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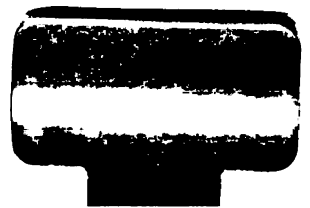
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**ASIA:
THE EMERGING
MARKET**

October, 1997



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ACKNOWLEDGEMENTS

This paper was written by Jeffrey Clark, Consultant. It was prepared with the collaboration and guidance of Tom Kerr. Additional reviews and comments by Clare Narrod and Joaquin Arias were appreciated. Technical assistance from Lorena Rodriguez was instrumental in getting the paper from manuscript form to published document.

USDA-ERS provided access to data, office space and logistics support during early work on the paper.

This study is a result of a larger effort that is being carried out by the Technical Management Unit of IICA, under the direction of P. Lizardo de las Casas.

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WHY IS IT IMPORTANT TO HAVE IMPROVED INTELLIGENCE ON ASIAN MARKETS?

Over the last two decades the economies of Asia have developed to the extent that they have become major markets for imported goods, including food and agricultural items. The size and growth of Asian markets are providing opportunities for agricultural exporters around the globe. Among Western Hemisphere producers, NAFTA countries have taken good advantage of these emerging markets. With a few notable exceptions, however, non-NAFTA countries have yet to capitalize on the opportunities provided by the newfound affluence and openness across the Pacific Ocean. (Table 1)

In 1995, Asians imported \$97.2 billion worth of agricultural goods. This total was second only to the EU's \$200 billion. If one looks exclusively at trade with external trading partners, the importance of Asia becomes even more apparent. Considering imports only from non-member countries reduces the EU's \$200 billion total to \$73.8 billion. Correspondingly, the annual import growth rate from the mid-1980s to the mid-1990s drops from 9.2% to 4.0% when purchases only from non-member producers are counted. Asia purchased a much larger share of its imports from external (non-Asian) suppliers, \$64.7 billion of the \$97.2 billion total, and supported 7.5% annual growth in these "foreign" imports, only slightly lower than the 8.3% rate for intra-Asian trade. Although NAFTA purchased over half of its \$48.0 billion total imports from non-NAFTA countries, import growth from these external sources was limited to 2.7%, one quarter of the growth rate among NAFTA countries (10.9%). Of the three main markets, Asia was easily the most receptive to and the fastest growing for imports from "external" suppliers.

Japan, the second largest single country market in the world for agricultural imports, purchased \$36.4 billion in 1995 to lie between Germany (\$45.3 billion) and the US (\$33.3 billion). Japan is not alone in Asia as a major destination for agricultural products. China's \$11.5 billion and South Korea's \$9.4 billion worth of imports contributed to the East Asian tally of \$71.9 billion. While the import markets of South Asia are obviously less developed, they imported only \$5.7 billion for a population of over one billion people, the countries of SE Asia purchased a total of \$19.6 billion. (UN trade data)

Growth of the Asian Market

Asians increased their total agricultural imports 7.8% annually from 1985 to 1995. This was higher than Europe's 6.9% and the Western Hemisphere's 6.0% annual increases. Several markets in Asia expanded their agricultural imports at rates higher than 10% per year: China, Indonesia, Korea, Myanmar, the Philippines, and Thailand. Asian demand growth will continue to outpace that in Europe and North America due to increasing incomes and population, falling trade barriers and changing diets.

Table 1: Asian Agricultural Imports, by Source

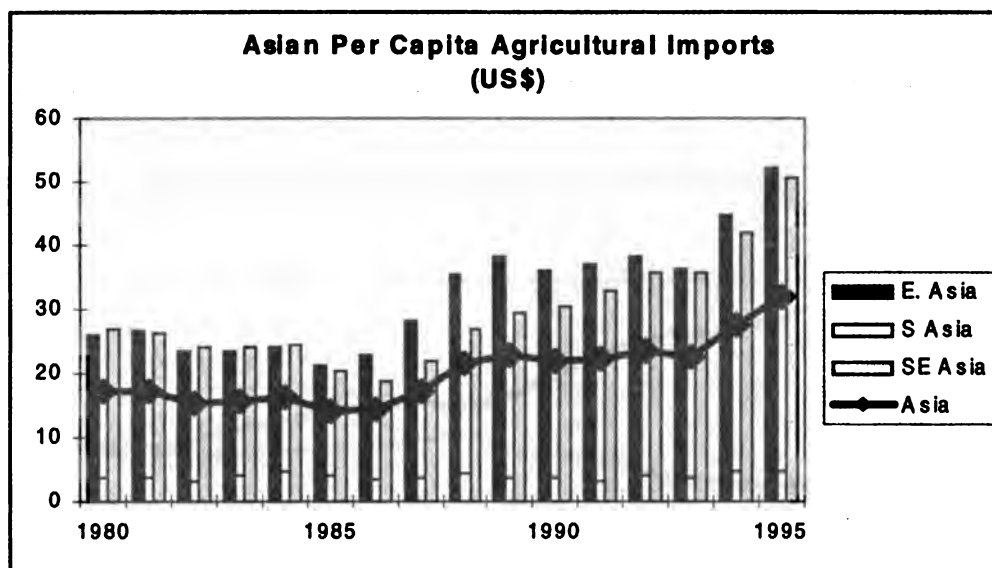
	Value (US\$ billion)	Share of World (%)	Share of Rest of World (non-Asia) (%)	Share of Western Hemisphere (%)	Annual Growth Rate (%)
Total Agricultural Products					
World	97.2	-	-	-	7.8
Non-Asian Suppliers	64.7	67	-	-	7.5
Western Hemisphere	37.3	38	58	-	6.0
NAFTA	30.4	31	47	82	5.6
Latin America	7.0	7	11	19	8.0
Caribbean	0.3	0	1	1	8.9
Horticultural Products					
World	7.0	-	-	-	9.7
Non-Asian Suppliers	3.4	49	-	-	12.0
Western Hemisphere	2.0	28	58	-	12.0
NAFTA	1.8	25	51	88	11.1
Latin America	0.3	5	10	17	22.5
Caribbean	0.0	0	0	0	-15.3
Intermediate Agricultural Goods					
World	29.4	-	-	-	8.9
Non-Asian Suppliers	17.2	58	-	-	9.1
Western Hemisphere	8.3	28	48	-	9.2
NAFTA	5.2	18	30	63	8.2
Latin America	3.1	11	18	38	11.5
Caribbean	0.0	0	0	0	-13.2
Consumer-Oriented Agricultural Goods					
World	29.5	-	-	-	13.3
Non-Asian Suppliers	18.9	64	-	-	13.5
Western Hemisphere	8.3	28	44	-	15.8
NAFTA	7.3	25	39	89	16.0
Latin America	1.1	4	6	13	15.1
Caribbean	0.0	0	0	0	12.0

Source: USDA, Economic Research Service.

Observing the success of Japan and the "four tigers" in achieving high income levels, other Asian countries are following their examples and developing rapidly. Three of the world's ten highest per capita GNPs are in Asia: Japan, Singapore and Brunei. Five Asian economies had per capita incomes of \$10,000 or more in 1995. (World Bank data) This escalating income is translating into increased purchasing power and increased imports. (Figure 1) As the economies of East and SE Asia continue to develop, their

consumers are demanding more food of higher quality and greater diversity. Some of this growing demand will result in imports of consumer-ready products and some of it will mean increased imports of raw materials or intermediate goods for further processing. For example, Japan is leading the way in Asia toward the purchase of consumer-oriented products. Since the countries of SE Asia are not as developed, demand for better food there has become apparent in other areas such as in fledgling livestock industries. Although most producing countries in the Western Hemisphere would rather supply high-value-added meat products, for the time being they are having to satisfy themselves with supplying animal feed to SE Asia.

