriers established a wall of protection behind which the government maintained support for domestic production. The government-established *ad valorem* tariff represents an important component of internal protection. The tariff, which was levied on all imports, ranged from 10 to 35 percent between 1982 and 1987. The current tariff level is 11 percent, with some additional phytosanitary restrictions. The government also uses variable surcharges to ensure that Chileans cannot obtain foreign commodities at a lower price than those produced domestically.

Chilean fruit and vegetable producers benefit from some generous government programs. An irrigation law enacted in 1986 allows producers a seven-year deferment on tariff payments for imported capital equipment valued over $5,000 and used in production of export commodities. Chile has made use of a crawling peg system of currency devaluation explicitly to promote exports. This system was first introduced in 1985 during restructuring of Chile's economic policy. The policy was

aimed at reducing reliance on foreign sources of finance by stimulating private investment in export commodities production.

Chile's economy has grown at a remarkable rate during the last seven years. All sectors of the Chilean economy, with the exception of the mining sector, have shown increases. Exports during the first part of 1992 were up by 9.2 percent over 1991, and imports were up by more than 21 percent over the same period one year ago. The United States and Japan are the principal buyers of Chile's exports, while the United States also supplies one-fifth of Chile's imports. The principal U.S. imports from Chile are fruits and vegetables, fish and preparations, and copper; Japan follows a similar pattern (Table 27). The United States and Japan export chemicals, machinery, transportation equipment (like aircraft and railway vehicles), and scientific instruments to Chile.

The President of Chile, Mr. Aylwin, obtained a commitment from then-President Bush that free trade negotiations between the United States and Chile would commence once the NAFTA talks were complete. An interesting note regarding Chilean international trade involves Mexico. Exports to Mexico totaled $30 million in the first four months of 1992, 120 percent higher than in 1991. This significant expansion of Chile-Mexico trade is a direct result of their 1991 agreement to lower trade barriers. Our impression is that both Chile and Mexico stand to gain from this pact, but the largest potential gain will come from a NAFTA agreement: easy access for Chile into the U.S. market via Mexico.

Much like the United States, Chile's economy suffered through a recession during the early 1980s. Chile's debt problem became critical as the price of copper, its principal export, fell on the world market. As a result of this recession, the government of Chile intervened by regulating trade

Table 26. United States-Chile Fruit and Vegetable Trade

	1990	1991
	(1,000 Dollars)	
Imports from Chile		
Cucumber Seeds	624	1,791
Squash Seeds	998	868
Tomato Seeds	1,641	2,398
Cantaloupe Seeds	1,259	2,197
Watermelon Seeds	1,243	1,287
Total Fruit and Vegetable Seeds	7,900	11,359
Grapes	260,561	198,725
Apples	7,146	8,055
Pears	8,428	9,098
Apricots	611	754
Cherries	1,650	1,412
Peaches	31,532	32,681
Plums	14,632	15,006
Avocados	17,969	15,974
Fresh Raspberries	3,254	1,692
Gooseberries	612	2,417
Frozen Raspberries	1,630	1,827
Raisins	4,294	6,660
Dried Apples	1,160	1,134
Grape Juice	1,588	1,725
Apple Juice	11,961	39,370
Pear Juice	246	1,870
Mandarin Juice	908	1,100
Garlic	1,760	2,317
Onions	1,045	563
Asparagus	1,969	1,622
Prepared Tomatoes	7,384	6,081
Tomato Paste/Puree	18,000	9,000
Total Agricultural Imports	479,504	443,073
Exports to Chile		
Total Fruit and Vegetables	2,680	3,405
Total Agricultural Exports	61,945	69,737

Source: USDA/FAS Trade Database.

Table 27. Agricultural Trade of Chile

	1985	1986	1987	1988	1989	1990
			(Million Dollars)			
Imports						
Total Merchandise Trade	3,007.0	3,157.0	4,023.0	4,924.0	6,734.0	7,272.0
Agricultural Products	265.0	189.0	233.0	298.0	298.0	356.0
Food and Animals	157.0	110.0	139.0	193.0	177.0	222.0
Live Animals	1.2	1.4	2.2	2.0	2.0	2.1
Meat and Meat Preps.	8.0	4.5	3.8	5.6	7.6	6.7
Dairy Prods. and Eggs	5.4	0.8	17.3	26.2	30.9	21.5
Cereals and Preps.	72.2	36.4	31.5	55.3	31.2	45.3
Fruits and Vegetables	12.5	13.7	17.2	20.2	23.1	24.1
Sugar and Honey	2.3	4.3	7.5	15.9	13.8	53.6
Coffee, Tea, and Cocoa	39.5	34.9	38.1	43.5	43.1	42.0
Feedingstuffs	8.0	9.3	15.0	17.7	13.2	17.4
Misc. Food	7.2	4.6	6.5	6.5	12.4	9.3
Exports						
Total Merchandise Trade	3,823.0	4,222.0	5,102.0	7,048.0	8,193.0	8,580.0
Agricultural Products	546.8	734.4	807.5	943.0	1,025.1	1,279.6
Food and Animals	468.1	641.8	694.1	801.4	865.4	1,105.6
Live Animals	1.6	2.1	7.1	3.7	3.4	5.2
Meat and Meat Preps.	3.2	9.0	5.0	11.5	12.6	19.0
Dairy Prods. and Eggs	1.3	7.3	7.7	3.5	2.8	5.6
Cereals and Preps.	10.5	9.1	18.9	21.6	47.3	34.2
Fruits and Vegetables	436.0	588.1	627.2	724.7	758.0	100.2
Sugar and Honey	2.3	3.0	3.8	6.3	5.1	7.5
Coffee, Tea, and Cocoa	0.4	4.7	6.8	7.7	9.0	14.3
Feedingstuffs	12.4	16.3	13.2	16.5	19.8	15.4
Misc. Food	0.4	2.1	4.4	5.9	5.5	4.3

