

Abstract

The Free Trade Area of the Americas (FTAA), a free trade area under negotiation among the United States and 33 countries in the Western Hemisphere, will progressively liberalize trade and investment in the region. It is scheduled to become effective by the end of 2005. The FTAA will lead to a 6-percent increase in annual U.S. agricultural exports to the Hemisphere and a 3-percent increase in annual U.S. agricultural imports from the Hemisphere. The FTAA will increase annual U.S. agricultural exports and imports worldwide by about \$1 billion each. The expansion of U.S. agricultural trade due to the FTAA will result from both the direct effect of trade liberalization and the indirect effect of accelerated economic growth in increasing agricultural demand in the Western Hemisphere. The FTAA complements the multilateral negotiations in the Doha Development Agenda, which have a broader agenda for agricultural reform.

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Executive Summary

The Free Trade Area of the Americas (FTAA) is a free trade area currently under negotiation among the United States and 33 countries in the Western Hemisphere. Its objective is to progressively liberalize trade and investment in the region. Negotiations on the FTAA began in 1998 and are to conclude in 2005, with the agreement scheduled to come into force by the end of that year. These are the implications of the FTAA for U.S. agriculture:

The FTAA will increase annual U.S. global agricultural exports and imports by about \$1 billion each. Elimination of tariffs on intra-regional trade in agriculture and manufacturing will increase annual U.S. agricultural exports to other countries in the Western Hemisphere by \$1.4 billion (6 percent) and annual imports from the 33 countries by about \$900 million (3 percent). The increased U.S. trade with Western Hemisphere countries will lead to small adjustments in U.S. trade with the rest of the world.

Agricultural trade in the Western Hemisphere will increase by \$4 billion (6 percent). Agriculture will account for about 20 percent of trade expansion in the Hemisphere due to the FTAA, proportionally larger than its current 9-percent share of merchandise trade and a reflection that current agricultural tariffs are higher than manufacturing tariffs in many Western Hemisphere countries, including the United States.

Trade liberalization of both agricultural and manufacturing goods in the FTAA will increase the welfare (consumer purchasing power) of the Western Hemisphere by \$63 billion annually. Free trade will allow a more efficient allocation of productive resources in the region, and can stimulate productivity gains and economic growth in developing countries. The expansion of U.S. agricultural trade due to the FTAA will result from both the direct effect of trade liberalization and the indirect effect of accelerated economic growth on increasing agricultural demand in the Western Hemisphere.

The FTAA will have small effects on U.S. agricultural production because trade with the Western Hemisphere accounts for only a small share of aggregate output, and U.S. tariffs are already low. Production changes in most of the commodity categories analyzed in this report will be less than 1 percent. U.S. export growth will lead to small increases in production of rice, oilseeds, oils and fats, and dairy products. U.S. sugar production could decline significantly, depending on how the domestic support program may be modified in response to increased sugar imports from other Western Hemisphere countries. The decline in U.S. orange juice production will be reduced if U.S. demand for domestic, not-from-concentrate orange juice continues to grow.

The FTAA will add to the benefits that trade liberalization already completed in the Western Hemisphere has had for U.S. agriculture. The impacts of trade reform have been greatest for U.S. agricultural exports to Mexico, which instituted a far-reaching set of unilateral trade reforms before it joined the North American Free Trade Agreement (NAFTA). In 1999, U.S. agricultural exports to Mexico were 2.5 times (\$3 billion) higher than they would have been in the absence of these trade reforms. NAFTA alone accounted for 20 percent of U.S. agricultural exports to Mexico during 1994-99. Many U.S. exports have benefited from Mexican trade liberalization, including wheat, rice, beef, and pork. The effects of reform have not been as important to U.S. agricultural trade with Canada, perhaps because trade barriers between the two countries were already low, and some agricultural products were excluded from trade liberalization. MERCOSUR's influence on U.S. agricultural exports has been mixed: it

has increased U.S. exports of beef, rice, and other commodities to the common market but has diverted some U.S. trade, most notably wheat exports to Brazil.

Regional agreements, multilateral reforms, and preferences have already lowered trade barriers in the Western Hemisphere, but high tariffs remain on some products.

The average, post-Uruguay Round Most-Favored-Nation (MFN) bound tariff of FTAA members in 2001 was about 40 percent, well below the global average bound rate of over 60 percent. Applied MFN tariff rates in the Western Hemisphere average 13 percent. The FTAA is expected to take reductions from the MFN applied rates rather than bound rates. Applied rates are generally highest on meats, dairy products, sugar and sugar-containing products, and vegetable oils, and relatively low for wheat, most oilseeds, fibers, and live plants and animals. The average tariff applied to U.S. agricultural exports to the Western Hemisphere is 13 percent. Most U.S. tariffs on agricultural imports from the Hemisphere are already very low or zero, with over 80 percent of U.S. imports from the region already qualifying for duty-free treatment in 2001.

The FTAA will expand the potential market for U.S. FDI in processed foods. If the agreement includes investment provisions, these could extend protections for U.S. investments to more countries in the region. However, foreign direct investment (FDI) is influenced by other factors as well, particularly prospects for economic growth, a favorable business climate, and economic and political stability.

Effects of the FTAA on U.S. agri-environment will be small. The agreement will have a small impact on U.S. agricultural production and thus will yield small benefits in terms of soil erosion and water pollution from nitrogen and small environmental costs in terms of air pollution from nitrogen and soil depreciation.

Sanitary and phytosanitary issues in the FTAA mirror those in the WTO. Debate on sanitary and phytosanitary (SPS) matters in the FTAA has focused on facilitating the implementation of current World Trade Organization (WTO) SPS obligations in the Western Hemisphere. A concern of developing country exporters is their ability to meet increasing demands for food safety in developed countries. These exporters may need technical assistance to effectively implement the WTO SPS agreement.

Doha Development Agenda and FTAA are reinforcing strategies for trade liberalization. The United States and other FTAA members are simultaneously pursuing agricultural policy reform in the Doha Development Agenda, the multilateral negotiations underway at the WTO. Despite the reforms achieved in the Uruguay Round, global agricultural markets are still highly distorted. The Western Hemisphere's role as a net global agricultural exporter gives FTAA members an important stake in further multilateral reform, and the region's relatively low dependence on policies that distort trade suggests that it will benefit from global reform. Furthermore, successful multilateral negotiations on a broader agenda for agricultural reform will complement reform in the FTAA, which is focused on market access.

U.S. Agriculture and the Free Trade Area of the Americas

1. Introduction

Thirty-four countries in the Western Hemisphere participated in the Summit of the Americas in Miami, Florida, in December 1994 and committed themselves to create a Free Trade Area of the Americas (FTAA). Negotiations on the FTAA began in 1998 in Miami, and they are continuing in Puebla, Mexico. Negotiations are scheduled to conclude in early 2005.¹ The pact, scheduled to enter into effect by the end of that year, will create a Hemisphere-wide free trade area encompassing 830 million people and a combined GDP of \$13 trillion.

The objective of the FTAA negotiations is to reach agreement on the progressive liberalization of trade and investment in the Western Hemisphere. Trade ministers have agreed that all tariffs are subject to negotiation. The FTAA will be a free trade area, meaning that it will liberalize trade among its members but will allow each member to maintain its independent trade policies with respect to the rest of the world (see box on membership, pg. 2).

The FTAA will be introduced into a region that has historically pursued a strategy of trade liberalization through regional trade preferences. About 20 preferential trade arrangements are already in effect in the Western Hemisphere, nearly 40 more agreements provide preferences for specific sectors, and other trade agreements are under negotiation or are proposed.² Some agreements date back nearly four decades and have been reinvigorated in the recent wave of regionalism in the Western Hemisphere; however, most have been implemented since the early 1990s. The resulting network of overlapping memberships in trade agreements within the Western Hemisphere will be consolidated in the FTAA.

¹The draft text of the FTAA is available to the public at www.ftaa-alca.org

²A compendium of trade agreements in the Western Hemisphere is maintained at www.sice.org/TRADEE.ASP

The United States has already entered free trade agreements with its major trade partners in the Western Hemisphere (see box on U.S. agricultural trade with the Western Hemisphere, pg. 3). In 1989, the United States implemented a free trade agreement with Canada. This was extended to include Mexico in 1994 in the North American Free Trade Agreement (NAFTA). The United States entered a bilateral free trade agreement with Chile in 2003 and is negotiating an agreement with five Central American countries. The United States, however, is an outsider to most regional trade agreements in the region. For example, the MERCOSUR (Mercado Comun del Sur) customs union of Argentina, Brazil, Paraguay, and Uruguay has liberalized trade among member countries, putting products of the United States and other nonmembers at a competitive disadvantage.

Over the past decade or so, the United States has pursued regional trade agreements as a complement to its efforts to achieve global agricultural trade liberalization in multilateral negotiations at the World Trade Organization (WTO). The global agricultural negotiations opened in March 2000, as required by the Uruguay Round's Agreement on Agriculture (URAA) and are continuing as part of the Doha Development Agenda initiated in late 2001. While the FTAA and the multilateral negotiations are both expected to conclude in early 2005, the two negotiations differ in their objectives and scope. The FTAA agriculture negotiations are expected to achieve deep reforms of tariffs and other impediments to trade and will address export subsidies used within the region. The WTO agriculture negotiations are more comprehensive in that they are addressing trade barriers, export subsidies, and domestic support, but market access reforms in the global initiative are not likely to be as deep as in the FTAA.

The regional and global context of the FTAA negotiations brings to the fore important questions for U.S. agriculture about the potential benefits from further engagement in regionalism in the Western Hemisphere.

In analyzing the potential effects of the FTAA on U.S. agriculture, this report focuses on three questions:

- *How has trade liberalization already achieved in the Western Hemisphere affected U.S. agriculture?*
- *Will the advance to the FTAA provide significant additional benefits for U.S. agriculture?*
- *What is the relationship between the FTAA and multilateral reform at the WTO?*

Membership, Process, and Timetable for the FTAA Negotiations

FTAA member countries: Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, United States, Uruguay, Venezuela.

Negotiations undertaken in nine separate groups: agriculture; market access; investment; services; government procurement; dispute settlement; intellectual property rights; subsidies, antidumping, and countervailing duties; competition policy.

Timeframe for negotiations:

- December 1994: FTAA initiated at the Miami Summit of the Americas
- June 1995-September 1998: Structure, scope, and organization of the negotiations determined
- September 1998: Negotiations initiated
- September 1998-November 1999: Annotated outlines of the FTAA agreement developed
- November 1999-April 2001: Draft text of the FTAA agreement developed
- April 2001-May 2002: Draft text consolidated and methods and modalities for market access negotiations established
- May 2002: Market access negotiations initiated
- December 15, 2002-February 15, 2003: Initial market access offers presented
- February 16, 2003-June 15, 2003: Requests for improvement in initial offers presented
- July 15, 2003-undetermined second date: Revised market access offers to be presented
- January 2005: Deadline to conclude negotiations
- December 2005: FTAA scheduled to enter into effect

U.S. Agricultural Trade With the Western Hemisphere, 2002

The United States is by far the world's largest agricultural trader (exports plus imports), and as the richest and most populous country in the Americas, it is also the region's largest market for agricultural products. Total agricultural trade (exports plus imports) between the United States and other countries of the Western Hemisphere is growing rapidly, increasing by 175 percent between 1993 and 2002. In terms of total value, U.S. agricultural imports from the region—\$22.9 billion in 2002—are higher than U.S. exports to the region—\$20.4 billion (see figures). In terms of shares of U.S. trade, however, the region is substantially more important as a source of imports for the United States than as a destination for U.S. exports. In 2002, about 55 percent of all U.S. agricultural imports came from Western Hemisphere countries, while about 38 percent of U.S. agricultural exports went to the region.