Figure 1



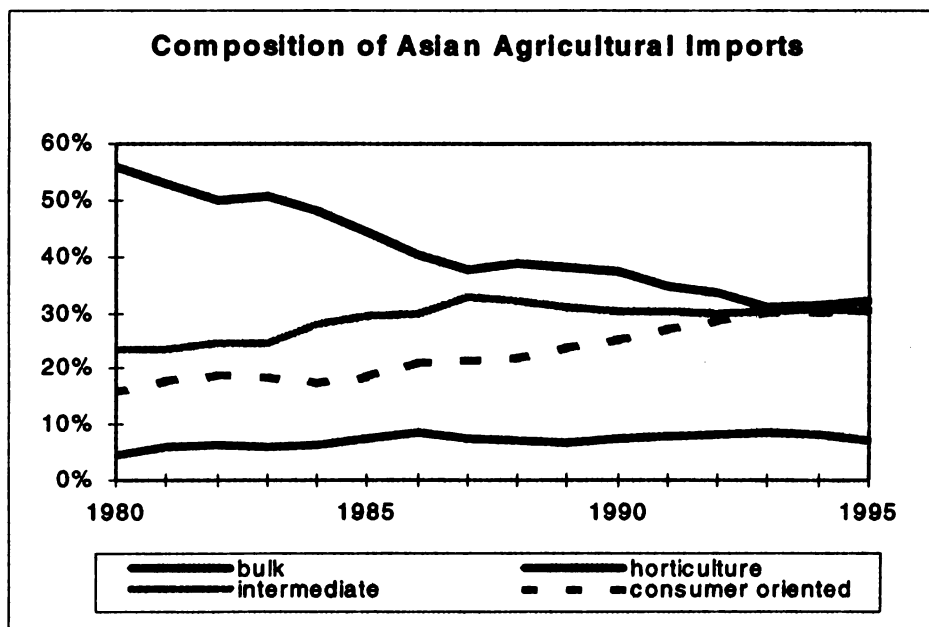
Sources: USDA, Economic Research Service. World Bank.

Multiplying the effect of the increased per capita income of Asian inhabitants is an increase in their numbers. Nine of the world's twenty most populous countries are in Asia, including three of the top four: China, India and Indonesia. Being the most populated continent, even a small positive birth rate results in a large population increase. As the number of consumers in Asia increases and the purchasing power of each consumer grows, the market potential increases as well.

Providing further impetus to the expansion of agricultural trade, many Asian countries have begun to dismantle their barriers to agricultural imports as a result of their commitments through the World Trade Organization (WTO) and regional trade fora. Although many countries were disappointed with the outcome of the Uruguay Round with respect to agriculture, the actions agreed to and the establishment of the WTO have been beneficial to agricultural trade. Additionally, Pacific Rim countries, including those in Asia, have embarked on another trade liberalization effort through the Asia Pacific Economic Cooperation (APEC) forum. The actions taken to liberalize agricultural trade could have significant repercussions for exporting countries. The timing of this liberalization is somewhat auspicious given the fact that a few years ago most Asian citizens could not afford imported foods. Now that their incomes are great enough to purchase substantial volumes of imported goods, the barriers which inhibited this trade are coming down. South Korea, a recent entrant into the Organization for Economic Cooperation and Development (OECD), is a prime example. Although it was designated by the US earlier this decade as the number one fortress closed to US agricultural goods, South Korea has begun to open its markets and has become wealthy enough to purchase large quantities of imported products.

The composition of agricultural goods imported by Asian markets has changed over the last ten years. (Figure 2) Asian consumers, adjusting to an urban existence as they migrate to the cities for employment, are moving toward more consumer-ready food and away from less processed or raw materials imports. In the mid-1980s, bulk commodities dominated Asian imports with a 47.7% share and consumer-oriented products constituted only 18.3% of total agricultural imports. In the mid-1990s, however, imports of consumer-oriented products had increased to represent 30.2% of the agricultural total, while bulk commodities had declined to a 31.5% share. Intermediate and horticultural goods also expanded their proportions of total agricultural imports, but less dramatically. It is important to acknowledge this trend toward high-value-added products when one is evaluating which markets to focus on for future growth and market share.

Figure 2



Source: USDA, Economic Research Service.

Playing a role in this trend toward increasing variation in imports is the changing diet of many Asians. Since they are eager to diversify their eating experiences and suddenly are affluent enough to indulge this hedonistic tendency, they are consuming more western foods. This growing demand provides ample opportunity for Western Hemisphere producers to increase their exports to Asia, in terms of both volume and variety.

The growth rates of commodities imported by Asia covered a wide range, from a high of 27% per year for live plants and bulbs to -9% for palm kernels. (Table 2) Many of the products which enjoyed strong annual growth rates are commodities which Latin American and Caribbean countries produce. (Figure 3) In addition to those of live plants, imports of tobacco products, cut flowers, leather and fruit and vegetable juices expanded more than 20% per year. Livestock meats and wine increased at rates of at least 15% as well. Processed fruit imports grew over 13% per year, providing another opportunity for Western Hemisphere producers to add value to their products being exported to Asia. At the other end

of the spectrum were the more traditional export items such as wheat and barley which increased at rates of less than 2.5% annually.

Table 2: Growth Rate of Total Imports for the Three Main Markets from 1983-85 average to 1993-95 average

<u>Commodity or Aggregation</u>	<u>Asia</u> (%)	<u>NAFTA</u> (%)	<u>EEC</u> (%)
Total Agriculture (USDA definition)	7.8	5.3	6.9
Bulk commodities	3.4	2.3	1.5
Fresh horticultural	9.7	7.9	9.1
Intermediate goods	8.9	5.5	5.2
Consumer-oriented, processed	13.3	6.3	10.6
Livestock Products, All	10.2	4.8	7.2
Fresh & Prsrvd Vegetables	10.9	8.9	9.2
Fresh Fruits	9.4	7.6	9.3
Oilseed Oils	8.4	7.1	4.9
Oilseeds & Kernals	3.4	3.7	1.4
bananas & plantains	6.9	4.5	11.4
bovine meat (fresh and frozen)	15.1	5.2	7.6
cocoa beans & products	8.0	1.6	6.3
coffee & products	3.9	-1.9	1.3
raw cotton	4.4	12.5	-1.1
flowers & foilage (cut)	23.4	8.5	10.8
fruit & vegetable juices	21.5	0.4	10.2
dried fruit	7.5	5.9	7.4
processed fruit	13.4	7.0	9.8
oilseed cake & residues	13.4	8.5	1.8
pork meat, fresh & frozen	15.1	4.5	8.3
poultry (fresh & frozen)	19.5	22.0	16.0
soybean oil	6.1	4.0	-0.1
soybeans	2.8	3.1	0.5
refined sugar	5.8	-20.6	9.0
sugar, beet, & cane	9.3	15.5	6.3
tobacco products	24.6	8.0	12.9
raw tobacco	5.2	3.8	0.8
wine	18.0	2.2	10.3

Source: USDA, Economic Research Service.

Western Hemisphere Participation

Overall, the Western Hemisphere has been successful in penetrating Asian markets. In 1995, its producers supplied 38% of Asia's total agricultural imports, 58% of the amount that originated outside of Asian borders (i.e., Asian excess demand). (Table 3) NAFTA countries exported \$30 billion of agricultural goods to Asia to capture 82% of the hemisphere's exports to Asia. (Table 1) The Asian shares

of total Western Hemisphere exports (Figure 3) demonstrate the current importance of this market and the growth rates of these exports show the future potential. Since the commodities involved often are produced in Latin American countries, non-NAFTA producers have the potential to match the successes of their neighbors to the north. However, the Latin American shares of Asian excess demand in Table 3 illustrate that most non-NAFTA countries have yet to realize their potential in this emerging market.

Table 3: Shares of Excess Demand in each of the Three Main Markets
(imports from countries not in the region or trading block)

<u>Commodity or Aggregation</u>	<u>Western Hemisphere share</u>			<u>Latin American share</u>		
	<u>Asia</u> (%)	<u>EEC</u> (%)	<u>NAFTA</u> (%)	<u>Asia</u> (%)	<u>EEC</u> (%)	<u>NAFTA</u> (%)
Total Agriculture (USDA definition)	57.6	39.8	30.8	10.8	24.2	28.9
Bulk commodities	74.0	52.1	43.6	9.8	29.2	39.4
Fresh horticultural	58.1	41.8	69.9	9.8	28.1	68.2
Intermediate goods	48.2	35.3	11.5	18.1	21.6	10.5
Consumer-oriented, processed	43.9	26.6	14.0	5.6	17.5	13.2

Sources: USDA, Economic Research Service. FAOStat.

HOW IMPORTANT IS ASIA TO LATIN AMERICA AND THE CARIBBEAN?