	Imports			Exports		
	1985	1986	1987	1988	1989	1990
Onions				9.4	8.4	12.6
Lemons				0.7	1.1	0.7
Apples				128.5	110.4	131.3
Grapes				315.1	282.1	379.3
Raisins				9.4	17.9	25.9
Pears				28.4	33.9	45.3
Peaches				39.7	40.4	55.1

Source: FAO Trade Yearbook, 1990.

and fostering growth through loans and debt restructuring. The agricultural and manufacturing sectors have led Chilean growth to high levels. The primary government strategy to reduce imports of agricultural goods was the imposition of a 10 to 35 percent tariff. As imports fell (by 65 percent from 1982 to 1987), agricultural production expanded, particularly for those commodities sold as exports.

Between 1987 and 1990, Chilean agricultural output increased by an average of 4.5 percent per year. During 1991, this rate fell to 1.2 percent. Two primary reasons were a world economic slowdown, particularly in the United States and Japan, and an extremely rainy six months in early 1991, which resulted in substantial agricultural losses.

To combat its recession, the government of Chile focused sharply on the expansion of exports and the support of import-substitution commodities. The goals were to reduce unemployment and minimize food imports. The plan called for control of exchange rate fluctuations, and direct support to producers via price support and border policies. Chile's government does not provide direct input subsidies, but does invest heavily in infrastructure improvements.

Price Support

In 1982, sugar was the first commodity covered under the umbrella of Chile's price support mechanism. IANSA, the government sugar agency, was created with the goal of achieving self-sufficiency in five years. IANSA contracts for sugar and guarantees a minimum price. In 1983, grain and rice were covered under another price support program operated by COPAGRO (a government subsidized cooperative). The cooperative worked well until 1986 when the c.i.f. price of corn fell below the support price and bankrupted COPAGRO. A minimum price mechanism is in place for wheat, sugar, and rapeseed oil.

A variable surtax is another price support strategy used by Chile's government. Many of the major agricultural commodities are protected by a tariff, but for others, the government can assess a variable surtax in order to ensure that the government-mandated minimum price remains at least equal to the import price.

Border Policies

A uniform *ad valorem* tariff is the principal protection strategy used by the Chilean government. The tariff is levied on all imports and has ranged from 10 to 35 percent. Currently, the tariff level on all commodities stands at 11 percent. In addition to the tariff, the variable surcharge ensures that domestic importers cannot obtain foreign commodities at lower prices than those produced domestically.

Other Government Involvement

Chile's government has a heavy investment in the country's infrastructure. For example, storage, refrigeration, and inspection services for exported fruit were implemented by the government. In 1986, the government started a program where 75 percent of the costs for irrigation and drainage projects would be subsidized. Many of the government's infrastructure investments were financed by a 20 percent value-added tax levied on all domestically produced and imported products. More recently, VAT rebates and exemptions have been granted for some commodities. The exact details of these exemptions are not known, but fruit producers are penalized less than producers of other domestic commodities.

Foreign Exchange Policies

The wide fluctuations in the exchange rates during the early 1980s implicitly taxed and subsidized the Chilean agricultural sector. Under the crawling peg exchange rate policy begun in 1985, Chile's agricultural trade has moved from $193 million in 1982 to $1 billion in 1990.

Policy Intervention in Agriculture

Policy intervention in Chile occurs directly and indirectly. Indirect intervention involves exchange rate adjustments, marketing board support, and infrastructure investment. More detailed supports include tariffs and the commodity surtax. A look at the PSEs reveals some interesting patterns. Export crops such as apples, grapes, and potatoes receive much less government support than imported commodities. The levels of support for wheat, corn, and sugar are a clear indication of the government's goal of achieving self-sufficiency in these commodities. The aggregate PSE levels have been falling since 1985 as production and exports of targeted commodities have increased.

Fruit producers in Chile are organized into an agency called Fedefruta. They seek to improve quality certification requirements on fruit exports with the goal of increasing fruit prices. Fruit exporters currently have a uniform system of quality control, but producers accuse exporters of unfair play. A recent study by Fedefruta claims that $2.37 billion worth of fruit was exported in 1990/91, but producers received only $37 million.

Chile's fruit sector has led the growth in exports during the last five years and has posed a significant threat to U.S. producers (Table 26). Chile's enormous potential emerged in the limelight with the Chilean grape scare of the mid-1980s. Presently, Chile is a major player in the export of apples ($131 million in 1990), grapes ($379 million in 1990), pears, and peaches (Table 27). For those wondering which will be the next Chilean crop to hit the world market with a flurry, berries fit

the pattern. Based on the 400 percent increase in acreage devoted to berry production in Chile from 1988 to 1991, a strong Chilean supply is expected during the next few years. During the 1991/92 season, fresh raspberry exports totaled 962,000 boxes, 14 percent lower than the previous year. Blackberry exports, on the other hand, rose by 294 percent and blueberries by 51 percent during the same period.

Agricultural Outlook

Chilean policymakers face some problems in the next decade. First, Chile's economy has become heavily reliant on fruit exports for its positive balance of trade and its debt payment. Without careful diversification into other export commodities, Chile could suffer a serious economic blow if it loses some of its markets. This happened with copper, which caused Chile's recession in the early 1980s. The second difficulty facing Chile is its large foreign debt which costs about 20 percent of GDP to service. A third potential problem could arise from the heavily subsidized commodities becoming overly reliant on taxpayer support. Nevertheless, Chile's future looks bright, particularly as the GATT negotiations progress toward liberalized trade; a freer trading environment will benefit efficient Chilean fruit producers.