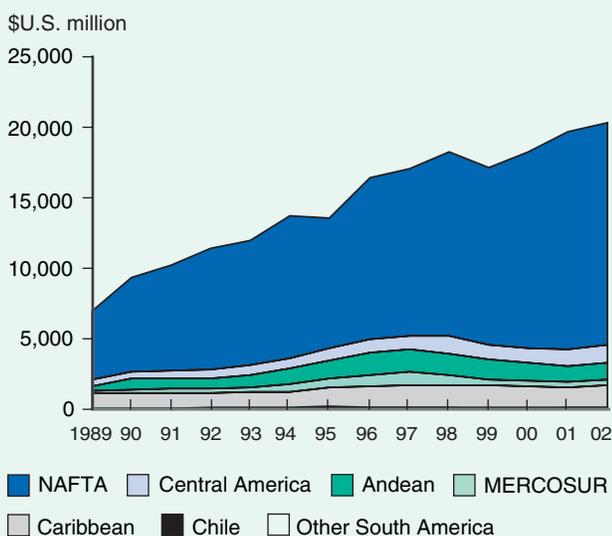
NAFTA trading partners (Canada and Mexico) dominate U.S. agricultural trade, together supplying about 38 percent of total U.S. imports and taking 30 percent of total U.S. agricultural exports in 2002. This asymmetry in U.S. import and export market shares is even more pronounced for other Western Hemisphere countries, which together supplied 17 percent of total U.S. agricultural imports but purchase only 9 percent of U.S. agricultural exports in 2002.

Among U.S. trading partners in the Western Hemisphere, not including Canada and Mexico, the top seven suppliers account for 83 percent of U.S. imports from the Western Hemisphere. Coffee and bananas constitute 32 percent of the \$5.8 billion U.S. agricultural imports from the countries. However, the makeup of U.S. imports from each country is different. Grapes, wine, and stone fruits account for slightly over 60 percent of U.S. imports of \$1.2 billion from Chile. Coffee, tobacco filler, prepared beef and veal, cashew nuts, and orange juice account for 54 percent of Brazil's \$1.2 billion worth of exports to the United States. Coffee, cut flowers, and bananas account for 86 percent of Columbia's \$928 million in exports to the United States. Bananas, pineapples, and coffee make up 67 percent of U.S. imports of \$803 million from Costa Rica.

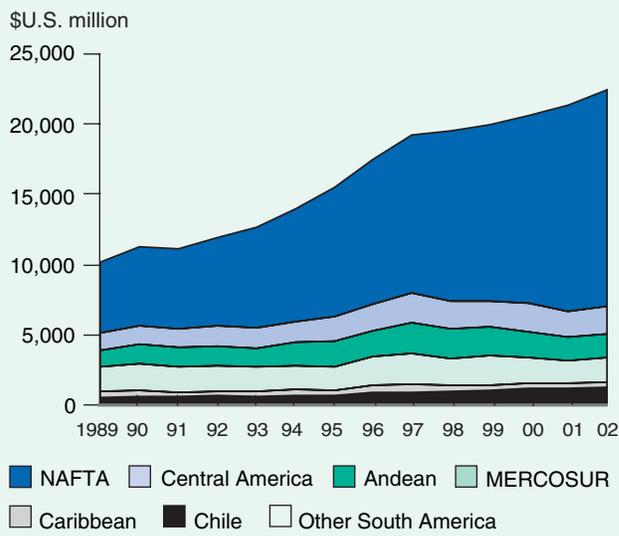
In terms of U.S. exports to the region, the geographic and commodity concentration is not as great. Excluding Canada and Mexico, the top seven countries account for 54 percent of total U.S. agricultural exports to the Western Hemisphere. Corn and wheat account for about 30 percent of the total \$4.5 billion of exports shipped to the subregion, and again the makeup of exports to each country is different. In the top U.S. market, the Dominican Republic, tobacco, corn, soybean meal, and wheat account for about 60 percent of the \$513 million worth of U.S. exports. In Colombia, corn and wheat account for about 54 percent of its \$452-million market. Corn, wheat, and soybean meal make up 49 percent of Venezuela's \$341-million market. In Guatemala, corn, soybean meal, and chicken meats account for about a third of its \$341 million worth of U.S. exports.

The United States is a vital source of agricultural imports for the subregion. In 2001, U.S. exports accounted for almost a fourth of their agricultural imports. The dichotomy was most striking for Andean countries, Central America, and the Caribbean countries. For these countries, U.S. market shares varied considerably by commodity category, with relatively low market shares for U.S. exports of horticultural and processed foods and relatively high market shares for U.S. exports of bulk and intermediate goods. The United States is also an important export market for the subregion, taking about a fifth of its exports in 2001.

U.S. agricultural exports to the Western Hemisphere, 1989-2002



U.S. agricultural imports from the Western Hemisphere, 1989-2002



2. Existing Regional Integration in the Western Hemisphere: Impacts on U.S. Agriculture

Trade preferences are prevalent in the agricultural trading system in the Western Hemisphere (table 2.1). Almost every member of the FTAA is now party to at least one agreement, and the multiple agreements to which most FTAA members belong create a network of overlapping memberships within the Western Hemisphere. A role of the FTAA will be to consolidate, rationalize, and potentially advance the trade liberalization that has occurred under these regional agreements.

Trade Preferences Have Already Lowered Agricultural Tariffs in the Hemisphere

Many types of trade preferences are extended in the Western Hemisphere. In reciprocal trade arrangements, all parties agree to mutual reduction or elimination of trade barriers, but the level of market integration can vary. In the Western Hemisphere, the most comprehensive reciprocal arrangements are customs unions, which now include MERCOSUR, the Central American Common Market (CACM), and the Caribbean Community and Common Market (CARICOM). In a customs union, members reduce or eliminate tariffs on products of other members and agree on common tariffs against the rest of the world. Free trade areas, such as NAFTA, reduce or eliminate internal tariffs but allow members to maintain separate external tariffs. Free trade areas therefore require detailed rules of origin to prevent the transshipment of imports into the union through the country with the lowest external tariffs. The FTAA will be a free trade area. Other, more limited, types of trade preferences used in the region include partial scope agreements, in which trade preferences are given to selected sectors. In economic complementation agreements, members increase economic cooperation with the objective of eventually realizing free trade.

In nonreciprocal preferences, which are applied extensively in the Western Hemisphere, only one party provides trade preferences. Among the major nonreciprocal arrangements are the U.S. Generalized System of Preferences (GSP) and Canada's Generalized Preferential Tariffs (GPT), both of which allow duty-free or preferential treatment for many agricultural imports from developing countries. Generally, neither arrangement allows preferences for the over-quota tariffs of tariff-rate quota (TRQ) regimes. The GSP and GPT preferences apply to all FTAA members, except

NAFTA members, and GSP for Bermuda. Some countries party to GSP and GPT are also eligible for other trade preferences. The United States and Canada provide nonreciprocal preferences for many agricultural products from the Caribbean area, and the United States also provides preferences for imports from the Andean countries. Nonreciprocal preferences are concessions, not binding commitments; in some cases they may expire and require reauthorization. Reciprocal trade agreements that are ratified by their members provide a greater degree of assurance about the stability of negotiated tariff preferences.

In the Western Hemisphere, regional trade agreements and preferences have largely succeeded in including agriculture in trade liberalization, although sensitive imports are often exempted. NAFTA, for example, will eliminate almost all barriers to agricultural trade among its members by the time it is fully implemented in 2008, with some exceptions affecting trade with Canada, including dairy, poultry, eggs, peanuts, sugar and sweeteners, cotton, and tobacco. In MERCOSUR, almost all agricultural tariffs are to be removed, although Argentina's economic crisis has recently led its government to eliminate regional preferences on many items, including some food products.

In addition to regional trade agreements with Western Hemisphere partners, many FTAA members have trade agreements with non-Hemisphere partners. The United States has free trade agreements with Israel, Jordan, and Singapore. Other negotiations are underway or proposed, including agreements with Morocco, the South African Customs Union, Bahrain, and Australia. Mexico's trade agreements include a pact with the European Union (EU) that excludes agricultural commodities receiving EU domestic support and agreements with the European Free Trade Association (EFTA) and Israel. Chile's agreements include one with the EU, and a MERCOSUR-EU negotiation is in progress. Caribbean countries, along with African and Pacific countries, are extended preferences from the EU, and Haiti will receive the EU's "Everything-But-Arms" preferences extended to 48 least developed countries.

Most U.S. Agricultural Imports From the Western Hemisphere Are Already Eligible for Tariff Preferences

Partly due to existing trade preferences, 81 percent (\$18.8 billion) of U.S. agricultural imports from the region qualified for duty-free entry in 2001 (table 2.2). Some of these imports received Most-Favored-Nation

Table 2.1—Selected Western Hemisphere trade agreements and their agricultural provisions

Trade agreement	Created	Current members	Agricultural provisions
<i>Selected reciprocal trade agreements</i>			
Andean Pact	1969	Bolivia, Colombia, Ecuador, Peru, Venezuela	Agricultural trade for many commodities has been liberalized. Only some members have agreed to a common external agricultural tariff, which includes the use of price bands.
Caribbean Community and Common Market (CARICOM)	1973	Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago	Members have developed a common market with duty-free movement of agricultural goods throughout the Caribbean Community. CARICOM has adopted a common domestic agricultural policy and a common agricultural trade policy.
Central American Common Market (CACM)	1960	Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua	Agricultural trade within the CACM is duty free, with a diminishing number of exempted agricultural products; a common external tariff is imposed on some agricultural products.
North American Free Trade Agreement (NAFTA)	1994 (Canada-U.S. Free Trade Agreement -1989)	Canada, Mexico, U.S.	Agricultural trade is treated bilaterally. Most agricultural tariffs were removed immediately, with a transition period of up to 15 years allowed for some commodities. NAFTA created a free trade area, with rules of origin.
Southern Common Market (MERCOSUR)	1991	Argentina, Brazil, Paraguay Uruguay	Nearly all intra-regional agricultural tariffs are removed. MERCOSUR created a common market, with a common external tariff ranging from 0-20 percent for agricultural products (avg. 10 percent)—generally lower than previous tariff levels.
<i>Selected nonreciprocal preferential trade arrangements</i>			
Canada CARIBCAN	1986	Anguilla, Antigua and Barbuda, Bahamas, Barbados, Belize, Bermuda, British Virgin Islands, Canada, Cayman Islands, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago, Turks and Caicos	Canada provides duty-free access on many agricultural products from the Commonwealth Caribbean countries.
Canadian Generalized Preferential Tariffs (GPT)	1974	Canada and most developing countries	Canada provides duty-free or preferential access for many agricultural products from developing countries to encourage development of their export sectors.
U.S. Andean Trade Preferences Act (ATPA)	1991	Bolivia, Colombia, Ecuador, Peru, U.S.	The U.S. provides duty-free or preferential access to many agricultural products from the Andean region.
U.S. Caribbean Basin Economic Recovery ACT (CBERA)	1983	Antigua and Barbuda, Aruba Bahamas, Barbados, Belize British Virgin Islands, Costa Rica, Dominica, Dominican Republic, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica Montserrat, Netherlands Antilles, Nicaragua, Panama, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Trinidad and Tobago, U.S.	The U.S. provides duty-free or preferential access to many agricultural products to promote export growth of CBERA members and encourage their export diversification.
U.S. Generalized System of Preferences (GSP)	1991	The U.S. and most developing countries	The U.S. provides duty-free access for many agricultural products from developing countries to encourage their economic growth.