Latin American (\$52 billion) and Caribbean (\$2.5 billion) agricultural exports worldwide grew 2.5% annually from the mid-1980s to the mid-1990s, far below global agricultural export growth of 6.1%. (1995 FAO trade statistics) When inflation is taken into consideration, overall Latin American and Caribbean agricultural exports declined in real terms. The annualized rate of inflation for the U.S. wholesale price index from 1980 to 1995 was 3.3%, greater than the Latin American and Caribbean export growth rate.

Latin American and Caribbean exports to Asia fared significantly better. After a decade of 8.1% annual growth, these countries' exports to Asia exceeded \$7 billion in 1995, 13% of their total exports. Three Western Hemisphere producers expanded their exports to Asia at double-digit annual rates from the mid-1980s to the mid-1990s: Chile, 17%; the Andean Pact, 13%; and Brazil, 10%. Only three of the countries and sub-regions expanded their exports to Asia slower than their total exports: Central America, Argentina, and Mexico. Mexico's situation was unique given the conclusion of the NAFTA, which caused its trade with the US and Canada to increase dramatically. Mexico still achieved over 8% annual Asian export growth. The other two registered the lowest growth rates from the hemisphere to Asia, less than 2.3%, and less than 4% growth worldwide.

Brazil enjoyed the most dramatic benefit from its increased exports to Asia over the last ten years. Its total exports grew only 1.8% annually, the lowest in the Western Hemisphere, while those to Asia expanded 10% per year. Over half of its increase in total exports was bound for Asian ports (\$2 billion out of \$3.6 billion).

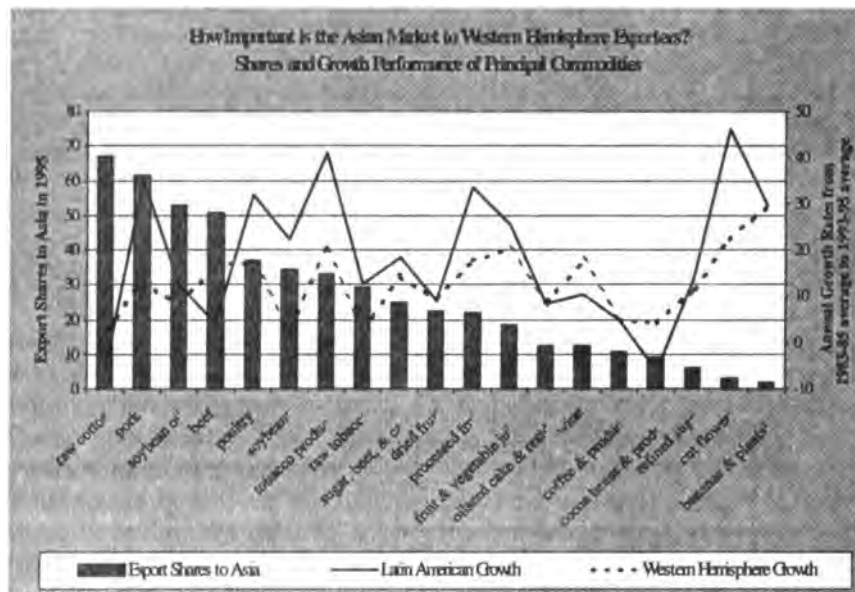
Now is the Time to Act

Producers in North America, Europe, and Oceania, aware of the importance and lucrative nature of the emerging markets in Asia, initiated drives to sell to Asia some years ago and have progressed far up the learning curve. Latin American producers should be able to progress more quickly if they benefit from the experiences of these earlier entrants into the Asian markets. However, the difficulties inherent in overcoming brand loyalties of customers and well-established relationships with suppliers in East Asia are significant.

The US and Canada have been able to establish closer ties with Asia than have Latin American countries. The relative stability of the Anglo-Saxon portions of North America throughout this century has

freed up their governments and economies to pursue multiple endeavors, including international trade. Additionally, the US endeared itself with many of the people and governments in Asia by liberating them from Japanese control at the end of WWII and establishing close security relationships with Korea, Japan, Taiwan, and the Philippines throughout the Cold War. Even now, many Asian countries prefer to keep the US involved in Asia as a stabilizing force to ensure that no local power will try to become preeminent in the region by filling the void that would be left if the US withdrew. All of these circumstances and relationships have enhanced the ability of US producers to sell to Asian markets and partially explain the market share of US suppliers relative to other Western Hemisphere producers. However, the countries of Latin America must seize the opportunities now available to them in Asia.

Figure 3



Source: USDA, Economic Research Service.

TRADE WITH ASIA

Traditional Agricultural Crops and Exports

Projections by the US Department of Agriculture, Economic Research Service, and other agricultural analysts suggest that in the medium term imports of bulk commodities in East Asia, except China, will decline while those in SE Asia will increase. The developed economies of East and SE Asia are already shifting their import demand from bulk goods to horticultural, intermediate and consumer-oriented items. The less developed economies of SE Asia and China are anticipated to follow suit once their economies expand enough that the per capita incomes exceed several thousand dollars. For the medium-term, these less developed economies will continue to increase their imports of bulk commodities to support increasing consumption and developing livestock industries. The global transition from trade exclusively in bulk commodities to the inclusion of high-value-added goods also has been facilitated by the introduction of new technologies such as improved refrigeration and inert gas shipping which avoid spoilage and suspend the ripening process until goods arrive at the market.

Bulk grains

Cereals still represented a quarter of Asian food imports (\$22 billion of \$88 billion) in 1995. East Asia continues to be the primary destination for these imports with China taking a 22% share, Japan receiving 20%, and S. Korea buying 8% of Asian imports. ASEAN is becoming a major market for cereals as well, with Indonesia being the largest buyer (9%). (1995 FAO trade statistics).

The Asian appetite for bulk grains increased at a marginal 2.5% annual rate over the study period to reach \$14 billion in 1995. Japan, China and SE Asia shared three-quarters of all Asian imports. Only South Korea and SE Asia registered annual growth rates in excess of 5%. Asians purchased 72% of their grain imports from Western Hemisphere producers, specifically from three countries (the US, Canada and Argentina). Although total Western Hemisphere grain exports declined 1.8% annually from the mid-1980s to the mid-1990s, exports to Asia grew 1.2% per year.

Sugar

The Asian appetite for sugar has grown appreciably over the last decade. Asians imported 40.1% of all sugar traded in 1995. China has already emerged as a large, if volatile, market, receiving over 17%

of all the sugar shipped to Asia. Japan, South Korea, and Malaysia have demonstrated sustained import growth, while South Asia has been another volatile market. (1995 FAO trade statistics)

Asian demand for imported raw sugar (\$2.7 billion) was four times as great as that for refined sugar. Similarly, the growth rate for raw sugar was much greater. Generally, the less developed countries are purchasing the majority of the refined product while the more developed economies are importing the bulk of the raw material. Western Hemisphere producers, all of them in non-NAFTA countries, satisfied over a quarter of Asian total import demand for raw sugar. This resulted from a decade of 14.1% annual export growth to Asia. Western Hemisphere producers, almost entirely from Latin America, increased their market share of refined sugar as well to just under 10% in 1995.

Coffee

Coffee has yet to become a standard drink in many Asian countries. Asia's 11.5% share of global coffee imports was limited basically to three countries: Japan (62%), S. Korea (13%), and Singapore (7%). This commodity has shown moderate growth recently and has potential for sustained growth in the mid-term. (1995 FAO trade statistics)

Asia imported \$1.8 billion of coffee and products in 1995, following a decade of relatively slow 3.2% annual growth. Only the South Korean and Taiwanese markets recorded annual growth rates in excess of 10%. Western Hemisphere producers increased their exports to Asia 5% per year over the study period to capture almost 60% of the Asian imported coffee market in 1995. The major exporters to Asia (Brazil, the Andean Pact and Central America) registered sluggish export growth to Asia, while Mexico and the Caribbean countries enjoyed low double-digit growth rates.

Tobacco and Products

Although imported tobacco and products are faring well since Asian countries have begun to open up their markets, this success may not translate into long term growth. Health concerns are starting to curb consumption growth. State monopolies for production and trade in tobacco, although they are losing their monopoly status, are restructuring aggressively to compete for the revenue generated by the tobacco industry. And in some markets tariffs remain a significant obstacle.