Colombian Fruit and Vegetable Policy and Trade

The performance of the Colombian economy is closely tied to the coffee market. While the agricultural sector accounts for slightly more than 20 percent of Colombia's gross domestic product, coffee alone provides over 35 percent of foreign exchange earnings. High coffee prices from 1977 to 1979 gave Colombia an opportunity to build up its exchange reserves.

Policies

The professed policy goals of the Colombian government for the agricultural sector have been to:

- encourage the growth of real income by reducing production costs and increasing competitiveness of domestic production relative to imports;
- ensure an adequate supply of food through the development of agricultural market channels; and
- promote agricultural exports.

Colombian policymakers used market protection and trade restrictions in an effort to offset increasing external imbalances at the beginning of the 1980s. For a long period of time, the government had employed a wide array of policies like tariffs, quotas, licensing, foreign exchange restrictions, and outright import bans as a way of protecting domestic agriculture from foreign competition. Tariffs on consumer goods typically averaged 50 percent, while raw materials and capital equipment faced tariff rates of 20 percent. However, after 1984, the government strengthened its resolve to promote export-led growth. Restrictions on import licenses were reduced, and tariff rates were reduced or eliminated. Colombia's second largest agricultural export crop is bananas. Banana producers receive export assistance through tax rebates. A large variety of tropical products are grown in Colombia because of the mild climate and reasonable soils.

Colombia's Trade

Colombia's trade level has grown for almost five years. Total merchandise trade was $7.6 billion in 1985 and $12.2 billion in 1990 (Table 29). Agricultural imports fell from $410 million in 1985 to $367 million in 1990. Colombia's major imports are live animals and grains; fruits and vegetables trail as a distant third. Colombia's total merchandise exports, on the other hand, have almost doubled in the 1985 to 1990 period; agriculture's share declined from 64 percent in 1985 to 36

percent in 1990. The major export categories include fruits and vegetables, coffee, tea, cocoa, and some meats. U.S.-Colombian bilateral trade totaled almost one billion dollars in 1991 (Table 28). The United States imported $787 million in agricultural products during the same period with $117 million in exports to Colombia. Fresh fruit imports from Colombia accounted for one-half of Colombia's fresh fruit and vegetable trade with the United States during 1991. The United States is the largest purchaser of Colombia's bananas and plantains. As can be seen in following tables, U.S. fruit and vegetable exports to Colombia were small. Within the fruit and vegetable category, apples were the single largest component of Colombia's imports from the United States, worth $1.5 million during 1991.

Through the 1980s, the government of Colombia relied on two policy instruments to correct its growing balance of payments deficit: currency devaluations and import controls. The agricultural policy goals of Colombia are achieved through private organizations like coffee and sugar producer groups which are involved with the government in setting producer prices. International organizations and memberships like the International Coffee Organization (ICO) and the GATT are used to promote liberalization of agricultural trade policies. Finally, government agencies like the Agricultural Marketing Institute (IDEMA) set prices, import basic foodstuffs, and maintain buffer stocks.

Effects of GATT

The domestic price policies are supported by border controls. IDEMA has price support programs for rice, sesame, barley, edible beans, corn, sorghum, soybeans, wheat, and cotton. No domestic price support mechanism exists for Colombian fruits and vegetables. Farmers producing fruit and vegetable crops destined for export are aided by low-interest government loans and some tax incentives. Most Colombian fruit and vegetable imports are subject to a 15 percent tariff. The

Table 28. United States-Colombia Fruit and Vegetable Trade

	1990	1991
	(1,000 Dollars)	
Imports from Columbia		
Bananas	105,159	136,207
Plantains	24,026	30,672
Strawberries	1,973	1,175
Total Fresh Fruit	131,751	168,254
Fruit and Vegetable Juices	1,357	3,669
Yams	3,058	1,494
Peppers	1,726	911
Total Fruit and Vegetables	339,894	379,876
Total Agricultural Imports	789,739	786,756
Exports to Colombia		
Deciduous Fresh Fruits	2,144	2,156
Apples	2,055	1,528
Dried Vegetables	250	700
Total Fruit and Vegetables	13,328	6,886
Total Agricultural Exports	116,276	116,981

Source: USDA/FAS Trade Database

Table 29. Agricultural Trade of Colombia

	1985	1986	1987	1988	1989	1990
			(Million Dollars)			
Imports						
Total Merchandise Trade	4,130.7	3,852.1	4,228.0	5,005.3	5,010.5	5,588.6
Agricultural Products	409.9	343.8	354.7	447.3	340.9	367.4
Food and Animals	228.8	202.9	196.5	252.2	213.7	233.2
Live Animals	7.0	3.6	4.9	5.9	14.9	4.0
Meat and Meat Preps.	2.2	1.9	2.0	2.3	1.5	1.4
Dairy Prods. and Eggs	5.7	6.5	4.8	12.7	6.8	3.2
Cereals and Preps.	156.0	128.4	108.6	143.9	133.2	154.2
Fruits and Vegetables	26.8	35.8	47.5	53.0	35.2	46.5
Sugar and Honey	2.1	2.5	2.7	3.4	2.7	2.7
Coffee, Tea, and Cocoa	9.4	6.9	5.6	8.7	4.4	4.4
Feedingstuffs	11.5	8.1	11.0	14.3	7.1	8.3
Misc. Food	8.1	9.3	9.5	8.0	8.0	8.4
Exports						
Total Merchandise Trade	3,551.9	5,107.9	5,024.4	5,026.2	5,739.4	6,741.5
Agricultural Products	2,269.1	3,594.6	22,473.8	2,379.4	2,329.6	2,385.5
Food and Animals	2,047.9	3,371.8	2,028.8	2,099.1	2,040.3	2,066.2
Live Animals	1.3	0.9	0.6	0.4	0.2	0.5
Meat and Meat Preps.	6.3	17.9	23.6	8.7	16.9	17.1
Dairy Prods. and Eggs	0.0	0.0	0.0	0.5	0.0	0.9
Cereals and Preps.	18.2	7.3	6.2	6.8	21.0	28.1
Fruits and Vegetables	164.7	216.1	232.2	281.4	288.6	361.4
Sugar and Honey	43.4	50.9	29.4	66.5	109.0	149.4
Coffee, Tea, and Cocoa	1,812.3	3,075.5	1,733.5	1,732.0	1,600.9	1,500.1
Feedingstuffs	0.5	0.9	0.6	0.2	0.4	1.0
Misc. Food	1.3	2.3	2.8	2.6	3.3	7.6