Source: Economic Research Service, USDA.

(MFN) duty-free status accorded by the United States to products from WTO member countries. Most of these free imports, however, received duty-free treatment under NAFTA or other preferences. Trade preferences covered over 60 percent of U.S. agricultural imports from Western Hemisphere countries in 2001 and allowed duty-free treatment or reduced tariff rates on many commodities.

Most of the U.S. agricultural imports that faced duties in 2001 entered from NAFTA partners. U.S. tariffs on imports from Mexico will be reduced to zero when NAFTA is fully implemented in 2008. Some other dutiable agricultural imports by the United States from the region enter under the U.S. TRQ system. In 2001, the U.S. imported \$2 billion worth of agricultural commodities from the Western Hemisphere under its TRQ system. Of this total, \$1.9 billion was under quota, 78 percent of which entered duty free, and about \$106,000 entered at over-quota tariff rates.

As a result of preferences, average U.S. tariffs on agricultural imports from Western Hemisphere countries are below the average, 2001 U.S. MFN rate of 10.4 percent (table 2.3). Countries qualifying for CBERA or ATPA preferences face an average U.S. agricultural tariff of 1.8 percent, while other FTAA countries, benefiting only from GSP, face slightly higher average tariff rates. Due to NAFTA, Canada, at 1.2 percent, and Mexico, at 0.4 percent, face the lowest average U.S. tariffs among FTAA countries.

In 2001, NAFTA was the only reciprocal trade agreement in the Western Hemisphere to which the United States was a party.³ Therefore, U.S. exports faced

Table 2.2—U.S. agricultural imports from the Western Hemisphere in 2001, by tariff treatment

Import classification	Value
	<i>\$U.S. billion</i>
Total agricultural imports from the Western Hemisphere	23.1
Total duty-free imports	18.8
Duty-free imports under MFN	(7.5)
Duty-free imports under preferences	(11.3)
Preferential, nonzero tariffs (NAFTA) ¹	2.8
MFN tariffs less than 5 percent	.9
MFN tariffs over 5 percent	.6

¹All U.S. tariffs under NAFTA will be reduced to zero when the implementation period is concluded in 2008.

Source: Agricultural Market Access Database.

³In late 2003, the United States entered a bilateral free trade agreement with Chile. The effects of this agreement on agricultural tariff levels is not incorporated in this analysis.

MFN tariffs in all Hemisphere countries other than Canada and Mexico. The average 2001 bound MFN agricultural tariff of Western Hemisphere countries, excluding the United States, is 43.3 percent. In general, U.S. exports face much lower applied tariffs in these markets, which average 12.5 percent.⁴ However, the possibility that countries can increase their tariffs up to rates bound in the WTO creates a degree of risk for U.S. exporters. Furthermore, U.S. products face these MFN tariffs while exports from many competing suppliers in the region have preferential access.

Tariff Protection Remains High on Some Products

While agriculture is included in most preferential trade arrangements in the region, some sensitive products are allowed exemptions or long transition periods to free trade (Stout and Ugaz-Pereda). Comprehensive data on preferential tariffs in the Western Hemisphere are not available, but analysis of applied MFN tariff schedules provides some perspective on which commodities receive the most protection. Applied tariff rates are generally highest on meats, dairy products, sugar and sugar-containing products, and vegetable oils. Wheat, most oilseeds, fibers, and live plants and animals have relatively low MFN tariffs. Of interest to the United States are higher-than-average tariffs on tobacco products, meats, rice, beer, wine, and distilled spirits. Certain fruits and vegetables, including apples, grapes, oranges, grapefruit, potatoes, and onions, also face higher-than-average tariffs in many markets, especially during specific times of the year.

Many countries' agricultural exports are concentrated in a few commodities. For example, in 10 countries in the Western Hemisphere, a single commodity accounts for over half of total agricultural exports to the United States. Due to this commodity concentration, some countries are more concerned about tariff rates for specific commodities than about overall tariff rates, particularly if products in which they specialize face higher-than-average tariffs. The United States, for example, maintains relatively high tariffs, with limited preferential access, on some agricultural products of special export interest to FTAA countries, including sugar, peanuts, tobacco, orange juice, and dairy products.

One way to measure the alignment between an exporting country's export concentration and an importing country's tariff peaks is to calculate the weighted aver-

⁴These percentages are based on 6-digit aggregates of the Harmonized System. Applied tariff rates are not available for all countries.

age of the importer's tariffs, using as weights the share of each commodity in the exporter's global agricultural exports. The "export-weighted" average tariff gives more weight to the importer's tariffs that are applied to the exporting country's most important exports to the world market (see box on comparing tariffs, pg. 8).

Table 2.3 compares the simple average applied tariffs with export-weighted applied tariffs, by country. For 6 of the 20 countries, U.S. preferences have resulted in lower tariffs on the commodities that are most important to the exporting country. For 13 countries, export weighting increases the effective U.S. tariff, indicating that U.S. tariffs remain relatively high on commodities that make up a larger share of an exporter's trade. Depending on the composition of a country's trade, U.S. preferences have therefore been more important for some of these 20 countries than for others.

Tariffs facing the U.S. do not differ much between simple average and export-weighted average rates. When NAFTA partners are excluded, the weighted (by U.S. exports) average bound rate facing U.S. agricultural

products in the Western Hemisphere is 46 percent, although the rate actually applied is only 15 percent.

Challenges for FTAA Negotiations on Agricultural Market Access

While regional trade agreements and preferences have already helped to lower agricultural tariffs, the transition toward the elimination of remaining trade barriers through the FTAA will present challenging issues, including how to treat sensitive products and how fast to phase in the elimination of tariffs. So far, FTAA members have agreed that tariffs will be allocated among four baskets with different schedules for tariff elimination: immediate, no more than 5 years, no more than 10 years, and longer than 10 years. Reductions are in general to be taken from the October 2002 MFN applied rates rather than the bound rates. This means that significant trade liberalization can be expected to occur early in the FTAA implementation period.

Tariffs are relatively transparent trade policies and their effects in reducing import demand and raising domestic prices and production are well understood.

Table 2.3—Average applied agricultural tariffs in the Western Hemisphere, 2001

Country	U.S. tariffs on FTAA exporter		FTAA country tariffs on U.S.		
	Average tariff (including preferences)	Average weighted by country's exports (including preferences)	Average applied MFN tariff	Average applied MFN tariff weighted by U.S. exports	Average bound MFN rates weighted by U.S. exports
			<i>Percent</i>		
Argentina	3.9	6.1	12.9	12.7	34.9
Brazil	3.9	12.8	12.7	12.7	40.0
Canada	1.2	1.2	6.1	7.0	12.8
Chile	3.9	2.1	9.0	9.0	25.0
Colombia	1.8	2.2	14.8	15.0	104.3
Costa Rica	1.8	1.1	11.5	13.0	35.7
Dominican Republic	1.8	8.9	21.4	18.5	40.0
Ecuador	1.8	.6	14.3	14.0	26.7
El Salvador	1.8	5.1	10.3	9.6	43.4
Guatemala	1.8	6.3	9.2	9.4	54.7
Haiti	1.8	.1	16.0	16.0	16.0
Honduras	1.8	1.1	11.0	12.1	35.0
Jamaica	1.8	10.3	17.7	16.1	100.0
Mexico	.4	.8	2.9	8.6	51.8
Nicaragua	1.8	8.4	7.0	8.0	59.5
Panama	1.8	3.0	12.5	12.4	27.8
Paraguay	3.9	4.2	12.6	12.1	34.9
Peru	1.8	.5	17.2	16.9	30.0
Uruguay	3.9	6.1	12.7	12.5	36.8
Venezuela	3.9	7.0	14.8	15.0	56.2

Notes: U.S. tariffs are applied rates, including tariff preferences extended under nonreciprocal tariff preference programs (GSP, CBERA, and ATPA). Tariffs for Canada and Mexico are the 2001 NAFTA rates. Averages are calculated as simple means; averages and weighted averages are calculated at the six-digit Harmonized System level.

Source: Agricultural Market Access Database.

Many members of the FTAA employ trade barriers that are more complex, less familiar, and less transparent in their effects on prices and production than tariffs. These policies include price bands, seasonal tariffs, tariff rate quotas, special safeguards, and domestic absorption agreements.

One strategy for understanding complex trade policies is to deconstruct their essential components—their operation, their impacts, and their tax burden (who pays)—and compare them with more traditional tariffs and subsidies (table 2.4). Countries employ many different types of trade protection and domestic support policies that can have identical effects in raising prices received by producers or in reducing price variability. For example, some countries use price bands to restrict imports when world prices are low, which helps to insulate and stabilize domestic producer prices. Consumers pay the costs of price bands: they pay tariffs on the imported product and face higher prices for the domestic variety. WTO tariff bindings limit the ability of price bands to insulate domestic prices.

In a domestic absorption agreement, prospective importers are first required to purchase a specified amount of the product from domestic producers. The

agreement does not change the total amount of the product consumed in a country, but it does increase the share of domestic production relative to imports in total consumption. The increase in demand for the domestic product leads to higher producer prices, while the amount of imports and tariff revenue collected by the domestic government fall. In effect, a domestic absorption agreement leads domestic buyers to shift expenditures from the import plus the tariff to the increased quantity and price of the domestic product.

The FTAA's mandate includes the identification of trade-distorting practices for agricultural products, including those that have an effect equivalent to agricultural export subsidies, to bring such policies under greater discipline. Some countries argue that agricultural policies with equivalent producer effects should be disciplined in the same way, regardless of their implementation. The U.S. position is that multilateral negotiations are the appropriate forum for addressing domestic support because a country's production subsidies affect its global, not just its regional, trade. The ongoing WTO multilateral negotiations are addressing market access, domestic support, and export subsidies.

Comparing Tariffs Across Countries

The aggregation of thousands of individual tariffs into a single, representative measure for each country means that some assumption must be made on how much weight to give individual tariffs. A simple average implies all tariffs are equally important, yet for some countries, most imports may be concentrated in only a few commodities. Giving equal weight to tariffs on lightly traded commodities therefore may not be representative of a country's tariff code. Tariffs are sometimes weighted by the share of each imported commodity in a country's total imports. But this understates the restrictiveness of a country's tariff code because import weights become smaller when tariffs become more restrictive. Consumption weights have the same measurement bias as import weights. Production weights would assure that highly protected commodities produced in large amounts get appropriately large weights, but production data at the tariff-line level are rarely available.