Asian demand for imported raw tobacco grew 5.2% annually from the mid-1980s to the mid-1990s to reach \$1.2 billion in 1995. Japan and SE Asia were the dominant markets and South Korea is a developing one with over 15% annual growth. Asian markets purchased over 60% of their raw tobacco imports from Western Hemisphere suppliers. These exports from the hemisphere were supplied almost entirely by the US (79%) and Brazil (16%). After growing 13% per year throughout the study period, exports to Asia represented 15% of Latin America's total raw tobacco exports in 1995.

Asian imports of tobacco products grew much faster than those of raw tobacco. The 25% annual growth rate resulted in \$4.6 billion in tobacco product imports in 1995. Western Hemisphere producers, with the US providing over 99% of these exports, supplied 43% of the Asian demand.

Cocoa

Asian demand for imported cocoa grew 8% annually over the study period to top \$1 billion for the

first time in 1995. Japan and SE Asia accounted for most of the Asian imports. Korea and Taiwan exhibited promise as future markets by expanding their imports more than 20% annually. Western Hemisphere producers supplied one-tenth of the Asian demand for imported cocoa in 1995, down from 18% in the mid-1980s. The US exported the bulk, 71%, of the cocoa from the hemisphere to Asia, with Brazil and the Andean Pact also supplying substantial quantities. Latin America shipped only 5% of its total cocoa exports to Asian destinations.

Cotton

Asian imports of raw cotton grew moderately to reach \$5.4 billion in 1995. As expected, given the significance of labor costs to textile industries, the markets are shifting from the more developed economies to the less developed ones. SE Asia imported one-third of the Asian total and China imported another quarter. Chinese imports led the increases with an annual growth rate of 25%, while Japan's imports contracted 5% per year. Western Hemisphere producers expanded their exports to Asia 2.5% annually over the study period. The \$3.2 billion of cotton shipped to Asia, almost 90% of which originated in the US, represented two-thirds of the hemisphere's total exports. Three other countries sold at least \$60 million to Asia: Argentina, Mexico and Brazil. Argentina enjoyed robust growth in its exports across the Pacific, while Mexico and Brazil suffered declines of more than 5% annually. These trends are representative of each country's overall cotton export performance. Central America, which was exporting \$230 million of cotton per year to Asia in the mid-1980s, suffered a 31% annual contraction to export only \$5 million worth in 1995.

Non-Traditional Agricultural Exports (NTAEs)

The term non-traditional agricultural exports refers to an amorphous collection of items which generally includes fruits, vegetables, flowers, plants and miscellaneous goods which were not produced for export until recently. Naturally, this definition includes a different basket of goods for each country and would include most exports to Asia from Latin American countries. However, a more typical breakdown for traditional versus non-traditional agricultural exports has been used in categorizing the items included in this analysis. For example, bananas have been included in this section, even though they are a significant traditional export, simply because the other horticultural items are generally referred to as NTAEs. Additionally, meats have been listed with the NTAEs because their volumes have increased dramatically over the last few years as a result of technological and political (trade policy) changes.

Horticultural Products

Asian demand for horticultural products grew 10% annually from 1985 to 1995, to reach \$7.0 billion. Japan consumed almost half and SE Asia accounted for another quarter of all fresh horticultural goods shipped to Asia. South Korea and China showed the strongest growth, over 16% annually. Capping a decade of strong growth, the Western Hemisphere exported \$2 billion worth of horticultural products to Asia in 1995. This figure represented 12% of the hemisphere's total horticultural exports and 28% of Asia's total imports. The US supplied almost 80% of the hemisphere's exports to Asia.

The importance of Asian markets to Latin American horticultural exporters increased marginally over the decade. Despite 23% annual growth, exports to Asia still represented only 3% of Latin America's \$11 billion total exports. Given Asia's \$7 billion appetite for fresh horticultural goods in 1995, Latin America's

meager \$335 million in exports illustrate that most suppliers south of the US could reap significant gains by giving greater emphasis to the lucrative and growing markets across the Pacific Ocean.

Although horticultural products are quite susceptible to SPS barriers to trade and some of the countries of East Asia have been notorious for using SPS concerns as a means to protect their domestic producers, it is evident that there are large markets in Asia for imported horticultural goods. Given the concessions made by all parties to the Uruguay Round and APEC agreements to seek more uniform and scientifically verifiable justifications for SPS impediments, there is reason to be bullish about the prospects for increased horticultural trade with Asia.

Fresh Fruit

Asian imports of fresh fruit increased 9% annually over the period 1985-95, approaching \$3 billion in 1995. Japan, SE Asia and Hong Kong were the major markets, purchasing over \$500 million of fresh fruit each. The smaller markets of China, Korea, and Taiwan grew at double-digit rates as high as 34%. Western Hemisphere exports to Asia grew slightly faster than the growth rate for total exports, to capture 44% of total Asian imports. Latin American exports to the region (\$206 million) grew 26% annually, but still accounted for less than one-fifth of the total exported by the Western Hemisphere to Asia (\$1.3 billion). Latin American countries' share of the Asian fresh fruit market is extremely limited considering that these same countries shipped over 73% of all fresh fruit exported from Western Hemisphere countries in 1995. In contrast, the US provided \$1 billion of fresh fruit to Asian markets. The Andean Pact and Chile exported significant amounts to Asia and enjoyed growth rates in excess of 20% per year. While the US and Chile sold a variety of fruits to Asia, the Andean Pact's exports were almost exclusively bananas and plantains.

Asian excess demand for fresh fruit grew 11% annually to reach \$1.7 billion in 1995, 61% of total imports. The Western Hemisphere supplied 72% of this excess demand.

The fruit and the market determine how difficult it is to sell in Asia. The US negotiated with Japan for years only to be granted extremely limited access for its apples. Since Japan has a substantial apple industry, only certain varieties, ones that would not compete well against Japanese varieties, from approved areas of the US were allowed to be imported. On the other hand, New Zealand has had few problems in exporting kiwis to Japan. Japanese kiwi production is more limited, so there was little concern about competition. Of course, fruit production differs from country to country, so the protection afforded to each fruit varies depending upon the local market.

Bananas and Plantains

A fairly small number of bananas were imported by Asian economies, only 11.8% of the world total. Japan and other East Asian markets imported the bulk of these, while Singapore did most of the limited buying in ASEAN. (1995 FAO trade statistics).

Asia's appetite for imported bananas and plantains grew moderately, reaching \$560 million in 1995. Japan received over three-quarters of these imports. China increased its imports dramatically the last few years to become the third largest market in Asia behind South Korea, which imported \$50 million. The Latin American (i.e., Western Hemisphere) share of the Asian market increased to 15% in 1995, a result of 30% annual export growth. Asia still consumed a rather small 2% portion of Latin America's total exports with over 99% of them being shipped from the Andean Pact. Although Central America and the

Andean Pact exported similar amounts of bananas, less than 0.1% of Central America's exports in 1995 were bound for Asian markets.

Processed Fruit

Asian consumption of imported processed fruit increased 13% annually from the mid-1980s to the mid-1990s, reaching \$1.3 billion in 1995. Japan imported two-thirds of all Asian imports and SE Asia was another significant market. Korea and Taiwan are encouraging markets as they registered growth rates of greater than 25% per year. After a decade of strong growth, Western Hemisphere exporters increased their share to 19% of the Asian import market and achieved similar market penetration in each economy analyzed, with the exception of South Asia. Asian markets purchased more than one-fifth of all Western Hemisphere processed fruit exports in 1995 with the NAFTA countries providing 89% of these shipments. Mexico and Chile, the only Latin American countries that sold considerable amounts to Asia, enjoyed growth rates in excess of 30%.

Asians purchased \$434 million, one-third of their total processed fruit imports, from non-Asian suppliers. The 16% annual increase in excess demand exceeded total import growth. Western Hemisphere producers provided 56% of these non-Asian import purchases. Latin American suppliers claimed a 13% share of excess demand after enjoying 33% annual export growth for a decade.

Fresh and Preserved Vegetables

Asian consumers increased their demand for imported vegetables 11% annually and purchased \$5 billion in 1995. Japan purchased over \$2.7 billion and SE Asia and Hong Kong each received at least \$500 million of imported vegetables. Korea, demonstrating robust import growth, is a market of the near future. Western Hemisphere producers supplied almost \$1 billion of vegetables to Asia in 1995. NAFTA countries provided 95% of this total and the US exported three-quarters of it. The only non-NAFTA country to sell a substantial amount to Asia was Chile: \$31 million. Western Hemisphere exports to Asia grew 17% annually, with Chile enjoying the fastest growth. Although Asia imported 16% of all Western Hemisphere exports, less than 5% of all Latin American vegetable exports were bound for Asian markets.