	Imports			Exports		
	1985	1986	1987	1988	1989	1990
Apples	15.7	10.6	10.1			
Raisins	1.7	1.8	2.1			
Peaches	0.7	0.8	1.1			

Source: FAO Trade Yearbook, 1990.

United States currently has no tariffs on Colombian fruit and vegetable imports. Some restrictions on Colombian imports are considered NTBs, and all Colombian fruit is checked for possible Mediterranean fruit fly contamination. The approval of a new GATT treaty will have significant effects on Colombian production of "protected" commodities such as grains, beans, and cotton. A GATT agreement, however, will have a small impact on U.S. fruit and vegetable producers because it currently has no tariffs on fruit and vegetable imports from Colombia.

Part II
MARKET OPPORTUNITIES FOR U.S. FRUIT AND VEGETABLE EXPORTERS

Introduction

This section provides an assessment of likely future market opportunities for U.S. fruit and vegetable exports to the EC, EFTA, and Asia. From the U.S. perspective, Asia is by far the most important of these three regions with Japan and Hong Kong emerging as key Asian markets. Asia accounts for 41 percent of U.S. fruit exports and 29 percent of vegetable exports. For the EC, the corresponding export shares are 16 percent and 12 percent, and for EFTA, the shares are 3 percent of the U.S. fruit exports and 2 percent of the vegetables. The prospects for U.S. producers of fresh fruit and vegetables in a post-GATT environment are good in some markets. This is a possible scenario for the development of U.S. fruit and vegetable markets in Asia, Europe, and South America.

GATT and Dunkel Text Implications

The effects of a GATT agreement on fruit and vegetable trade will vary among commodities and among specific countries or regions. GATT reform will have a greater effect on importing countries with higher rates of border protection (such as Thailand and Indonesia) than on importers with low rates of protection on imports (such as the United States) or exports. The importers will benefit from lower consumer prices and higher volumes traded. Exporters such as Chile, Brazil, and Colombia will enjoy greater benefits from a GATT accord in the form of expanded trade, since they have low rates of protection on imports and are net exporters of fruit and vegetables. The EC has some protection on fruits and vegetables, but also supports the export of fruit and vegetables through subsidies, phytosanitary restrictions, and preferential agreements with former colonies; and will thus

experience some changes under the Uruguay round. The United States has relatively low border protection levels, many of which are only applied seasonally. Changes in border policies as a result of GATT will, for the most part, lead to higher volumes of trade in fruits and vegetables. If the current GATT round is unsuccessful, regional trading blocs may develop, with net effects similar to those under a GATT agreement. The strong movement toward trading blocs is evident in NAFTA, an Asian common market, a North-South American bloc, and an EC-EFTA trading region.

The strong recent growth in U.S. exports of fruit and vegetables has been due to an opening up of foreign markets and reductions of nontariff barriers. A GATT agreement will provide additional opportunities for U.S. producers. Increases of around 5 percent in the value of U.S. fruit and vegetable trade would be likely to result from a GATT agreement. New markets, particularly for apples, pears, nuts, and grapefruits would be expected to open in many developing countries that have been closed by import bans or restrictive licensing arrangements. In important markets such as Japan, Taiwan, and Korea, U.S. fresh oranges, table grapes, wine, and other products would enjoy reduced tariffs.

U.S. producers of fresh fruits and vegetables already feel competitive pressure from South America, particularly Chile. As a consequence of the NAFTA, they will face increased competition from Mexican farmers for a share of the North American market.

The Asian Market

The greatest market growth potential for U.S. fruit and vegetable producers lies in Asia. It is not only the largest market, but also the only market where we expect significant policy reform combined with meaningful income growth.

The United States is a net importer of fruits and vegetables, so it does not have a revealed comparative advantage in these commodities. The future competitiveness of the U.S. *vis a vis* its principal competitors in the Japanese and Hong Kong markets for fruits and vegetables depends on several critical factors. These include the following:

- income growth and changing tastes in importing countries
- the extent of any lowering of existing import trade barriers
- changing U.S. government policies (e.g. water subsidies in California)
- technical change (e.g. increased shelf life of products, improved transportation technology)
- cost of production in third countries (i.e. People's Republic of China (PRC), Australia, and New Zealand)
- changes in policies under the GATT in importing and exporting countries.

We implicitly include each of these factors in our assessment of future market potential.

U.S. agricultural exports to Asia consist mainly of fresh fruits, rather than vegetables. Both Japan and Hong Kong have been growing export markets for U.S. fruits and vegetables. While Japan tends towards protectionism, Hong Kong is an open market. Japan's trade barriers include quotas, tariffs, import licensing, and phytosanitary regulations.