This report develops export weights in which the importing country's tariffs are aggregated using as weights the share of the commodity in the exporter's world agricultural exports (Sandrey). An aggregate measure of a country's tariffs is therefore calculated for each of its trade partners. This measure gives greater weight to those commodities important to an exporting country and avoids the bias introduced in bilateral trade by the importer's tariff schedule. It is especially appropriate when exporting countries are characterized by commodity concentration and the importer's tariffs are highly distorting of that trade. Its limitation is that differences in the composition of its bilateral trade may reflect differences among its partners' consumer preferences instead of their tariff structure.

As an example, consider a country for which cinnamon accounts for 95 percent of its global agricultural exports. The exporter may face zero tariffs on all other products in the importer's market, except for a nearly prohibitive tariff on cinnamon, say 100 percent. The importer's simple average agricultural tariff may be close to zero percent, yet the importer's single, nearly prohibitive tariff has a very restrictive effect on its trade with the cinnamon exporter. An import tariff weighted by the share of the commodity in the exporter's world trade (95 percent) places a greater weight on the importer's tariff on cinnamon than on other products, even if little, or even no, bilateral trade in cinnamon takes place. It will result in a weighted-average tariff in that importer's market of close to 95 percent with respect to its cinnamon-exporting partner.

While domestic production subsidies are often difficult to directly negotiate in a free trade area, market forces would discipline some types of support if free trade is achieved within a region. Open borders can place budgetary pressure on programs that attempt to support domestic market prices at above free-market levels (see box on U.S. sugar in the FTAA, pg. 10). If low-cost imports are allowed to enter freely from regional suppliers, domestic subsidy costs would have to rise to defend a price support against falling domestic prices.

U.S. Agriculture Has Benefited From Trade Liberalization in the Western Hemisphere

Trends in U.S. agricultural exports during 1980-99, a period in which many countries in the Western Hemisphere implemented substantial regional and unilateral trade reforms, provide a valuable perspective on the additional trade benefits that the FTAA is

likely to generate. This analysis finds that the trade reforms already completed in the Western Hemisphere have supported an expansion of U.S. agricultural exports to the region.⁵

The impact of these reforms on U.S. agricultural exports is most obvious in the case of Mexico, which implemented a far-reaching set of unilateral trade reforms before it cemented the liberalization of its trade with Canada and the United States by joining NAFTA in 1994. In 1999, U.S. agricultural exports to Mexico were 2.5 times (\$3 billion) higher than they would have been in the absence of these unilateral and regional trade

⁵This analysis is based on a series of “gravity models.” The approach is able to differentiate and measure the impact of trade reforms on U.S. exports to a specific country, compared with other factors, such as the relative closeness of that country’s bilateral trade relationship with the United States and the size of the importing country’s economy. However, the variables used to identify trade reforms may also capture the influence of other factors that are contemporaneous to specific trade agreements.

Table 2.4—Tariffs, complex tariffs, and domestic support: Equivalencies in operation, impacts, and tax burden

Policy	Treatment under WTO disciplines	Operation	Impacts on producer price	Who pays?
Ad valorem tariffs	Market access	Percentage (fixed) tax on import unit value	Raise domestic producer price	Consumers
Specific tariffs	Market access	Per unit (fixed) tax on import unit volume	Raise domestic producer price	Consumers
Tariff-rate quotas	Market access	Low duties applied to within-quota volume, high duties applied on over-quota volume	Raise domestic producer price	Consumers
Seasonal tariffs	Market access	Tax rate dependent on import season	Raise domestic producer price during seasons when production is highest	Consumers
Special safeguard tariffs	Market access	Tax rate dependent on import unit value (price trigger) or import volume (volume trigger)	Raise domestic producer price and reduce its volatility	Consumers
Price bands	Market access	Tax rate dependent on market trends in import unit values and domestic prices	Raise domestic producer price and reduce its volatility	Consumers
Price support	Domestic support	Fixed producer price floor, subsidy varies with domestic market price	Raise domestic producer price and reduce its volatility	Government/taxpayers
Domestic absorption agreements	Trade-related investment measures	Import license and tariff rebate requires purchase of domestic agricultural product	Raise domestic producer price	Consumers/taxpayers (foregone revenue)

Source: Economic Research Service, USDA.

U.S. Sugar in the FTAA

Increased FTAA access to the U.S. sugar market is a key issue in the FTAA negotiations on agriculture because U.S. import barriers are high and changes in access will significantly change market conditions facing competing sugar suppliers in the Western Hemisphere. The effect of an FTAA on the U.S. sugar industry will depend on how the increase in market access is achieved and on how U.S. sugar support programs may be modified as a result of these access commitments.

The U.S. domestic sugar market is supported by a sugar TRQ, a nonrecourse loan (price support) program, and a domestic supply control program (flexible marketing allotments). Excluding NAFTA, the U.S. sugar TRQ system allocates 40 countries the right to export raw sugar to the United States, with quota allocations based on historical trade shares from 1975-81. Twenty-three of the 40 countries are from the Western Hemisphere, and they accounted for 64 percent of the U.S. raw sugar TRQ in 2001. NAFTA currently allows Mexico duty-free access to the U.S. market for a limited quantity of raw sugar. Beginning in 2008, Mexico will have duty-free access with no quantitative limits.

The nonrecourse loan program allows U.S. sugar processors to take out loans from the Government using sugar as collateral. The loan rate in effect sets a floor price for sugar. After harvest, processors can pay off the loan in cash; alternatively, they can forfeit the sugar to the Government if market prices drop below the loan rate. Sugar forfeitures result in a buildup of Government stocks. The 2002 Farm Security and Rural Investment Act requires the program to be operated at no cost to the Government. Two mechanisms are used to meet this requirement: allowing processors to purchase sugar from Commodity Credit Corporation (CCC) stocks in exchange for reduced production, and adjusting marketing allotments downward if imports are below a specified volume.

This case study of sugar analyzes the effects on the U.S. sugar industry of two trade liberalization scenarios: an expansion of the U.S. sugar TRQ (2-million ton, or 280-percent, increase), and an elimination of the TRQ. If the TRQ is expanded but the current floor price is maintained, increased U.S. imports will likely cause sugar forfeitures to the Government to increase, with some of the producer adjustment occurring through transfers of publicly owned stocks. It is assumed that marketing allotments will be suspended because imports will exceed the threshold. CCC stockholding will become a major factor in the adjustment to the FTAA, with stocks projected at 88 percent of the additional market access in 2012. Alternatively, lowering loan rates to levels that would eliminate loan forfeiture by 2010 will allow more adjustment through declining domestic production (see table). While the domestic price will gradually recover to 23 cents, imports will permanently displace some domestic production.

Because the net surplus producer status of the Western Hemisphere is extremely large, and because the largest, lowest cost producers have low transport costs relative to non-Hemisphere competitors, it is assumed that full market access in an FTAA is the equivalent of unrestricted free trade in sugar for the United States. In this scenario, therefore, the U.S. is assumed to eliminate its sugar TRQ and nonrecourse loan program. The implications for U.S. sugar would be significant, with a 61-percent decline in production and a nearly fourfold increase in imports, which would account for almost 70 percent of domestic consumption. If the loan rate is abandoned, the U.S. raw sugar price will be closer to the world price, assumed to increase to 11 cents per pound. Remaining U.S. producers would face world price movements and constant market competition with FTAA producers. A large shift from high fructose corn syrup to sugar, while possible, is not likely.

It is not only U.S. producers who will face adjustments to a liberalized U.S. sugar market. Exporters to the U.S. now benefit from their access because they are able to sell sugar at the relatively high U.S. domestic price. Some of these exporters are currently high-cost producers that will likely have difficulty competing if equal access is provided to all FTAA members.

Adjustment of U.S. sugar to increased market access in an FTAA

Item	2-million metric ton increase in TRQ access		Elimination of U.S. sugar TRQ and loan program
	Fixed loan rate	Reduction in loan rate	No loan rate
Loan rate (cents/lb.)	18	13	Eliminated
Production (% change in 2012 from 2008 base)	-20.3	-26.6	-61.2
U.S. raw sugar price in 2012 (NY - No. 14)	20.2	23.0	13.1
Import share of consumption in 2012	38.1	43.6	68.6

Note: The reduction in the loan rate is calculated as the rate that avoids loan forfeiture by 2010.

Source: Economic Research Service, USDA.

reforms. NAFTA alone accounted for 20 percent of U.S. exports to Mexico during 1994-99. These estimates are substantially larger than the assessment of ERS's 1997 NAFTA report (Crawford and Link), which concluded that U.S. agricultural exports to Mexico in 1996 were about 3 percent higher than they would have been in the absence of NAFTA. The 1997 study, however, which relied upon a computable general equilibrium model, examined only the first 3 years of NAFTA's 14-year transition to trade liberalization.

Many U.S. exports have benefited from Mexican trade reform, including wheat, rice, beef, apples, pork, and cotton—exported both as a raw commodity and embodied in yarn and thread (table 2.5). These findings reinforce the conclusions of ERS's 2002 NAFTA report (Zahniser and Link), which identified several U.S. agricultural exports to Mexico whose volume during 1994-2000 increased by more than 15 percent as a direct result of NAFTA, including include rice, cotton, and apples. The analysis conducted in this report, however, did not confirm Zahniser and Link's conclusions that NAFTA significantly increased U.S. exports of corn, oilseeds, and sorghum to Mexico.

The estimated impact of the Canada-U.S. Free Trade Agreement (CFTA) and NAFTA on U.S. agricultural exports to Canada is not statistically significant. This finding may reflect that most barriers to U.S.-Canada trade were already low prior to CFTA, while several important agricultural sectors—including dairy, poultry, sugar and eggs—were exempted from trade liberalization. Within the context of this analytical approach, the main factors that help explain the level of U.S. agricultural exports to Canada are the size of the Canadian economy and the historically close trading relationship between the two countries.

MERCOSUR has created new opportunities for U.S. agricultural exports, even though the United States is not a member of that common market. For all four member countries, there are commodities where MERCOSUR is linked to increased U.S. exports, and at the aggregate level, MERCOSUR is found to have increased total U.S. agricultural exports to Argentina, Paraguay, and Uruguay. This positive effect on U.S. exports likely stems from MERCOSUR's implementation of a common set of external tariffs. In many instances, the new external tariffs are substantially lower than tariffs previously in place. However, it is important to keep this

beneficial effect of MERCOSUR in context, as U.S. agricultural exports to MERCOSUR are measured in millions of dollars, while U.S. agricultural exports to both Canada and Mexico are measured in billions.

Although MERCOSUR is found to have stimulated many aspects of U.S. agricultural exports to Brazil, it may have diverted U.S. trade in milk and cream, legumes, and wheat. Among these commodities, wheat is the most likely case of trade diversion, as Argentina has dramatically increased its share of the Brazilian wheat market. Argentina's preferential access to the Brazilian wheat market via MERCOSUR partially explains this shift, but improved wheat yields in Argentina also help to explain the changing fortunes of U.S. wheat exports to Brazil.

Table 2.5—Effects of trade liberalization on U.S. exports to Mexico, Brazil, and Argentina, by commodity

Effects of Mexican unilateral reforms and NAFTA on U.S. exports to Mexico	Effects of MERCOSUR on U.S. exports to	
	Argentina	Brazil
Positive	Positive	Positive
Wheat	Fruit or vegetable juice	Rice
Rice	Nuts	Beef
Beef	Prepared breakfast foods	Cheese
Pork	Tobacco	Distilled beverages
Tomatoes		Fruit or vegetable juice
Apples		Apples
Grapes		Grapes
Cotton		Plants and bulbs
Cut flowers		Prepared breakfast food
Tobacco		Soda and bottled water
Beer		Wine
Soda		
Prepared breakfast foods		
Macaroni		
Peanuts		Negative
Yarn and thread		Wheat
		Milk and cream
		Legumes ¹

Notes: Table reports all commodities for which the impact of trade liberalization on U.S. exports is statistically significant at the 90-percent level, according to the gravity-model analysis.