Asian excess demand for vegetables expanded 14% annually to approach \$2 billion in 1995. The Western Hemisphere's share of excess demand was 55%, with over 90% of that being captured by NAFTA countries. Latin America's 19% annual export growth allowed it to sell \$129 million to Asia in 1995, meeting 7% of the market's excess demand.

Fruit and Vegetable Juices

Asian consumption of imported fruit and vegetable juices, facilitated by the relaxation of trade barriers in East Asia, grew robustly over the study period to surpass \$745 million in 1995. Japan consumed two-thirds of the Asian imports, Korea exceeded \$125 million and SE Asia imported almost \$60 million in 1995. Western Hemisphere juice exports to Asia grew rapidly, expanding to represent over 18% of the hemisphere's total exports in 1995 from less than 5% in the mid-1980s. The US and Brazil shared over 90% of the hemisphere's exports to Asia, which accounted for more than a third of Asian imports. Chile increased its exports sufficiently to rank third among Western Hemisphere exporters to Asia and Argentina

demonstrated promise as a potential player in the Asian juice market by expanding its exports 21% annually.

Orange juice is by far the most popular imported juice. In Japan and Korea, consumption of orange juice seems to have peaked as consumers are experimenting with other juices such as apple and grape as well as more exotic tropical fruit juices. An official of the USDA's Foreign Agricultural Service reported that Korean businesses are anticipating increased imports of U.S. grape juice due to recent medical reports linking grape juice consumption to a reduced risk of heart disease. In support of this assertion, a Korean juice company spokesman stated early in 1997 that grape juice consumption had already doubled. Although other juice varieties and mixtures are becoming more popular, they still lag far behind orange juice consumption.

Wine

Asian consumption of imported wine increased 18% annually, reaching \$666 million in 1995. Japan imported almost three-quarters of the Asian total and SE Asia received another 14%. The South Korean and Taiwanese import markets, though still small, grew rapidly over the last several years. Asia sourced 10% of its wine imports from the Western Hemisphere. The US provided over two-thirds of these exports, with Argentina and Chile supplying the rest. Surprisingly, total exports from the hemisphere grew even faster than the 18% annual pace for exports to Asia.

As prices have come down, Asians have demonstrated an eagerness to experiment with non-rice wines, which they still perceive to be a foreign, generally European, beverage. Although the impression of wine as a foreign item has probably been beneficial to its image, the belief that European wines are superior to all others is something that Western Hemisphere producers are going to have to work hard to overcome, especially for premium wines. To the advantage of Western Hemisphere producers, Asians are beginning to overcome the attitude that non-rice wine is a rare extravagance to be experienced only at special occasions and to accept that it can be part of daily meals and ordinary social occasions.

Nuts

Asian imports of edible nuts grew 12% annually to reach \$723 million in 1995 with Japan consuming almost half of these imports. Hong Kong and SE Asia were the next largest markets. China and South Korea registered the highest growth rates, in excess of 33% per year. South Asia has the potential to become a very large market as it has imported as much as or more than Japan in certain years. However, its imports, \$95 million in 1995, have been extremely volatile, ranging from \$68 million to almost \$300 million over the study period. Western Hemisphere producers supplied one-third of Asia's imports in 1995 after strong growth throughout the study period. While Asia receives a large share of Western Hemisphere edible nuts exports, the US was basically the only country to sell there. Latin America has yet to capitalize on the Asian markets, selling only 0.3% of its \$325 million in exports to Asian buyers. Brazil, the dominant Latin American edible nuts supplier, sold five times as much to the much smaller \$75 million market in Oceania as it did to Asia in 1995.

Cut Flowers

The Asian import market for cut flowers is still fairly small, reaching only \$328 million in 1995 with Japan consuming 75% of this total. Singapore and Hong Kong were also significant markets. SE Asia and

all markets in East Asia registered double-digit annual growth rates. Western Hemisphere growers accounted for \$28 million, less than 9%, of Asia's import consumption, with the Andean Pact, the US and Central America providing almost all of these exports. Despite growing 22% annually, nearly twice as fast as total exports, exports to Asia accounted for less than 3% of the hemisphere's total shipments of cut flowers. The Andean Pact countries and the US penetrated all of the major markets in Asia, but Central American countries sold large numbers of cut flowers only to the Japanese.

Meats

Meats have become an important export item since transportation and refrigeration techniques have improved and countries have dismantled barriers to imports of these high-value-added products. Asia has become a major market for these commodities, importing 31% of global beef trade, 30% of pork trade and 38% of poultry trade in 1995. Asia expanded its imports of all three commodities at double-digit annual rates from the mid-1980s to the mid-1990s. (FAO data)

Differentiation of cuts is an important factor in the profitability of a meat market. This aspect is highly developed in Japan and is becoming more prevalent in South Korea, but most markets in Asia consider meat to be meat. Currently, they are unwilling to pay a premium for higher quality cuts or chilled rather than frozen meat. Perhaps Latin American countries can use this to their advantage at present since they have lower costs of production. However, in the long run, it is to their advantage as well to promote the differentiation of the market. The US has attempted to support this development in South Korea, but the effort is essentially up to retailers and restaurateurs in the local markets. Of note, the Japanese have a fondness for highly marbled meat rather than the leaner meat preferred in the US.

Beef

The Asian market for imported beef is large and growing quickly, 15% per year over the study period. Japan dominated the \$4 billion total in 1995, but South Korea, SE Asia and Taiwan were also large and growing markets. Over half of Western Hemisphere exports were bound for Asian ports in 1995 after a decade of 17% annual growth. Currently, only large Western Hemisphere countries are selling substantial amounts of beef to Asian markets with the US providing over \$2 billion, 96% of all Western Hemisphere trans-Pacific exports in 1995. Canada, Argentina and Brazil also shipped beef to Asian markets and the MERCOSUR producers penetrated the Hong Kong and SE Asian markets with considerable success, providing at least one quarter of each economy's total beef imports.

Pork

The Asian pork market essentially mirrored the beef market in size and growth rate, but Japan consumed an even larger share, over 90%, of total imports. Hong Kong was another large, stable market while South Korea was less stable with imports ranging from less than \$1 million in many years to \$110 million in 1995. Western Hemisphere exports to Asia generally kept pace with the market's growth, to satisfy just under a quarter of Asian import demand in 1995. The US exported two-thirds, Canada captured another quarter and Mexico and Brazil split the remaining 10% of hemisphere exports to Asia. With the exception of Canada, these suppliers expanded their exports to Asia at double-digit annual rates. Japan bought Western Hemisphere pork only from the NAFTA countries. The Latin American exporters each sold pork only to one Asian market. Mexico exported to Japan; Brazil and Argentina shipped pork to Hong Kong.

Recent changes have affected the pork trade in Asia. The conclusion of the Uruguay Round of the GATT has ensured greater access to the Japanese market, but the terms of the agreement have resulted in volatile swings as trade prohibiting safeguard measures are alternately applied and removed. The Korean government has implemented commitments to improve access such as full liberalization of the frozen pork market on July 1, 1997, which may result in Korean pork imports becoming more substantial and more stable. Additionally, the outbreak of foot-and-mouth disease in Taiwan has forced Asian countries that used to import from Taiwan, most noticeably Japan, to seek alternative sources of pork.

Poultry

Asian imports of fresh and frozen poultry have grown even more briskly than those of beef or pork. After 20% annual expansion throughout the study period, Asia imported over \$2 billion of broilers in 1995. Japan and Hong Kong were, by far, the largest markets, but SE Asia, South Korea and China also made sizable purchases. All five of these markets recorded double-digit annual growth and China averaged a doubling of its imports every year of the ten-year period. Western Hemisphere producers supplied almost half of Asia's poultry imports in 1995 with the US providing two-thirds of this \$982 million. Brazil sold most of the other hemisphere exports to Asia and exceeded 30% annual growth. The US completely controlled Western Hemisphere exports to each of the smaller markets in East Asia, but Brazil fared better in the two largest markets, even commanding the majority of Japanese imports from the hemisphere in 1995.