Rapid increases in per capita incomes and a growing affinity for western foods create potential for continued export growth in Asia. However, export growth is constrained by existing trade barriers (see Section I for details) and by third country competitors, such as the PRC, Australia, and New Zealand. For example, the PRC and the United States compete head-on in the Hong Kong market for fruits and vegetables. Hong Kong purchases 20 percent of U.S. fruit and vegetable exports, importing approximately $700 million per annum from the United States. Hong Kong is the third largest market for U.S. oranges and the fourth largest for grapes. It is among the top four importers of U.S. prunes and plums, melons, tomatoes, cabbages, celery, lettuce, peppers, apples,

cherries, and onions. Over the past 20 years the U.S. share of the Hong Kong market has been increasing, but we expect this trend to reverse.

U.S. Department of Agriculture reports (*Situation and Outlook Reports*) on the PRC have identified significant increases in fruit and vegetable production in recent years. Research work conducted at the South China Agriculture University in Guangzhou indicates that some PRC fruit and vegetable products have favorable potential for future export growth. The inferior marketing structure in the PRC affects its current ability to export agricultural products to quality conscious markets such as Hong Kong. This may change with the continuation of PRC economic reforms (especially in Guangdong province in southern China).

The Hong Kong transfer agreement between Britain and China, called the "Basic Law", was officially adopted in April 1990. If China adheres to this agreement, American farmers certainly will not lose the Hong Kong market overnight. Even under the agreement, however, they could still lose market share to the PRC if farmers there are given incentives to improve the quality of their fruits and vegetables in order to compete with the United States as a supplier to Hong Kong. Mainland China is only a short distance from the Hong Kong food markets. If the Chinese can improve the quality of their products, it is then likely they could match the demand in Hong Kong at a price below that at which American products are currently supplied. This may happen in China if the economic reforms which began in 1979 are continued, and there is every reason to believe they are being continued—especially in southern China. Unfortunately there is insufficient information on whether China will be able to export high quality food to Hong Kong. From China's standpoint, there should not be large agronomic problems that would prevent a significant expansion in production. The biggest hurdles are proper incentives and an adequate infrastructure.

After 1997, it may actually be Hong Kong entrepreneurs themselves who develop higher quality Chinese food products for sale in Hong Kong, and elsewhere in the Pacific Rim. They would employ mainland Chinese farmers, if given approval from the central government in Beijing or perhaps even the provincial government in Guangdong. Another distinct possibility is the development of food processing on the mainland by Hong Kong firms. In fact, at the present time there are an estimated 2 million light manufacturing workers on mainland China working for Hong Kong bosses. This is over twice the size of the work force in Hong Kong.

It would not be too surprising if Beijing chose to ignore certain details of the "Basic Law" and decided to prohibit the importation of high-valued foods from the United States. The judicious use of foreign exchange controls to tax or subsidize particular commodities has worked wonders for other Asian nations (e.g. Korea). Rather than spend hard currency to air-freight fruits and vegetables from California, the Beijing government may decide to supply Hong Kong consumers with Chinese fruits and vegetables.

How much of this market growth will the U.S. producer enjoy? The principal conclusion is that the U.S. fruit and vegetable market share in Japan and Hong Kong is vulnerable to export competition from Australia, New Zealand, and PRC.

EC, EFTA, Other Markets

The European market has some growth potential for U.S. fruit and vegetable producers. The EFTA countries support agriculture to some degree with seasonal tariffs, but their short growing season forces them to import most of their fresh products. During 1991, over 20 percent of U.S. agricultural exports to EFTA were fruits and vegetables. After the GATT round, the U.S. share is expected to remain the same or even fall slightly, as EC producers attempt to expand their markets.

The EC's fruit and vegetable sectors will undergo the largest structural changes stemming from a completed Uruguay Round. The EC supports its producers and exporters through numerous subsidy and price-support mechanisms. Once this blanket of support is lifted, EC producers will continue to hold 90 percent of the EC market and will probably attempt to expand into some of the budding Eastern European markets.

Some of the Eastern European nations, particularly Romania, Hungary, Poland, Czechoslovakia, and Yugoslavia, have the potential to become sizable producers and consumers of fruits and vegetables. But first, these nations must overcome political and economic instability.

Competition from Chile, Brazil, and Colombia

Brazil, Chile, and Colombia are U.S. producers' primary winter competitors in the northern hemisphere. Brazilian and Chilean producers in particular have successfully entered the world agricultural markets after their economic woes in the early 1980s.

Brazil is expected to continue to compete for a large share of the U.S. orange juice market and is also shipping its juice to Europe and Asia. Brazil is the world's largest exporter of processed citrus. Production has shown unprecedented growth in the last decade, with almost all of the additional growth coming from production of bulk frozen concentrated orange juice (FCOJ). Unlike the U.S. orange juice producers, Brazil is heavily dependent on export trade. In 1990, most of Brazilian production was exported. Within a world trading environment with fewer border protection policies, Brazilian exports will likely enter the European and Asian markets.

Colombia is recovering from structural changes as many farmers shift away from the production of crops used in the drug trade. Colombia's land and climate are ideally suited for increased tropical fruit production through the next decade.

Chile will continue to export its fruits and vegetables to the United States. NAFTA will further enhance Chile's export position in North America with easy access to Mexico, the United States, and Canada. A successful GATT Round will allow Chile easier access to the growing Asian markets, competing directly with U.S. producers.

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DATA APPENDIX

The following data appendix was compiled from the Economic Research Service's *Foreign Agricultural Trade of the United States,* FATUS; 1991 Calendar Year Supplement.