¹Effect of MERCOSUR on U.S. legume exports to Brazil is negative over 1991-99 but positive over 1994-99.

Source: Economic Research Service, USDA.

3. Advancing to the FTAA: Potential Effects on U.S. Agriculture

The FTAA will be a comprehensive agreement that is expected to address a range of economic issues. This analysis of the expected effects of the FTAA addresses several possible negotiating areas with implications for U.S. agriculture, including market access reforms (elimination of agricultural and manufacturing tariffs and other trade measures), foreign direct investment (FDI), U.S. agri-environmental impacts, sanitary and phytosanitary (SPS) measures, and trade remedy laws (see box on trade remedy laws, p. 17).

Welfare Impacts of Market Access Reform in the FTAA

Based on the assumption that all (agricultural and manufacturing) tariffs will be eliminated, the FTAA will lead to welfare gains (or increased consumer purchasing power) of \$63 billion for the Western Hemisphere, with gains achieved by every member of the trade agreement (table 3.1).⁶ U.S. welfare is expected to increase \$4.1 billion. Welfare gains derive from two sources: resource reallocation and productivity growth. First, tariff elimination removes tariff-based price distortions that influence production and consumption decisions. Countries can then reallocate resources to products in which they hold a comparative advantage, and consumers can follow their preferences in making expenditure choices. The resulting allocative efficiency gains from tariff elimination will account for almost \$4 billion in welfare gains for the region. Every country will achieve these static welfare gains from the FTAA except Chile, which will experience a small loss (under \$10 million) due to the welfare costs of its export taxes.

Second, the FTAA is expected to generate dynamic gains in the productive capacity of developing countries in the Western Hemisphere. The link between trade openness and accelerated economic growth has been widely observed in developing countries and attributed to several sources. Productivity gains accrue when the expansion of exports and imports of capital goods between developing and developed countries leads to technological spillovers that stimulate total factor productivity (TFP) growth in the developing countries. These spillovers can stem from technological advances embodied in

⁶Welfare, trade, and production effects are based on a simulation using a global computable general equilibrium model. These results reflect outcomes after a long-term adjustment (10-15 years) of the world economy to trade liberalization. Results are reported in nominal U.S. 2002 dollars. Percent changes are reported relative to a representative base year (1997).

traded goods, “learning by doing,” increased input varieties, and the competitive pressures of global markets, all of which help increase the productive efficiency of land, labor, and capital in all sectors of a developing economy. Such potential productivity gains will add \$59 billion to the estimated welfare impact of the FTAA on the region, with benefits accruing to every country, including Chile. Welfare gains will be largest in Argentina and Brazil, whose economies will increase in size by about 5 and 7 percent, respectively, due to the FTAA, mainly reflecting the large role of trade in manufacturing in these economies. By increasing returns to capital, productivity gains will also help to attract FDI, a goal of the FTAA for the Western Hemisphere’s developing countries but a potential impact that is not incorporated in this analysis.

Aggregate Agricultural Trade Impacts of the FTAA

If all tariffs (agricultural and manufacturing) are eliminated in the FTAA and productivity gains are realized, annual agricultural trade within the Western Hemisphere will increase by about \$4.0 billion, or about 6 percent (table 3.2). Agriculture will account for about 20 percent of trade expansion in the Hemisphere due to the FTAA, proportionally larger than its current 9-percent share of merchandise trade and a reflection that current agricultural tariffs are higher than manufacturing tariffs in many Western Hemisphere countries, including the United States. Annual U.S. agricultural exports to Western Hemisphere countries will increase by \$1.4 billion (about 6 percent) due to the FTAA, and U.S. imports from the Hemisphere will increase by about \$900 mil-

Table 3.1—Welfare impacts of an FTAA, by country

Country	Static welfare gains	Welfare gains including productivity growth
	<i>\$U.S. billion</i>	
United States	2.3	4.1
Canada	.1	.2
Mexico	.1	.3
Central America and the Caribbean	.2	4.9
Andean countries	.5	6.6
Argentina	.2	20.5
Brazil	.2	25.3
Chile	0	.6
Rest of South America	0	.3
Total	3.6	62.8

Source: Economic Research Service, USDA.

Table 3.2—Change in annual Western Hemisphere and U.S. trade due to the FTAA

Item	Imports from FTAA	Imports from rest of world	Exports to FTAA	Exports to rest of world
<i>\$U.S. billion</i>				
Total Western Hemisphere:				
Agriculture	3.9	0.2	3.9	-0.6
Manufacturing	16.2	-3.7	16.2	-1.2
United States:				
Agriculture	0.9	0.1	1.4	-0.3
Manufacturing	6.1	0.7	6.5	-2.6

Source: Economic Research Service, USDA.

lion (about 3 percent). The FTAA will be net trade creating in all sectors, including agriculture. In other words, the value of trade that is created within the Western Hemisphere will be greater than the decline in its trade outside the Hemisphere caused by preferential tariffs.

FTAA Trade Impacts by Commodity

The largest agricultural trade impacts of the FTAA will be in processed foods, for which the Western Hemisphere's annual global exports will increase by about \$1.5 billion, or 3 percent (table 3.3). This export category is a large, heterogeneous sector that includes fruit and vegetable juices, syrups and confections, frozen seafood, flour, baked goods, roasted coffee and teas, sugar and sugar products, and orange juice. The Western Hemisphere's annual global exports of dairy products will also have relatively large growth, at about \$330 million, or 33 percent, reflecting the high tariffs that remain on dairy products in the Western Hemisphere. The FTAA's global exports of "other crops"—a category that includes fibers, seeds, flowers, and tropical products, such as coffee and bananas—will increase by about \$235 million, or 3 percent. Global, annual grain exports, including rice, wheat, and other grains, will increase about \$460 million, or 6 percent. The commodity composition of the region's import growth due to the FTAA is similar to that of its exports, reflecting that most of the trade expansion is in intra-regional trade.

Country and Commodity Composition of U.S. Agricultural Trade Growth

The growth in annual U.S. agricultural exports due to the FTAA will be greatest to Central American and Caribbean countries (\$650 million, mostly processed foods) and Andean countries (\$360 million, mostly grains, and oilseeds and products) (table 3.4). Annual

U.S. agricultural exports to Canada will increase by about \$160 million (mostly dairy products) because the FTAA is assumed to liberalize trade in commodities excluded from NAFTA. Growth in annual U.S. agricultural exports to Argentina (\$100 million) and Brazil (\$120 million) will be mostly processed foods.

Central America and the Caribbean will also account for the largest increase in U.S. agricultural imports due to the FTAA (\$310 million), followed by an increase in imports from the Andean region of \$170 million (table 3.5). Most of the growth in U.S. agricultural imports from these two regions will be in processed foods. Although most U.S. tariffs on processed agricultural imports from these countries are already zero, U.S. preferences generally maintain high tariffs on a small number of commodities related to U.S. farm support programs, such as chocolate crumb, sweetened cocoa powders, cake mixes, and other sugar- and dairy-containing products. The United States also has a relatively high MFN tariff on frozen concentrate orange juice, also part of the processed foods sector (see box on U.S. orange juice, pg. 18).

Because trade with the Western Hemisphere accounts for a small share of U.S. agricultural production, trade expansion due to the FTAA will have very small effects on U.S. output. Except for rice, real output will change less than 1 percent for the aggregate sectors described in this report (table 3.6). Increased U.S. exports will lead to a small expansion of output in

Table 3.3—Change in annual, global agricultural imports and exports of FTAA members, by commodity

Commodity	Growth in FTAA members' global exports	Growth in FTAA members' global imports
<i>\$U.S. million</i>		
Rice	179.8	200.7
Wheat	130.5	183.1
Other grains	146.9	191.9
Horticulture	205.0	271.9
Oilseeds	126.1	166.7
Other crops	234.7	325.7
Livestock	45.0	100.9
Meats	172.2	265.4
Oils and fats	261.0	345.4
Dairy products	330.1	350.9
Processed foods	1,532.9	1,694.1
Total	3,364.1	4,096.6

Source: Economic Research Service, USDA.

oilseeds, oils and fats, milk, and dairy products. U.S. sugar production could decline significantly, depending on how the domestic support program may be modified in response to increased sugar imports from the Western Hemisphere countries (see box on U.S. sugar, pg. 10). The moderate decline in U.S. orange juice production due to the FTAA will be reduced if growth continues in U.S. demand for domestic, not-from-concentrate orange juice (see box on U.S. orange juice, pg. 18).

Inclusion of United States, Agriculture, Maximize Benefits of the FTAA

U.S. participation in the FTAA will help the Western Hemisphere attain the full potential benefits of the agreement. The large size of the U.S. economy makes it the single most important market for the rest of the

region. In agriculture, U.S. participation will account for about one-third of the region's global agricultural export growth due to the FTAA and about one-quarter of the region's global agricultural import growth (table 3.7). For U.S. trade partners, the potential trade opportunities with the United States will support both their efficiency gains based on increased trade and specialization, and potential productivity gains linked to the expansion of trade between developing and developed country partners. For the United States, participation in the FTAA ensures expansion of both U.S. agricultural exports and imports. Without U.S. participation, U.S. agricultural exports would decline because preferential treatment will be extended to competing suppliers within the region through the terms of the agreement. Also, U.S. agricultural import growth, which lowers

Table 3.4—Change in U.S. agricultural exports due to the FTAA

Commodity	Canada	Mexico	Central America and		Argentina	Brazil	Chile	Rest of South America	Total FTAA	Rest of world	World
			Caribbean	Andean countries							
<i>\$U.S. million</i>											
Rice	0	-2	102	12	0	0	0	0	112	-14	98
Wheat	0	2	22	45	0	0	0	1	70	-11	59
Other grains	-8	-27	56	60	12	1	3	0	98	-7	91
Horticulture	-7	1	34	22	3	10	1	0	65	-30	35
Oilseeds	1	-9	14	29	32	30	1	0	98	-21	77
Other crops	-3	0	66	32	13	21	1	0	129	-39	90
Livestock	-3	-2	19	4	4	3	1	0	26	-33	-7
Meat	-8	-1	77	25	2	4	0	2	102	-52	50
Oils and fats	0	-3	64	67	1	3	2	1	135	-10	125
Dairy products	203	-2	25	10	2	3	0	1	242	-10	232
Processed foods	-16	1	171	57	34	45	8	25	325	-110	215
Total agriculture	159	-43	649	363	104	121	18	31	1,401	-336	1,065

Source: Economic Research Service, USDA.