Oilseed Cake

Asian imports of oilseed cake increased 13% annually over the study period to reach \$1.3 billion in 1995. The three major import markets (SE Asia, Korea and Japan), all grew faster than 10% per year. China is still a small market, but it is growing rapidly. With sales to Asia growing 8% annually, more than double the growth rate for their total exports, Western Hemisphere producers satisfied half of the Asian demand. Brazil and the US sold three-quarters of these exports, while Argentina and Canada captured significant shares as well.

SE Asia and China are developing livestock sectors, so export prospects to these markets are promising over the mid-term. The East Asian markets, other than China, are attractive in the short-term, but they are likely to decrease their imports in the future as environmental concerns cause livestock sectors to contract in these densely populated, space-constrained markets.

Oilseed Oils

After growing very modestly in the late 1980s and early 1990s, Asian imports of oilseed oils exploded the last two years to reach \$6.5 billion in 1995. China, which increased its imports 41% annually over the ten-year period to become the largest Asian importer, and South Asia each purchased at least \$2 billion of oilseed oils in 1995. Despite the sub-continent's negative growth rate for the ten-year period, -0.2% annually, it was increasing its imports over the last five years. SE Asia was another substantial market in 1995. Western Hemisphere producers garnered 29% of the Asian import market in 1995 after moderate annual growth in shipments across the Pacific. Brazil supplied 42% of total hemisphere exports to Asia and the US, Argentina and Canada each shipped over \$100 million. While Argentina and Brazil enjoyed strong export growth, Canada suffered contracting exports over the study period, -4% annually. The US dominated in all East Asian markets, except China where Brazil was the most successful. Latin American producers set the pace for Western Hemisphere exports to South Asia, SE Asia, and Oceania.

IMPEDIMENTS TO TRADE

Although the UR did much to lower tariffs, agriculture was one sector that many people felt did not receive adequate treatment. Many WTO members, including those in Asia, were allowed to convert their non-tariff barriers to tariffs at prohibitively high levels and intend to postpone the bulk of their graduated tariff reductions until the last year or two allowed. Thus, they will be in full compliance with their commitments through the Uruguay Round, but their markets will remain restricted until the last year of implementation of the Uruguay Round Agreement. Among APEC members, South Korea was a significant outlier in the march toward establishing open, duty-free markets as its WTO *ad valorem* bound rate commitments for agricultural goods had a simple average in excess of 68%.

Actions since the UR, particularly through the APEC forum, have reduced Asian agricultural tariffs further. Hong Kong and Singapore have committed to becoming duty-free ports by 2010. At the Manila Summit of the APEC forum in 1996, Indonesia committed to reducing its tariffs on all goods to no more than 10% by 2003. This is a substantial move from the SE Asian country's obligations through the URA: bound rates averaging over 40% on agricultural goods. China declared at the same summit that it would reduce its average tariff level by a third by 2003.

Non-tariff Barriers (NTBs)

The success of the UR and APEC to lower tariffs has been mitigated by the emergence of sanitary and phytosanitary (SPS) claims as a means of protecting countries' domestic agricultural sectors. These issues have yet to become standardized internationally so they lend themselves to abuse through discretionary interpretation and application.[Nielsen, 1991 #1] A 1996 USDA study estimated that SPS barriers in the Asia-Pacific region threatened or constrained about \$1.27 billion worth of U.S. agricultural trade. Most of these SPS restrictions were in the phytosanitary area, affecting plant-related commodities. [USDA, APHIS International Services technical report on APEC on APHIS's internet home page] Despite such discouraging assessments, many countries have acknowledged the need to address these impediments to trade and have been holding meetings to ensure that progress is achieved toward making SPS rulings more transparent and scientifically justifiable.

Other NTBs include customs and port practices. South Korea has the most notorious customs procedures, which delay the entry of agricultural goods causing either reduced quality of the product by the time it gets to market or spoilage so that consumers will never get a chance to experience the product. In the past, Japan also resorted to customs practices similar to Korea's to delay the entry of agricultural goods, but these obstacles have largely been overcome. The most significant remaining port

practices in Japan are the "prior consent" requirement and stevedore working hours. China and other developing Asian countries do not need to rely on these ruses to impede trade in agricultural goods. They simply do not have the infrastructure to support large volumes of trade. China has neither sufficient port facilities to handle all of the imported goods nor adequate refrigeration facilities to keep produce from perishing once it is offloaded in a Chinese port. These issues are being addressed, but at present they constrain trade.

RECOMMENDATIONS FOR ACTION

The overarching recommendation is for governments to make all producers and traders aware of the opportunities in Asia. This does not mean simply informing them that there is potential across the Pacific Ocean. It includes emphasizing and promoting the markets in Asia so that Latin American producers will realize that the government is committed to supporting efforts to sell to Asia. Then, producers and traders will begin to pay more attention to the markets there and make their decisions with more complete information.

Governments should promote and subsidize international food fairs in Asian markets and subsidize the attendance of participants from Latin America. The US has already had considerable success with food fairs that it has sponsored in Asia, especially Japan. One important aspect of these food fairs is establishing connections with local food business personnel. Both sides feel more comfortable because they believe that they are being introduced to reliable business partners. Making these connections on their own would be more difficult and involve greater skepticism on the part of both parties. Therefore, the trade generated through their self-established connections would likely be smaller for a few years until both parties became more confident with the relationship. Major producers in NAFTA, Oceania and the EU have used food fairs to increase the visibility and understanding of their agricultural goods. These venues raise the consciousness of the wholesalers and retailers and introduce consumers to the new foods. The fairs also demonstrate to retailers that their customers want to try these exotic foods. Often US food fairs are integrated with promotions at hotels and nearby restaurants to get a full barrage effect on businessmen and consumers. This ensures that the restaurants will carry the food on their menus and that the chefs will be able to prepare the meals properly (even if modified slightly for local palettes). These steps prevent the likelihood of a poorly prepared meal in a restaurant convincing locals not to try the food again.

Government needs to help potential exporters to understand the differences between Asian markets and those in the Western Hemisphere and Europe. For example, it may be necessary to establish a joint venture with a well-known business group or retailer in the local market in order to overcome the stigma of being an unknown quantity. In many markets in Asia, especially East Asia, it is difficult for any new producer to enter the market, regardless of whether the company is from across the street or across the ocean. Joint ventures with well established retailers could give a new entrant a foot in the door to sell his products. After the product is established and the producer has learned more about how to operate in the new market, he can attempt to sell his products directly.

Subsidize or conduct market research and make this information available to all interested parties. This market information must include local taste preferences, appearance requirements (this includes packaging as well as the product itself), and prices of competitors.

Support collective advertising and public relations initiatives in Asian markets. This can be for general marketing, informing about the health benefits of a particular product, or informing consumers about either the food or the region from which it comes.

Support general marketing of the countries and their level of development. Many East Asians, currently the consumers with the most money to buy imports, know very little about Latin American countries. This works to the disadvantage of Latin American producers. These sophisticated consumers consider Latin American countries to be underdeveloped and, therefore, less sanitary and prestigious. Given the health consciousness of these consumers, particularly in light of the recent highly publicized problems with E coli outbreaks in Japan, the "mad cow" disease in the UK and the foot-and-mouth disease outbreak in Taiwan, the level of development in Latin America should be emphasized. The better informed Asian consumers are of production and processing conditions in Latin American countries, the more confident they will be that it is safe to buy Latin American food products. Asians, particularly Japanese, Koreans, and Taiwanese, are exceedingly quality and image conscious. They will gladly spend more on an item if they believe that they are getting better quality for their money. In the recent past, Japanese consumers were willing to pay extra for the image even if the product was not superior in any way. The mere fact that everyone knew that the product was more expensive, and therefore more exclusive, gave it the allure it needed to prize hard earned yen from Japanese wallets. Today, the story has changed somewhat with the key to success being more value for the money. Style and image alone are not sufficient to wrest cash from Japanese hands. However, a product still will not sell well if it has a bad image. Currently, the US, Australia, and Europe hold positions of high esteem in Asian minds. Latin American countries/ producers must find a way to compete against these popular, attractive images. Even activities as indirectly related as establishing sister cities throughout Asia will raise the consciousness of Asians regarding Latin America, enhance the image of participating countries and ensure that they are not overlooked when Asian importers are looking for suppliers.