Table A.1. Commodity: Total U.S. Agricultural Exports

Country	1991	Percent of World
	(Million Dollars)	
World	39,191	
Canada	4,554	11.6
Latin America	5,684	14.5
Western Europe	7,468	19.1
EC	6,916	17.6
EFTA/Other W. Europe	552	1.4
Eastern Europe	234	0.6
Former Soviet Union	2,495	6.4
Asia	16,451	42.0
Middle East	1,508	3.8
Japan	7,729	19.7
China	722	1.8
Southeast Asia	1,302	3.3
Other East Asia	4,779	12.2
Oceania	1,899	4.8
Africa	1,911	4.9

Source: FATUS 1991.

Table A.2. Commodity: Fruits and Preps., excluding Juices

Country	1991	Percent of World
	(Million Dollars)	
World	2,143	
Canada	689	32.2
Latin America	123	5.7
Western Europe	417	19.5
EC	353	16.5
EFTA/Other W. Europe	63	3.0
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	889	41.5
Middle East	0	0.0
Japan	530	24.7
China	0	0.0
Southeast Asia	90	4.2
Other East Asia	230	10.7
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.

Table A.3. Commodity: Total U.S. Citrus Exports

Country	1991	Percent of World
	(Million Dollars)	
World	593	
Canada	119	20.1
Latin America	0	0.0
Western Europe	65	11.0
EC	63	10.6
EFTA/Other W. Europe	2	0.3
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	405	68.2
Middle East	0	0.0
Japan	349	58.8
China	0	0.0
Southeast Asia	0	0.0
Other East Asia	49	8.2
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991

Table A.4. Commodity: U.S. Grapefruit Exports

Country	1991	Percent of World
	(Million Dollars)	
World	273	
Canada	38	13.9
Latin America	0	0.0
Western Europe	62	22.7
EC	60	22.0
EFTA/Other W. Europe	2	0.7
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	172	63.0
Middle East	0	0.0
Japan	162	59.3
China	0	0.0
Southeast Asia	0	0.0
Other East Asia	0	0.0
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.

Table A.5. Commodity: U.S. Lemon and Lime Exports

Country	1991	Percent of World
	(Million Dollars)	
World	130	
Canada	18	13.8
Latin America	0	0.0
Western Europe	1	0.8
EC	0	0.0
EFTA/Other W. Europe	0	0.0
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	110	84.6
Middle East	0	0.0
Japan	101	77.7
China	0	0.0
Southeast Asia	0	0.0
Other East Asia	0	0.0
Oceania	0	0.0
Africa	0	0.0

Source: FATUS, 1991.

Table A.6. Commodity: U.S. Orange and Tangerine Exports

Country	1991	Percent of World
	(Million Dollars)	
World	189	
Canada	62	32.8
Latin America	0	0.0
Western Europe	2	1.1
EC	0	0.0
EFTA/Other W. Europe	0	0.0
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	123	65.1
Middle East	0	0.0
Japan	85	45.0
China	0	0.0
Southeast Asia	6	3.2
Other East Asia	0	0.0
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.

Table A.7. Commodity: U.S. Noncitrus Exports

Country	1991	Percent of World
	(Million Dollars)	
World	968	
Canada	453	46.8
Latin America	89	9.2
Western Europe	114	11.8
EC	92	9.5
EFTA/Other W. Europe	22	2.3
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	306	31.6
Middle East	23	2.4
Japan	79	8.2
China	0	0.0
Southeast Asia	58	6.0
Other East Asia	145	15.0
Oceania	6	0.6
Africa	0	0.0

Source: FATUS 1991.

Table A.8. Commodity: U.S. Apple Exports

Country	1991	Percent of World
	(Million Dollars)	
World	263	
Canada	59	22.4
Latin America	34	12.9
Western Europe	51	19.4
EC	40	15.2
EFTA/Other W. Europe	11	4.2
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	117	44.5
Middle East	19	7.2
Japan	0	0.0
China	0	0.0
Southeast Asia	35	13.3
Other East Asia	56	21.3
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.

Table A.9. Commodity: U.S. Fresh Berries Exports

Country	1991	Percent of World
	(Million Dollars)	
World	99	
Canada	68	68.7
Latin America	0	0.0
Western Europe	10	10.1
EC	9	9.1
EFTA/Other W. Europe	1	1.0
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	19	19.2
Middle East	0	0.0
Japan	18	18.2
China	0	0.0
Southeast Asia	0	0.0
Other East Asia	0	0.0
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.

Table A.10. Commodity: U.S. Fresh Cherries Exports

Country	1991	Percent of World
	(Million Dollars)	
World	64	
Canada	13	20.3
Latin America	0	0.0
Western Europe	11	17.2
EC	10	15.6
EFTA/Other W. Europe	1	1.6
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	39	60.9
Middle East	0	0.0
Japan	34	53.1
China	0	0.0
Southeast Asia	0	0.0
Other East Asia	5	7.8
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.

Table A.11. Commodity: U.S. Fresh Grapes Exports

Country	1991	Percent of World
	(Million Dollars)	
World	218	
Canada	123	56.4
Latin America	16	7.3
Western Europe	17	7.8
EC	14	6.4
EFTA/Other W. Europe	3	1.4
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	59	27.1
Middle East	0	0.0
Japan	8	3.7
China	0	0.0
Southeast Asia	19	8.7
Other East Asia	32	14.7
Oceania	0	0.0
Africa	0	0.0

Source: FATUS, 1991.

Table A.12. Commodity: U.S. Fresh Melons Exports

Country	1991	Percent of World
	(Million Dollars)	
World	74	
Canada	59	79.7
Latin America	2	2.7
Western Europe	0	0.0
EC	0	0.0
EFTA/Other W. Europe	0	0.0
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	13	17.6
Middle East	0	0.0
Japan	7	9.5
China	0	0.0
Southeast Asia	1	1.4
Other East Asia	8	10.8
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.