Table 3.5—Change in U.S. agricultural imports due to the FTAA

Commodity	Canada	Mexico	Central America and		Argentina	Brazil	Chile	Rest of South America	Total FTAA	Rest of world	World
			Caribbean	Andean countries							
<i>\$U.S. million</i>											
Rice, raw	0	0	0	0	0	0	0	0	0	8	8
Wheat	1	0	0	0	0	0	0	0	1	0	1
Other grains	34	0	0	0	1	0	3	0	38	4	43
Horticulture	0	5	14	1	1	10	22	0	54	1	55
Oilseeds	0	0	1	0	0	3	0	0	4	0	4
Other crops	1	3	15	5	1	24	2	0	53	2	55
Livestock	27	3	0	0	1	1	0	0	33	13	46
Meat	9	0	1	0	0	2	0	1	13	9	22
Oils and fats	3	0	0	0	0	1	0	0	4	4	9
Dairy products	0	0	1	0	4	0	0	1	7	7	13
Processed foods	10	3	279	164	47	91	75	10	679	39	718
Total agriculture	86	15	311	171	56	133	102	12	886	88	974

Source: Economic Research Service, USDA.

Table 3.6—Effects of the FTAA on U.S. agricultural production, by sector

Commodity	Real change in output
	Percent
Rice	3.2
Wheat	0.0
Other grains	-0.5
Horticulture	0.0
Oilseeds	0.4
Other crops	-0.6
Livestock	-0.4
Milk (raw)	0.1
Meat	-0.3
Oils and fats	0.5
Dairy products	0.1
Processed foods	-0.1

Source: Economic Research Service, USDA.

food costs and increases variety for consumers, would be diminished.

Agriculture is often a sensitive sector in free trade agreements because most countries provide domestic support or relatively high trade protection to their agricultural producers, and the effectiveness of some of these policies could be compromised by freer trade. Reflecting the diverse levels of economic development of FTAA members, their agricultural policies evidence a range of objectives, including providing farm income support, reducing price or income variability, providing income and employment in rural or low-income areas, and stimulating economic development. While the use of agricultural support and protection create challenges for the inclusion of agriculture in the FTAA, benefits will be greater if agriculture is included, rather than excluded, in the agreement. Trade liberalization of manufacturing alone would increase FTAA members' demand for manufacturing imports, causing some countries to reduce their agricultural production and trade to shift resources into industry. This redistribution of agricultural to manufacturing production will lead to a small increase in demand for agricultural imports in these countries. In addition, productivity gains linked to expanded trade in manufacturing sectors will stimulate consumer demand for all products, including food. The effects of the FTAA on agricultural trade in the Western Hemisphere will therefore still be positive but far smaller if agriculture is excluded from trade reform. Including agriculture in the FTAA increases these positive effects through the potential efficiency and welfare benefits linked directly to agricultural trade liberalization.

Foreign Direct Investment in Processed Foods: FTAA Could Expand Existing Agreements

Over the past decade, foreign direct investment (FDI) in the processed food industries has increased its role in the Western Hemisphere's agricultural economy. In 2001, the stock of U.S. FDI in the region's processed foods industries was about \$13 billion, more than double the level in 1990 (fig. 1). These investments generated \$45 billion in sales of processed foods in 2000, also doubling in value since 1990 (fig. 2). These sales in 2000 exceeded the value of U.S. exports to the region of processed foods in 2000 (\$12.5 billion).

Most U.S. FDI in the Western Hemisphere is in Mexico and Canada, where both trade and investment in processed foods have steadily increased. Some of the increased trade in processed products, especially between the United States and Canada, is linked to growth in FDI. The two countries trade many semi-processed food items that are made into highly processed foods by U.S. affiliates serving both U.S. and Canadian markets.

Brazil and Argentina are also major host countries for U.S. FDI. Two factors make FDI more efficient than trade as a means for U.S. entry in these countries' processed foods markets. First, the two countries are similar to the United States in types of crops produced, which makes them competitors in the supply of inputs to the food industry. Second, the high transport costs between the Northern and Southern Hemispheres generally make it more cost efficient to purchase agricultural inputs locally than to import them.

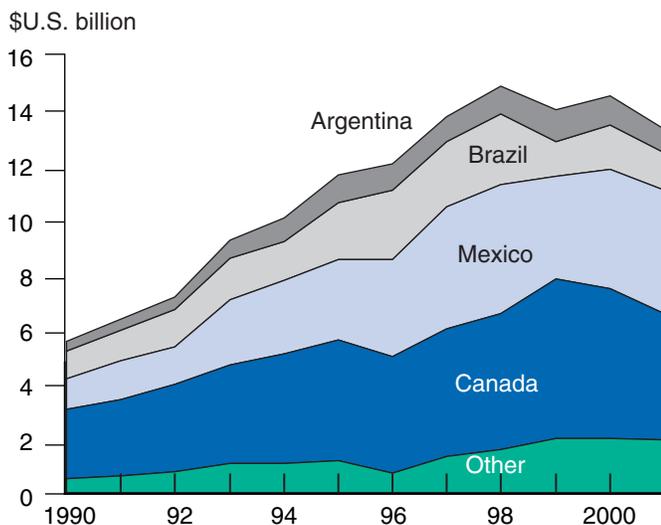
Table 3.7—Change in annual global agricultural trade due to the FTAA, without U.S. participation and without agriculture

Item	United States		Rest of Western Hemisphere	
	Exports	Imports	Exports	Imports
	<i>\$U.S. billion</i>			
FTAA, including U.S. and agriculture	1.07	0.97	2.30	3.12
FTAA without United States	-.01	.06	1.47	1.39
FTAA without agriculture	-.05	.12	.06	.60

Source: Economic Research Service, USDA.

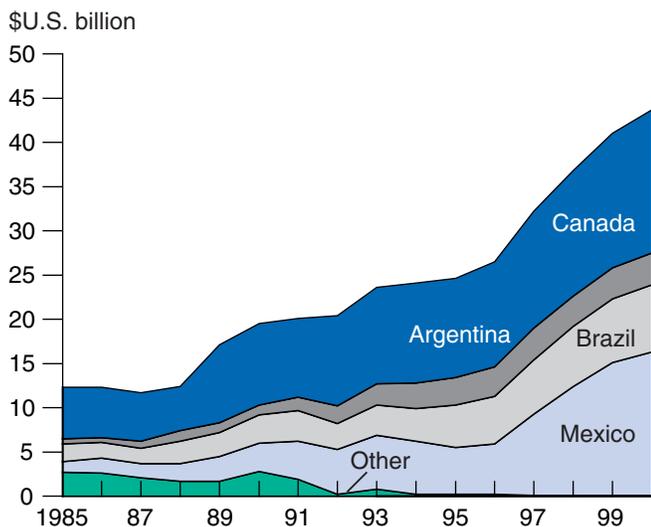
The United States is not the only foreign investor in these four markets, but it accounts for significant shares of FDI in their food industries (table 3.8). Country shares of FDI change continually, mainly based on the underlying “profit and loss” of individual firms. Shares are unlikely to reflect preferential investor treatment or “investment diversion” because of the fundamental change in the climate for FDI in the Western Hemisphere over the past decade. Latin

Figure 1
U.S. FDI position in the Western Hemisphere processed food industry during 1990-2001



Source: Economic Research Service, USDA. Calculations based on data from the Bureau of Economic Analysis.

Figure 2
U.S. FDI generates \$45 billion in food product sales in the Western Hemisphere



Source: Economic Research Service, USDA. Calculations based on data from the Bureau of Economic Analysis.

American countries underwent a widespread adoption of investment treaties during the 1990s, in an effort to attract needed foreign capital (OAS). These treaties typically grant national treatment to foreign investors, eliminate most restrictions on capital and profit remittances, and specify dispute settlement procedures.

Most countries in the Western Hemisphere are now party to at least one bilateral investment treaty. The United States is party to bilateral investment treaties with 10 Western Hemisphere countries, including Argentina. Some regional trade pacts also afford investment protection. The NAFTA agreement guarantees its members national treatment of investment and specifies a dispute settlement process. MERCOSUR has investment treaties governing both members and nonmembers, including the United States.

In the FTAA, FDI is being addressed in the negotiating group on investment. The objectives of the negotiations are to establish a fair and transparent legal framework and to create a stable and predictable environment that protects the investor, without creating obstacles to investment from outside the Western Hemisphere. So far, FTAA members are in general agreement on the types of protection to be addressed in the pact, including expropriation and compensation, transparency of laws, and dispute settlement, and members agree not to relax labor and environmental laws to attract investment. Members have yet to determine whether these protections will be extended to new investment or be restricted to existing investment, and whether the pact will cover financial portfolio investments as well as real, direct investments (U.S. GAO).

Incorporating investment protections in the FTAA would lock in the benefits already provided to the United States by bilateral and regional treaties, and it would extend protection of U.S. investments to the remaining countries in the Western Hemisphere with which it does not have treaties. These investment protections could expand the potential market for U.S. FDI in

Table 3.8—U.S. share in total FDI in processed food industries, 2000

Country	U.S. share in FDI
	Percent
Argentina	25
Brazil	40
Canada	Over 50
Mexico	60

Source: Economic Research Service, USDA. Calculations based on data from the Bureau of Economic Analysis and UNCTAD.

Trade Remedy Laws in the FTAA

FTAA countries are discussing trade remedy laws, which are used to counter imports that have been allegedly dumped by firms in the exporting country or subsidized by the government of the exporting country. National trade remedy laws are a particularly contentious issue, as some countries believe trade remedy laws are a form of thinly veiled protectionism. Other countries, including the United States, see these laws as essential to efforts to liberalize trade. Without them, they argue, it would be hard to assure domestic industries that they would be protected against unfair trade practices by other countries.

The initial proposals tabled within the Subsidies, Antidumping, and Countervailing Duties Negotiating Group of the FTA differed extensively. At one end of the spectrum, the United States argued that countries should be allowed to maintain their current trade remedy laws; at the other end, some proposed that use of trade remedy laws be limited or even eliminated within the FTAA (U.S. GAO). While negotiators have made progress in certain areas, a number of issues remain unresolved. Chief among these is the extent to which the FTAA will modify WTO rules to tighten the requirements that must be met before an FTAA country can impose antidumping and countervailing duties on other countries within the region. The United States is concerned that this could create a body of law that would be divergent from U.S. law applied to countries that are not members of the FTAA. This could complicate antidumping investigations that target suppliers from multiple countries, both within and outside the Western Hemisphere, as well as pose legal implications within the WTO.

In 2001, 10 FTAA countries reported having 634 active trade remedy measures in place (see table). Fourteen FTAA countries were the targets of these measures. The majority of these measures, 569, or 90 percent, were the result of alleged dumping. Five countries were applying both antidumping (AD) and countervailing duties (CVD), and five had only antidumping duties.¹ Eighteen percent of the antidumping measures applied by FTAA countries and 14 percent of the countervailing measures were assessed against imports from countries within the Western Hemisphere. The United States was the only country applying countervailing duties against its regional trading partners. The United States was also the heaviest overall user of trade remedy measures within the Western Hemisphere, with 32 measures in place against other FTAA countries. This represented 10 percent of U.S. AD/CVD measures in place on December 31, 2001.

The United States was also the main target of other countries' measures within the region, with 39 antidumping measures in place against U.S. exports. The United States had measures against imports from five countries in the region (Argentina, Brazil, Canada, Chile, and Mexico), while six countries had at least one measure in place against the United States (Argentina, Brazil, Canada, Colombia, Mexico, and Venezuela).

¹Another three countries (Chile, Costa Rica, and Uruguay) have reported trade remedy investigations in the past, but none reported active measure in place to the WTO during 2001.