Governments could provide research into the health benefits of products unique to Latin America or the Western Hemisphere or of products which have other competitive advantages. This aspect often seems important in ensuring the success of a product in the health conscious East Asian markets. A product which purports to provide health benefits has a distinct advantage over another which has no known, or touted, health benefit. Again, image is an aspect which cannot be ignored. One example is the previously cited 1997 report from the USDA's in-country FAS representatives which stated that Korean imports of U.S. grape juice were expected to rise due to recent medical reports linking grape juice consumption to a reduced risk of heart disease.

Piggyback on NAFTA's successes. South American countries have the obvious advantage of producing crops and horticultural items when their competitors in the northern hemisphere can not produce them, except by expensive greenhouse methods. Latin America's direct competitors in these reversed seasons are Australia and New Zealand, who, although they are large agricultural exporters, do not match the agricultural output of producers in North America and Europe. Latin American producers could attempt to export products which complement those shipped from NAFTA countries but which are seasonal in nature. By assessing which commodities the NAFTA countries are exporting to Asia and when, Latin American producers could structure their exports to complement those from the North on a seasonal basis. Those Latin American countries in the tropics could schedule their planting and harvesting for Asian markets to come during the Northern Hemisphere winter. It is obvious that domestic production in many Asian markets is insufficient to satisfy demand since the NAFTA countries have been successful in exporting to them. Many of the most affluent markets are north of the tropics, so there would be even less resistance in these countries to imports from Latin American countries than there is to imports from NAFTA countries (which compete directly against domestic production).

In order to foster further development of processing industries for agricultural goods, thereby deriving greater income from the resulting high-value goods, governments should lower foreign direct investment (FDI) barriers and capital repatriation restrictions. Probable gains from such a move are processed fruit exports, oilseed cake/meal exports, and processed vegetable exports (frozen vegetables or vacuum-packed vegetables).

Assuming one agrees with the adage that "trade follows investment," what are Latin American countries doing to promote investment in Asian markets by Latin American producers, traders, and retailers? What incentives have Latin American governments convinced their Asian counterparts are necessary to facilitate this investment in Asia by Latin Americans? This investment is necessary in some countries to prove that the producers and traders are committed to a long-term relationship. (High-Value Product Exports, US GAO Report to the Ranking Minority Member Committee on Agriculture, House of Representatives, p. 2) Wholesalers and retailers in East Asia do not like changing their suppliers on a frequent basis. They want to establish good relationships with reliable, long-term suppliers. If a company or association is not willing to establish local offices, this lack of investment is interpreted as a lack of commitment to the market. Such a situation virtually assures that the exporter will not generate much interest in his goods.

Assist locals in making connections with family and friends from immigrant roots in Asia. Japan has done this in reverse with moderate success to gain a foothold in Latin America, particularly evident in Peru and Brazil. Many descendants of emigrants from Japan recently have returned to the land of their ancestors. Although Japan has allowed these individuals to return because of the East Asian country's need for laborers, they provide another opportunity for Latin American exporters to establish connections in the land of the rising sun.

Governments should promote the proper development of NTAE production. Such a move would increase incomes and provide an impetus for conserving the environment by reducing the need to clear cut forests to gain access to new, fertile soil to replace previously used fields which have become depleted from overuse or improper cropping practices. Provide further information on improving farming techniques to increase yields of traditional crops and on preserving the environment within the context of traditional farming. A 1989 IFPRI study indicated that the profit per hectare from snow peas, one of the NTAEs, was as much as ten times that from traditional maize. While the local value-added for NTAEs can be 60-90% of free-on-board (FOB) values, for some industries, such as textiles, local value-added can be as low as 5-10%. [Free-on-board refers to the cost/value of an item that it is on a ship ready to be exported. It does not include the costs of shipping and insurance.] (Harvest of Progress, pp. 7-9)

Governments should provide technical assistance and perhaps subsidize the first few years' crops as an incentive to aid farmers who are willing to switch to production of NTAE crops. Obvious concerns will be where to buy good seeds, how to maximize production and profit with NTAEs, and how to avoid poisoning personnel and damaging the environment while applying fertilizers and pesticides.

Governments should place stipulations on the credit or subsidies for pesticides and fertilizers, making access contingent upon the attendance of government-approved training regarding the application of chemicals. As is often the case when new products or technologies are introduced, there have been some negative side-effects from NTAE production. Some analyses of the NTAE sector have reported problems with the overuse of chemicals because of misunderstandings about the intended market's requirements as well as about the proper management of these newer crops. Government programs often promote the use of chemicals through subsidies, easy credit, and other methods. The controversy arises when the chemical usage causes health problems for the workers and environmental degradation. Additionally, the food is rejected sometimes by the intended market because of excessive chemical residues. (Bittersweet Harvests, pp. 30-35)

Organic food production should be promoted. Organic commodities are becoming very popular in the US, Europe and the developed markets in Asia. Supporting this assertion is a recent report by the USDA's trade office in southwestern Japan that a major distributor in high-end meats recently launched a line of Australian organic citrus juices, with the focus of the promotion on the organic certification. This development by a mainstream player provides further evidence of the surging organic product demand in Japan. A move toward these products could be very profitable for Latin American farmers. Labor is the most expensive input into these crops, so the farmers in Latin American countries would have an advantage over large-scale farming operations where the economies of scale do not accumulate to provide any benefit in this type of labor-intensive farming. Such an initiative would provide rural employment, reduce exposure to potentially harmful chemicals, minimize degradation of the land, and increase returns to the local economy. Examples of successful organic farming in Latin America include:

- organic coffee and sesame El Salvador
- organic lettuce Ecuador
- organic cocoa Bolivia

(Harvest of Progress, p. 7)

Governments need to institute and to enforce better intellectual property rights (IPR) protection so that makers of registered seeds will sell NTAE seeds more freely to Latin American farmers. (Harvest of Progress, p. 9)

Governments need to become more aggressive in eradicating SPS impediments to trade. In some cases this will mean confronting the importing countries about their inappropriate SPS requirements. In others, the necessary course of action is either eradicating a known pest or ensuring that other countries feel confident about the disease-free status of products being shipped from the Western Hemisphere country.

Infrastructure. The obvious needs for improved roads, more extensive irrigation systems, and computerized information about markets and customs processing can not be ignored. If all of the other actions were taken but infrastructure was not further developed and updated, then trade would still be impeded.

APPENDIX 1: DETAILED COMMODITY TRADE INFORMATION

The Asian appetite for bulk grains increased at a marginal 2.5% annual rate over the study period. Japan imported the largest share, 27.4%, of the \$13.8 billion total in 1995. China and SE Asia each imported at least \$3 billion worth to account for 23.8% and 21.9% shares of Asian imports. South Korea followed with imports of \$1.7 billion and a 12.2% share. Taiwan received \$960 million and South Asia entered the trade picture for this collection of commodities with \$838 million. South Korea (6.2%) and SE Asia (5.4%) were the only markets to register annual growth rates in excess of 5%. South Asia's imports contracted over the study period at an annual rate of -1.6%.

Asia purchased 71.7% of its grain imports from Western Hemisphere producers. Although total Western Hemisphere exports of grains declined 1.8% annually from the mid-1980s to the mid-1990s, exports to Asia grew 1.2% per year. The US exported 77.3% of this trade, \$7.6 billion, in 1995. Canada shipped \$1.9 billion of grains to capture 19.1% of the hemisphere total to Asia. Argentina provided the remaining 3.6% or \$353 million. The US and Canada suffered contracting total exports but expanding exports to Asia. Argentina was not so fortunate. Even its exports to Asia contracted over the study period, albeit at a slightly slower rate than its total exports.

Raw Sugar

Asian consumption of imported raw sugar grew an average of 9.3% each year from the mid-1980s to the mid-1990s. In 1995, total Asian imports tallied \$2.7 billion. Since this figure is a jump of almost \$900 million over the previous year, it is difficult to know whether it indicates a trend or an anomaly. Chinese and Taiwanese imports have surged over the last few years. China, with a 14.9% average annual growth rate over the last decade, eclipsed Japan as the largest market for imported raw sugar in Asia in 1995, buying \$778 million. Every market in Asia is significant with Japan purchasing \$616 million, SE Asia buying \$549 million, South Korea importing \$441 million, and even South Asia receiving \$221 million in 1995. Taiwan increased its imports more than ten-fold over its 1994 level, reaching \$52 million.