Table A.13. Commodity: U.S. Fresh Peaches Exports

Country	1991	Percent of World
	(Million Dollars)	
World	60	
Canada	47	78.3
Latin America	9	15.0
Western Europe	0	0.0
EC	0	0.0
EFTA/Other W. Europe	0	0.0
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	4	6.7
Middle East	0	0.0
Japan	0	0.0
China	0	0.0
Southeast Asia	0	0.0
Other East Asia	0	0.0
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.

Table A.14. Commodity: U.S. Fresh Pears Exports

Country	1991	Percent of World
	(Million Dollars)	
World	61	
Canada	26	42.6
Latin America	20	32.8
Western Europe	8	13.1
EC	4	6.6
EFTA/Other W. Europe	4	6.6
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	7	11.5
Middle East	3	4.9
Japan	0	0.0
China	0	0.0
Southeast Asia	0	0.0
Other East Asia	4	6.6
Oceania	1	1.6
Africa	0	0.0

Source: FATUS 1991.

Table A.15. Commodity: U.S. Plum Exports

Country	1991	Percent of World
	(Million Dollars)	
World	63	
Canada	24	38.1
Latin America	4	6.3
Western Europe	5	7.9
EC	5	7.9
EFTA/Other W. Europe	0	0.0
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	30	47.6
Middle East	0	0.0
Japan	0	0.0
China	0	0.0
Southeast Asia	2	3.2
Other East Asia	28	44.4
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.

Table A.16. Commodity: U.S. Other Noncitrus Exports

Country	1991	Percent of World
	(Million Dollars)	
World	65	
Canada	35	53.8
Latin America	4	6.2
Western Europe	10	15.4
EC	10	15.4
EFTA/Other W. Europe	0	0.0
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	17	26.2
Middle East	0	0.0
Japan	13	20.0
China	0	0.0
Southeast Asia	0	0.0
Other East Asia	4	6.2
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.

Table A.17. Commodity: U.S. Dried Fruit Exports

Country	1991	Percent of World
	(Million Dollars)	
World	337	
Canada	44	13.1
Latin America	12	3.6
Western Europe	195	57.9
EC	159	47.2
EFTA/Other W. Europe	36	10.7
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	79	23.4
Middle East	44	13.1
Japan	52	15.4
China	0	0.0
Southeast Asia	9	2.7
Other East Asia	13	3.9
Oceania	7	2.1
Africa	0	0.0

Source: FATUS 1991.

Table A.18. Commodity: U.S. Raisin Exports

Country	1991	Percent of World
	(Million Dollars)	
World	182	
Canada	23	12.6
Latin America	5	2.7
Western Europe	101	55.5
EC	82	45.1
EFTA/Other W. Europe	19	10.4
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	49	26.9
Middle East	0	0.0
Japan	30	16.5
China	0	0.0
Southeast Asia	5	2.7
Other East Asia	11	6.0
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.

Table A.19. Commodity: U.S. Dried Prunes Exports

Country	1991	Percent of World
	(Million Dollars)	
World	126	
Canada	10	7.9
Latin America	4	3.2
Western Europe	83	65.9
EC	69	54.8
EFTA/Other W. Europe	14	11.1
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	25	19.8
Middle East	0	0.0
Japan	19	15.1
China	0	0.0
Southeast Asia	3	2.4
Other East Asia	2	1.6
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.

Table A.20. Commodity: U.S. Almond Exports

Country	1991	Percent of World
	(Million Dollars)	
World	581	
Canada	32	5.5
Latin America	13	2.2
Western Europe	369	63.5
EC	334	57.5
EFTA/Other W. Europe	35	6.0
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	146	25.1
Middle East	24	4.1
Japan	74	12.7
China	0	0.0
Southeast Asia	6	1.0
Other East Asia	30	5.2
Oceania	9	1.5
Africa	0	0.0

Source: FATUS 1991.

Table A.21. Commodity: U.S. Walnut Exports

Country	1991	Percent of World
	(Million Dollars)	
World	136	
Canada	125	91.9
Latin America	4	2.9
Western Europe	95	69.9
EC	89	65.4
EFTA/Other W. Europe	6	4.4
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	19	14.0
Middle East	0	0.0
Japan	11	8.1
China	0	0.0
Southeast Asia	0	0.0
Other East Asia	3	2.2
Oceania	7	5.1
Africa	0	0.0

Source: FATUS 1991.

Table A.22. Commodity: Total U.S. Vegetables and Preps. Exports

Country	1991	Percent of World
	(Million Dollars)	
World	2,615	
Canada	1,032	39.5
Latin America	349	13.3
Western Europe	350	13.4
EC	307	11.7
EFTA/Other W. Europe	43	1.6
Eastern Europe	5	0.2
Former Soviet Union	3	0.1
Asia	767	29.3
Middle East	56	2.1
Japan	383	14.6
China	0	0.0
Southeast Asia	91	3.5
Other East Asia	230	8.8
Oceania	50	1.9
Africa	59	2.3

Source: FATUS 1991.

Table A.23. Commodity: U.S. Fresh Vegetables Exports

Country	1991	Percent of World
	(Million Dollars)	
World	801	
Canada	633	79.0
Latin America	41	5.1
Western Europe	36	4.5
EC	28	3.5
EFTA/Other W. Europe	8	1.0
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	88	11.0
Middle East	0	0.0
Japan	63	7.9
China	0	0.0
Southeast Asia	3	0.4
Other East Asia	20	2.5
Oceania	3	0.4
Africa	0	0.0

Source: FATUS 1991.