Number of final antidumping and countervailing duty measures in force within the FTAA, as of December 31, 2001

Exporting country	Countries applying both antidumping (AD) and countervailing duties (CVD)					Countries applying only antidumping duties					Total FTAA							
	United States		Argentina		Canada		Mexico		Venezuela ¹		Brazil	Colombia	Jamaica	Peru ¹	Trinidad and Tobago ¹	AD	CVD	
	AD	CVD	AD	CVD	AD	CVD	AD	CVD	AD	CVD	AD	AD	AD	AD	AD			
	<i>Number</i>																	
Argentina	6	2			1						1						8	2
Brazil	1	4	11		5		3										20	4
Canada	6	2															6	2
Chile	2		3							2				2			9	0
Colombia																	0	0
Costa Rica																	0	0
Guatemala																	0	0
Jamaica																	0	0
Mexico	8	1	2		1					3				2			16	1
Nicaragua																	0	0
Trinidad and Tobago															1		1	0
United States			1		14		11		2	5		3					36	0
Uruguay										1							1	0
Venezuela							1			1					1		3	0
FTAA total	23	9	17	0	21	0	15	0	2	13	4	0	4	4	1	1	100	9
Global total	260	48	47	3	94	10	61	1	19	53	14	1	15	5	569	65		
FTAA share of global (%)	9	19	36	0	22	0	25	0	11	25	29	0	27	20	18	14		

¹Measures for Peru, Trinidad and Tobago, and Venezuela are as of June 30, 2001.

Source: WTO members' semi-annual reports to the Committees on Anti-dumping practices and Subsidies and Countervailing measures.

U.S. Orange and Orange Juice Industries in the FTAA

The U.S. orange juice industry receives considerable tariff protection from imports. Given this insulation, U.S. juice producers and orange growers are concerned that the FTAA's reduction or elimination of the U.S. tariff on orange juice concentrate will expose the domestic sector to low-priced imports from the world's largest orange juice exporter, Brazil. As imports increase, U.S. processors are likely to demand fewer oranges from domestic growers. Currently, juice processors purchase 95 percent of Florida fresh orange production.

Our analysis of the U.S. orange and juice industry uses a global model of the orange juice sector. The model accounts for both the full implementation of NAFTA and the recent, and increasing, preference of U.S. consumers for not-from-concentrate (NFC) relative to frozen concentrate orange juice (FCOJ). If U.S. consumer preferences remain unchanged, elimination of the U.S. tariff on orange juice concentrate will lead to a substantial (26 percent) increase in orange juice imports by the United States, mostly of FCOJ (see table). Under this scenario, imports from Brazil will increase by 55 percent. Imports from other suppliers, however, will decline. Production of U.S. oranges will decline by 3 percent and U.S. prices will drop 15 percent. Grower revenue would fall 17 percent.

Our analysis also distinguishes between the two prevalent types of orange juice consumed, FCOJ and NFC. Consumers consider NFC orange juice to be of higher quality than FCOJ and are willing to pay a premium for it. The share of NFC in U.S. orange juice consumption has increased from 15 to 40 percent over the last 10 years. The high cost of transporting NFC juice from Brazil to the U.S. gives domestic producers a comparative advantage in supplying this product, although innovations in transportation technology could make imports more competitive in the future. Changes in U.S. consumer demand for orange juice and in transportation technologies are therefore key variables that could determine the effect of the FTAA on the U.S. orange and orange juice industry.

If the trend in increased consumer preference for NFC orange juice continues, even at a fairly small rate, overall U.S. orange juice production will experience a more modest decline, with less of an impact on the derived demand for U.S.-grown oranges. The potential shift in consumer preferences to NFC, combined with the FTAA, would result in decreases of 2 percent in domestic orange production and 4 percent in domestic prices. Grower revenue would drop 6 percent.

Effects of the FTAA on the U.S. orange and orange juice industries

U.S. industry segment	Base period quantity or price	Change with FTAA plus:	
		No changes in U.S. preferences	Continued increase in U.S. preference for NFC ¹
	<i>Million gal SSE</i>	-----Percent-----	
Orange juice imports	376	26.1	23.4
Frozen	369	26.6	23.7
NFC	7	3.4	15.0
Orange juice production	1,370	-2.7	-1.9
Frozen	753	-4.9	-8.2
NFC	617	-0.1	5.6
	<i>Dollars/gal SSE</i>		
Frozen juice price	1.32	-10.4	-10.1
NFC price	1.82	-5.6	3.6
	<i>Millions</i>		
Orange boxes	217	-2.7	-1.9
	<i>Dollars/box</i>		
On-tree orange price	5.01	-15.1	-3.8

Notes: Juice yield conversion factor is 6.3 SSE gallons per box. NFC = Not from concentrate. SSE = Single strength equivalent. Base period is a simulation of post-NAFTA implementation quantities and prices.

¹Scenario assumes a 2.5-percent increase in NFC share of consumption.

Source: Economic Research Service, USDA.

processed foods. However, FDI is influenced by many factors in addition to investment protection, particularly prospects for economic growth, a favorable business climate, and economic and political stability. These economic and political determinants of FDI are likely to be positively influenced by regional integration in the FTAA and may have a greater effect on stimulating further growth in FDI than any additional investment protection provided by the FTAA agreement.

Potential Agri-Environmental Impact of the FTAA

Within the past decade, environmental and consumer groups have called for formal consideration of the environmental impacts of trade agreements. One concern of these groups and others is that some countries may respond to expanded export opportunities by weakening their environmental standards to lower costs of production and attract foreign investment. Firms will then relocate production facilities to the less regulated country, resulting in a loss of jobs at home and a worsening of pollution as more production occurs using dirty technologies. The prevention of such a scenario in free trade is being primarily addressed in the FTAA's investment negotiations. The draft text includes a proposal that labor and environmental standards may not be weakened to attract foreign investment.

Weak environmental standards that already exist in some developing countries are another cause for concern. Compliance with environmental regulations in developed countries is assumed to impose costs, creating unfair competition if trade is liberalized between countries with different environmental standards. Differences in per capita incomes and levels of development are a reason that some countries have lower environmental standards than others. Environmental standards are more likely to be weak in low-income countries, although the income level itself may not be the driving factor (Dasgupta et al.). Conditions associated with countries that have lower income levels, such as weak regulatory environments and limited access to information on the costs of environmental damage, also lead to poor environmental quality.

Some argue that an improved environment is an achievable goal for the long run, as the economic growth associated with trade liberalization will lead to higher incomes and higher environmental standards in developing countries. Whether pollution could or must increase during the developmental transition has been a key issue in the debate on trade and the environment.

A growing body of empirical evidence on the relationship between income levels and the environment suggests that developing countries today are better able to improve their environmental quality at lower levels of income and earlier stages of development than historically (Dasgupta et al.). Factors influencing this change include greater levels of public concern and greater knowledge about the costs of pollution. Trade liberalization, too, has been an influence; in addition to stimulating income growth, it allows the speedier adoption of newer and cleaner technologies and efficiency gains that typically are based on production practices that are less polluting.

To address growing concerns about the effects of globalization on the environment, the United States declared in 2001 that all trade agreements in which it will take part will be subject to an assessment of each agreement's impacts on the U.S. environment. Determining how such reviews are to be conducted and the scope of potential impacts that should or can be considered is a challenge for researchers and regulators. While research is available to support impact analyses of some indicators of conventional pollutants, many other pollutants are untested and still others may be unknown but of potentially great concern in the future. Environmental impact evaluations must therefore remain a sufficiently flexible process to adapt to changes in technologies, the level of knowledge about the environment, and social concerns about, and demand for, environmental quality.

The FTAA will be subject to an environmental review. Because trade liberalization in the FTAA is expected to have minimal effects on U.S. agricultural production, it has only a small potential to affect the U.S. agri-environment, and these impacts can be assessed in an agriculture sector model. The analysis reported here is not an official environmental review. It provides analysis of some of the agri-environmental indicators that could be included in such reviews.

Measurable environmental indicators for agriculture include soil depreciation, nitrogen loss, and soil erosion as production scale, composition, technologies, and location change.⁷ The relatively small effects of the FTAA on U.S. agricultural production will result in only small impacts on these agri-environmental indicators. The FTAA will yield small benefits in terms of soil erosion and water pollution from nitrogen and

⁷The analysis in this section draws on the U.S. Mathematical Programming Model (USMP), a spatial and regional partial equilibrium model described in House et al. (1999).

phosphorus, with reductions of less than 0.2 percent of baseline values. It will, however, result in small environmental costs in terms of air pollution from nitrogen and soil depreciation, with increases of less than 0.1 percent of baseline values. The environmental impacts of the FTAA cannot yet be measured for sugar, among other products. Studies of sugarcane production in Florida suggest that a decrease in U.S. production could improve environmental quality as water-retention capacity in the neighboring Florida Everglades watershed increases. However, the final environmental consequence of retiring sugar acreage will depend on alternative uses of that land.

Sanitary and Phytosanitary Issues in the FTAA: Challenges of Implementation

Sanitary and phytosanitary measures can pose significant barriers to trade, and they are likely to become more prominent as tariff barriers are lowered. FTAA members have therefore committed themselves to identifying and developing mechanisms needed to facilitate Western Hemisphere trade consistent with the WTO SPS agreement concluded in the Uruguay Round and implemented in 1995. The WTO agreement provides a set of multilateral rules that ensure SPS measures are applied only to achieve appropriate levels of protection for human, animal, or plant life or health. To ensure that such regulations are not protection policies “in disguise,” the agreement requires them to be based on scientific principles.

Negotiation of an agreement on SPS measures in the FTAA is expected to address whether the WTO SPS agreement provides a sufficient framework for the regional trade pact, or whether the region should pursue a “WTO-plus” agreement that spells out additional rights and obligations. So far, debate on SPS matters in the FTAA has mainly been over the implementation of current WTO SPS obligations in the region, rather than the WTO agreement’s fundamental principles. Advancing to a WTO-plus agreement presents challenges: it is difficult to draft prescriptive rules to bring about a more energetic fulfillment of current obligations without codifying procedures that could become increasingly inappropriate as technology, institutions, and the WTO SPS agreement itself change over time.

The key issues on SPS in the FTAA are likely to mirror those in the WTO—particularly the concerns of developing country exporters about their ability to meet the increasing demand for food safety in developed countries. Developing country exporters need

constructive solutions and assistance in fulfilling their obligations and in exercising their rights under the WTO SPS agreement.

Some countries have offered proposals that address implementation of the core principles of the WTO agreement: transparency, science-based standards, equivalence, regionalization, and multilateral harmonization. Transparency requires that countries notify the WTO (and, therefore, all trade partners) of changes in SPS regulations. Countries can also counter-notify, or complain, about other countries’ regulations. Increased regulatory transparency in the region could improve the functioning of markets. While the major economies in the Western Hemisphere, including the United States, Canada, Mexico, Argentina, Brazil, and Chile, routinely notify the WTO of their proposed regulations, about one-third of Western Hemisphere countries (primarily the Caribbean countries) have not submitted any notifications to the WTO. Many developing countries have requested assistance with procedures, including translation of documents and extensions of deadlines.

Countries must be able to reference scientific evidence to support their risk mitigation measures. Developed country exporters have the resources to successfully challenge the scientific rationale of others’ measures, as well as employ new, scientifically based initiatives to ensure food safety. For many of the smaller economies, the resources needed to establish a scientific basis for regulations are limited. Weak science is one factor that makes the equivalence principle difficult to implement between developed and developing countries. The equivalence principle ensures the right of exporting countries to use different measures if they demonstrably achieve the same safety outcome as importers’ regulations, but insufficient inspection and services in developing countries often preclude them from taking advantage of this provision. This problem is increasing because a growing number of SPS measures are process standards designed to check the potential for hazards at critical points during production, rather than product standards that address the testable characteristics of the finished product only.

Regionalization, which allows trade among regions of countries where the risk of disease and pest transmission is low, was incorporated into NAFTA as well as the WTO SPS agreement. Regionalization is already opening trade in the Western Hemisphere. Chile is allowing imports of fresh melons and watermelons from some parts of the United States. The United States is allow-

ing avocado imports from specified regions of Mexico to the Northeast and Midwest, and is considering opening access to all 50 States. In general, however, the benefits from regionalization have been constrained in many developing countries in part because regionalization requires adequate public investment in laboratory, inspection, monitoring, and certification infrastructure.

Like domestic support policies, SPS measures in some respects cannot be effectively addressed in a regional framework. SPS rules cannot be tailored for specific products of interest nor can preferential rules and regulations be established for regional partners.

Technical assistance, however, can be targeted regionally and may be especially suitable for the coalition of developed and developing countries that form the FTAA membership. Experience with the WTO SPS agreement suggests that technical assistance is an effective mechanism for addressing barriers to trade and helping to improve food safety. Options for technical assistance within the FTAA include assistance in pest and disease eradication, strengthening of public sector testing and certification capacity to speed equivalence determinations and support regionalization, and support for greater participation of developing countries in the activities of international standard-setting institutions.

4. The FTAA and the Doha Development Agenda

FTAA members (except the Bahamas) are negotiating their regional trade agreement at the same time that they are engaged in multilateral negotiations in the WTO Doha Development Agenda. Globally, the continued proliferation of regional trade agreements indicates that regionalism and multilateralism have become accepted as dual trade strategies for most countries. As of June 2003, 140 regional trade agreements are in force. Nearly every country in the world is now a member of at least one trade agreement (Crawford and Laird). Nevertheless, the benefits of a regional versus a multilateral trade strategy is the subject of a continuing public policy debate (Burfisher and Zahniser).

Multilateralism will always be a “first best” strategy because it is nondiscriminatory, that is, all countries participate and offer similar tariff treatment to all WTO members. This principle of nondiscrimination forms the foundation of today’s global trade rules. Regionalism, on the other hand, violates this principle by offering preferential tariff treatment to selected trade partners. Opponents of regionalism argue that the creation of trade among a small group of preferred trade partners is mostly achieved at the expense of trade with and investment in nonmembers, and it may create large blocs of countries with competing regulatory and institutional practices.

Advocates of regionalism generally emphasize its incremental and more attainable benefits, compared with global reform. Regional agreements are more likely to achieve deeper and faster reform among like-minded partners than is possible in the more diverse multilateral negotiations. Advocates also argue that a region’s successful experience in dealing with nontariff barriers following the removal or reduction of regional tariffs can provide experience that strengthens the multilateral process. The newer regional agreements formed in the past decade, particularly those in the Western Hemisphere, have also helped to accelerate economic growth in small economies by locking in unilateral reforms, stimulating investment and productivity growth, and fostering links with large and more developed economies (Ethier). For small, reforming countries especially, regionalism can play a role as a first step in engaging in the global trading system, and it helps give such countries a greater stake in a rules-based global trading system. Trade rules that ensure predictability and fairness in trade relationships, and

that offer a credible enforcement mechanism, provide conditions that are favorable for the conduct of business, investment, and the expansion of trade.

As the Western Hemisphere pursues a regional agreement, two factors make multilateral agricultural reform of continued importance for FTAA members. First, FTAA countries are global agricultural traders. They depend on non-FTAA markets, with about 65 percent of their agricultural exports destined for, and 35 percent of their agricultural imports originating from, outside the Western Hemisphere. Non-FTAA markets are especially important for the United States and Brazil, for whom they account for 75-80 percent of total agricultural exports. The FTAA region is also a major trade bloc in global agricultural markets. Agricultural exports going outside the Western Hemisphere account for about 45 percent of world agricultural trade, and imports from the rest of the world account for about 9 percent of that trade.

The Western Hemisphere’s position as a large net agricultural exporter gives it a great stake in WTO negotiations that may further liberalize global agricultural markets. Despite the reforms achieved in the Uruguay Round, these markets are still characterized by significant policy distortions (USDA). Further multilateral reform will impose disciplines on FTAA members and the rest of the world alike. However, in general, the level of distorting policies used by FTAA members is lower than in most other countries and regions. The average, post-Uruguay Round bound agricultural tariff of FTAA countries of about 40 percent is lower than the global average bound rate of 62 percent (Gibson et al.). The average applied rate of FTAA countries is about 13 percent. Domestic support in the FTAA is also relatively low. The 2002 producer support estimates for the three FTAA members of the OECD are 18 percent (United States), 20 percent (Canada), and 22 percent (Mexico)—below the aggregate OECD rate of 31 percent (OECD). Finally, export subsidies by FTAA members are minimal, with the EU accounting for over 90 percent of global expenditures on these subsidies in 1998 (Leetma).

These patterns in agricultural trade flows and agricultural policy distortions suggest that the region will benefit from further global trade reforms. Any scenario of globalized reform shows the benefits of a multilateral agreement for the Western Hemisphere. For example, if the Doha Round replicates the limits set in the Uruguay Round, the region’s annual agricultural exports outside the Western Hemisphere would

increase 10 percent and imports would increase 2 percent. Western Hemisphere agricultural export growth in this scenario for multilateral reform is estimated to account for about 40 percent of the resulting expansion of global agricultural trade.

The multilateral negotiations also have significance for the FTAA because of their more comprehensive agenda for agricultural reform. The Doha Round is negotiating disciplines on market access, domestic support, and export subsidies. While the mandate for the FTAA includes export subsidies in the region and all other practices that distort trade in agricultural products, its regional scope means that it is difficult for the FTAA to limit members' domestic support. In addition, the FTAA cannot address the use of export subsidies by non-FTAA countries, which affect competition within the Western Hemisphere and in third markets.

FTAA members recognize the global character of their agricultural markets and the importance of third-country policies. At the Toronto Trade Ministerial in 1999, FTAA members agreed to work in the multilateral negotiations toward the global elimination of export subsidies on agricultural products. FTAA members addressed the problem of domestic support at the Quito Trade Ministerial Meetings in November 2002. There, members agreed on the need for significant results in the negotiations on agriculture in both the FTAA and the WTO and, furthermore, noted that progress in the FTAA's market access negotiations for agriculture will depend on progress being made on a broader agriculture agenda. This interdependence of the regional and multilateral negotiations increases the Western Hemisphere's stake in the Doha Development Agenda.

5. Conclusion

As trade becomes increasingly important for both U.S. agricultural producers and consumers, the potential benefits from the U.S. pursuit of a more open and market-oriented global trading system become greater. U.S. producers will benefit directly from their greater access to world markets and indirectly from the accelerated economic growth and increased demand for food that trade liberalization can foster. Consumers will benefit

because global trade rules and freer trade will increase variety, lower food costs, and ensure the safety and security of food supplies. U.S. pursuit of regionalism complements its pursuit of multilateralism. Both strategies reinforce the same principles of trade liberalization, with regionalism offering an opportunity to achieve deeper reforms on key issues with some partners and multilateralism providing the venue for more comprehensive and inclusive, but likely more gradual, trade liberalization.

Recommended Readings

- Burfisher, Mary E., and Steven Zahniser (2003). "Multilateralism and Regionalism: Dual Strategies for Trade Reform," *Amber Waves*, Vol. 1, No. 4, pp. 22-29.
- Crawford, Jo-Ann, and Sam Laird (2001). "Regional Trade Agreements and the WTO," *North American Journal of Economics and Finance*, Vol. 12 (2), pp. 193-211.
- Crawford, Terry, and John E. Link (coord.) (1997). "NAFTA," *Situation and Outlook Series*, International Agriculture and Trade Report WRS-97-2, U.S. Department of Agriculture, Economic Research Service, <<http://www.ers.usda.gov/briefing/nafta/mandated.htm>>.
- Dasgupta, Susmita, Benoit Laplante, Hua Wang, and David Wheeler (2002). "Confronting the Environmental Kuznets Curve," *Journal of Economic Perspectives*, Vol. 16 (1), pp. 147-168.
- Ethier, William J. (2001). "The New Regionalism in the Americas: A Theoretical Framework," *North American Journal of Economics and Finance*, 12 (2), pp. 159-172.
- Gibson, Paul, John Wainio, Daniel Whitley, and Mary Bohman (2001). *Profiles of Tariffs in Global Agricultural Markets*, Agricultural Economic Report No. 796, U.S. Department of Agriculture, Economic Research Service.
- Hasha, Gene (2001). "EU Preferential Trading Arrangements: Heightened Competition for U.S.," *Agricultural Outlook*, No. AGO-287, U.S. Department of Agriculture, Economic Research Service, pp. 16-20.
- House, R.M., H. McDowell, M. Peters, and R. Heimlich (1999). "Agriculture Sector Resource and Environmental Policy Analysis: An Economic and Biophysical Approach," in *Environmental Statistics: Analyzing Data for Environmental Policy*. New York: John Wiley and Sons, pp. 243-261.
- Leetma, Susan. (2001). "Effects of Eliminating EU Export Subsidies," *Agricultural Policy Reform in the WTO: The Road Ahead*, Agricultural Economic Report No. 802, U.S. Department of Agriculture, Economic Research Service.
- Organization for Economic Development and Cooperation (2003). *Agricultural Policies in OECD Countries: Monitoring and Evaluation, 2003*. OECD: Paris.
- Organization of American States (2001). *Investment Agreements in the Western Hemisphere: A Compendium*, Study prepared for the FTAA Negotiating Group on Investment.
- Sandrey, Ron (2000). *The Relative Tariff Ratio Index*, New Zealand Trade Consortium Working Paper No. 7, New Zealand Trade Consortium with the New Zealand Institute of Economic Research.
- Stout, James V., and Julieta Ugaz-Pereda (1998). "Western Hemisphere Trading Blocs and Tariff Barriers for U.S. Agricultural Exports," *Regional Trade Agreements and U.S. Agriculture*, Agricultural Economic Report No. 771, U.S. Department of Agriculture, Economic Research Service.
- U.S. Department of Agriculture, Economic Research Service (2001). *Agricultural Policy Reform in the WTO: The Road Ahead*, Agricultural Economic Report No. 802.
- U.S. General Accounting Office (2001). *Free Trade Area of the Americas: Negotiators Move Toward an Agreement That Will Have Benefits, Costs to U.S. Economy*, GAO-01-1027.
- World Trade Organization (2003). *Interim Report (2002) of the Committee on Regional Trade Agreements to the General Council*, WT/REG/12.
- Zahniser, Steven, and John Link (eds.) (2002). *Effects of North American Free Trade Agreement on Agriculture and the Rural Economy*, Agriculture and Trade Report WRS-0201, U.S. Department of Agriculture, Economic Research Service, <<http://www.ers.usda.gov/publications/wrs0201/>>.