Table A.24. Commodity: U.S. Asparagus Exports

Country	1991	Percent of World
	(Million Dollars)	
World	47	
Canada	16	34.0
Latin America	0	0.0
Western Europe	11	23.4
EC	6	12.8
EFTA/Other W. Europe	5	10.6
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	19	40.4
Middle East	0	0.0
Japan	18	38.3
China	0	0.0
Southeast Asia	0	0.0
Other East Asia	0	0.0
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.

Table A.25. Commodity: U.S. Broccoli Exports

Country	1991	Percent of World
	(Million Dollars)	
World	55	
Canada	39	70.9
Latin America	0	0.0
Western Europe	0	0.0
EC	0	0.0
EFTA/Other W. Europe	0	0.0
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	16	29.1
Middle East	0	0.0
Japan	0	0.0
China	0	0.0
Southeast Asia	15	27.3
Other East Asia	0	0.0
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.

Table A.26. Commodity: U.S. Carrots Exports

Country	1991	Percent of World
	(Million Dollars)	
World	31	
Canada	25	80.6
Latin America	3	9.7
Western Europe	0	0.0
EC	0	0.0
EFTA/Other W. Europe	0	0.0
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	2	6.5
Middle East	2	6.5
Japan	0	0.0
China	0	0.0
Southeast Asia	0	0.0
Other East Asia	0	0.0
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.

Table A.27. Commodity: U.S. Celery Exports

Country	1991	Percent of World
	(Million Dollars)	
World	40	
Canada	32	80.0
Latin America	0	0.0
Western Europe	2	5.0
EC	2	5.0
EFTA/Other W. Europe	0	0.0
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	5	12.5
Middle East	0	0.0
Japan	0	0.0
China	0	0.0
Southeast Asia	0	0.0
Other East Asia	4	10.0
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.

Table A.28. Commodity: U.S. Cauliflower Exports

Country	1991	Percent of World
	(Million Dollars)	
World	46	
Canada	33	71.7
Latin America	0	0.0
Western Europe	0	0.0
EC	0	0.0
EFTA/Other W. Europe	0	0.0
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	12	26.1
Middle East	0	0.0
Japan	110	239.1
China	0	0.0
Southeast Asia	0	0.0
Other East Asia	0	0.0
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.

Table A.29. Commodity: U.S. Lettuce Exports

Country	1991	Percent of World
	(Million Dollars)	
World	133	
Canada	107	80.5
Latin America	4	3.0
Western Europe	8	6.0
EC	7	5.3
EFTA/Other W. Europe	1	0.8
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	14	10.5
Middle East	0	0.0
Japan	5	3.8
China	0	0.0
Southeast Asia	0	0.0
Other East Asia	8	6.0
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.

Table A.30. Commodity: U.S. Onions Exports

Country	1991	Percent of World
	(Million Dollars)	
World	52	
Canada	37	71.2
Latin America	5	9.6
Western Europe	1	1.9
EC	0	0.0
EFTA/Other W. Europe	0	0.0
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	8	15.4
Middle East	0	0.0
Japan	5	9.6
China	0	0.0
Southeast Asia	0	0.0
Other East Asia	2	3.8
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.

Table A.31. Commodity: U.S. Peppers Exports

Country	1991	Percent of World
	(Million Dollars)	
World	44	
Canada	43	97.7
Latin America	0	0.0
Western Europe	0	0.0
EC	0	0.0
EFTA/Other W. Europe	0	0.0
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	0	0.0
Middle East	0	0.0
Japan	0	0.0
China	0	0.0
Southeast Asia	0	0.0
Other East Asia	0	0.0
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.

Table A.32. Commodity: U.S. Fresh Potato Exports

Country	1991	Percent of World
	(Million Dollars)	
World	68	
Canada	62	91.2
Latin America	6	8.8
Western Europe	0	0.0
EC	0	0.0
EFTA/Other W. Europe	0	0.0
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	0	0.0
Middle East	0	0.0
Japan	0	0.0
China	0	0.0
Southeast Asia	0	0.0
Other East Asia	0	0.0
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.

Table A.33. Commodity: U.S. Fresh Tomatoes Exports

Country	1991	Percent of World
	(Million Dollars)	
World	110	
Canada	102	92.7
Latin America	5	4.5
Western Europe	3	2.7
EC	3	2.7
EFTA/Other W. Europe	0	0.0
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	0	0.0
Middle East	0	0.0
Japan	0	0.0
China	0	0.0
Southeast Asia	0	0.0
Other East Asia	0	0.0
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.

Table A.34. Commodity: U.S. Frozen Vegetables Exports

Country	1991	Percent of World
	(Million Dollars)	
World	246	
Canada	19	7.7
Latin America	20	8.1
Western Europe	11	4.5
EC	7	2.8
EFTA/Other W. Europe	4	1.6
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	192	78.0
Middle East	5	2.0
Japan	145	58.9
China	0	0.0
Southeast Asia	13	5.3
Other East Asia	29	11.8
Oceania	5	2.0
Africa	0	0.0

Source: FATUS 1991.

Table A.35. Commodity: U.S. Canned Vegetable Exports

Country	1991	Percent of World
	(Million Dollars)	
World	208	
Canada	56	26.9
Latin America	23	11.1
Western Europe	52	25.0
EC	43	20.7
EFTA/Other W. Europe	0	0.0
Eastern Europe	0	0.0
Former Soviet Union	0	0.0
Asia	75	36.1
Middle East	6	2.9
Japan	39	18.8
China	0	0.0
Southeast Asia	5	2.4
Other East Asia	25	12.0
Oceania	0	0.0
Africa	0	0.0

Source: FATUS 1991.