Western Hemisphere producers supplied \$733 million or 27.5% of the total Asian import market for raw sugar in 1995. Exports from the hemisphere grew 14.1% annually over the study period. All of these exports originated from non-NAFTA countries. Brazil captured most of this market, supplying 37.7% of the hemisphere's exports to Asia. The Caribbean countries were only slightly behind with exports of \$271 million, 36.9% of the hemisphere total. Central American countries sold \$171 million to Asian markets. And Andean Pact countries provided the remainder of the exports to Asia from the hemisphere, \$15 million. Western Hemisphere producers have had varied success in penetrating the Asian markets. They garnered 45.2% of the Chinese import market in 1995 with Caribbean countries supplying \$213 million

worth. China has been a continuous and growing market for Caribbean sugar exports, but it also purchased large quantities from other Western Hemisphere producers in 1995. Brazil and the Central American countries exported \$66 and \$68 million to China that year, whereas in most years they sold nothing to the Asian giant. The situation in Japan has been similar with Caribbean countries selling sugar there regularly and providing 86% of the Western Hemisphere's 11.0% share of the total import market. Central American and Andean Pact countries provided all of the 4.5% market share of the Korean import market that Western Hemisphere producers captured. Central American countries provided all of Taiwan's imports of \$52 million. In a sudden market change, South Asia purchased 85.2% of its imported sugar from the Western Hemisphere in 1995. In previous years, the sub-continent imported only a small share of its sugar needs from the hemisphere. Brazil sold South Asia \$181 million worth of raw sugar in 1995. SE Asians purchased just under 10% of their imported sugar from Western Hemisphere producers, with Brazil and the Central American countries splitting these sales 55% and 45%. Western Hemisphere producers provided none of the \$56 million raw sugar imports purchased by Oceania in 1995.

Refined Sugar

The Asian market for imported refined sugar is smaller than that for raw sugar, totaling only \$618 million in 1995. For this commodity, the more developed economies are buying very little while the less developed ones consume approximately 90% of all Asian imports. The largest market is SE Asia, which imported \$323 million in 1995. After SE Asia's 52.2% share came China with a 19.0% share or \$118 million. Hong Kong purchased \$86 million of refined sugar, but most of this probably was transshipped to China. This commodity and many others may display new trade flows as far as China and Hong Kong are concerned, given the recent return of the former British colony to mainland China. Smuggled goods and even official trade may take new routes to the Chinese market. South Asia imported \$73 million of refined sugar in 1995, 11.9% of the Asian total. The combined imports of the more developed economies of Japan, South Korea, and Taiwan totaled only \$12 million, less than 2% of Asia's refined sugar imports.

Asia purchased \$60 million of refined sugar from the Western Hemisphere, just under 10% of its total import needs. Brazil provided 72.9% of that amount and Mexico supplied another 14.9%. The Andean Pact countries and the US sold the bulk of the remainder to Asia. Western Hemisphere producers were improving their market position throughout the last decade with an export growth rate of 11.7%, twice the Asian import growth rate. China's refined sugar imports exploded in 1995, jumping from \$20 million in 1994 to \$118 million. Western Hemisphere producers provided 19.3% of the 1995 figure, with Brazil and Mexico each selling \$9 million. Andean Pact countries sold half of that amount to account for rest of the exports to China from the hemisphere. Exports to Hong Kong are minuscule, less than 1% with the US being the former colony's preferred provider. The US also sells almost all of the refined sugar from the Western Hemisphere that is destined for the more developed economies of East Asia. Brazil, the only steady supplier from the Western Hemisphere to South Asia, exported all of the sugar bound for the sub-continent in 1995, \$28 million. This represented 38.4% of South Asia's total imports. In previous years, Andean Pact and Central American countries, as well as the US, have exported some sugar to South Asia, too. The SE Asian market had purchased Western Hemisphere refined sugar only from the US for several years. In 1995, although it continued to buy just a small amount from the hemisphere, \$8 million or 2.3% of its total imports, SE Asia bought most of this from Brazil, \$6 million.

Coffee

Asia imported \$1.8 billion of coffee and products in 1995, following a decade of relatively slow 3.2% annual growth. Japan, South Korea and SE Asia are the only three markets which imported an average

of more than \$30 million per year over the period 1993-95. Japan received 68.7% of the Asian total in 1995. SE Asia followed with \$243 million and South Korea bought \$240 million of imported coffee and products. Singapore, with purchases of \$181 million, and Malaysia, with imports of \$49 million, were the only two significant markets in SE Asia. The South Korean market recorded annual growth of 19.1% over the study period. The only other market increasing imports at a double-digit annual pace was Taiwan with 13.2%.

Western Hemisphere producers increased their exports to Asia 5.0% per year over the study period to capture 57.7% of the Asian imported coffee market in 1995, or \$1.1 billion. Brazil was the most successful Western Hemisphere country selling coffee and products to Asia in 1995. Its \$378 million of exports represented 35.8% of all coffee purchased by Asian markets from this hemisphere. The Andean Pact was not far behind, supplying \$352 million or 33.3% of the hemisphere total. Central American countries sold another \$196 million worth to Asia. The US, Mexico, and the Caribbean countries each exported \$40-50 million to Asia as well. The major providers and the US had low growth rates over the study period. Mexico and the Caribbean countries recorded low double-digit growth rates. In the large markets of Japan and South Korea, Western Hemisphere producers captured 60-70% of the import demand. In the smaller markets of Taiwan and Hong Kong, they fared much worse with only 32% and 17% shares. Multiple suppliers in the hemisphere have had success penetrating the markets of Japan and South Korea. Three main producers sold Japan 90% of its imports from the hemisphere: Brazil, 38%; the Andean Pact, 35%; and Central America, 17%. The Caribbean countries enjoyed strong growth in exports to Japan, 10.2% annually, to reach \$39 million in 1995. South Korea bought most of its Western Hemisphere coffee from the same three main suppliers but reduced their dominance by purchasing higher percentages from Mexico and the US. The Andean Pact countries provided 30%, followed by Brazil with 27% and Central America with 20%. Mexico sold 15% of the hemisphere total to South Korea. Western Hemisphere producers have not penetrated the markets of Oceania and SE Asia very substantially. Each market imported approximately \$240 million in 1995 but purchased only 15% and 7% of these amounts from the Western Hemisphere.

Raw Tobacco

Asian demand for imported raw tobacco grew 5.2% annually from the mid-1980s to the mid-1990s to reach \$1.2 billion in 1995. Japan imported 47.8% of this total, followed by SE Asia with a 30.8% share. The three Asian tigers in East Asia combined for another 15.8%. South Korea is a promising market with its 15.4% annual growth rate. Chinese demand was \$30 million in 1995 and has been growing at a moderate 5.4% annual rate.

Asian markets purchased 60.7% of their total raw tobacco imports from Western Hemisphere suppliers. This trade was supplied almost in total by the US with a 78.7% share and by Brazil with another 16% of exports from the hemisphere. In Japan, Hong Kong and SE Asia, the US controlled approximately 80% of Western Hemisphere sales, while Brazil supplied another 15-20%. The South Korean market, with the US supplying all of the 56.5% market share captured by Western Hemisphere producers, is not a good indicator of competitiveness in Asia. The state-controlled trade of tobacco distorts the trade picture. This situation is changing, but the UN trade data being analyzed show the effect of monopolistic state trading. Brazil has penetrated the \$92 million Oceania market with greater success, capturing 43.2% versus the US's 54% share of Western Hemisphere exports. After growing 12.6% per year throughout the study period, Latin American exports of raw tobacco to Asia reached \$147 million in 1995, 14.5% of Latin America's total exports. Brazil, the exporter of 79% of the raw tobacco shipped from Latin American countries, led the move toward Asian markets with 15.4% annual growth.

Although imported tobacco and products are faring well since countries have begun to open up their markets, this success may not translate into long term growth. Asian authorities are beginning to enact legislation which allows areas to be designated as non-smoking areas, restrict cigarette advertising, and mandate warning labels on cigarette packages. Consumers in many of these countries have become receptive to the messages about the deleterious health effects of smoking. As a result, consumption in many markets is stagnating.

Many countries still have state monopolies on production and trade in tobacco and products. Although they are being dismantled, these obstacles limit the growth potential in these markets. Since the states do not want to lose the revenues from these profitable enterprises, they are adopting new strategies to maintain their viability in open or semi-open markets. Some are increasing the amount of imported tobacco leaf in order to reduce the costs of production to make domestic cigarettes more competitive with imported brands. Additionally, they are devoting more resources to developing new cigarettes to compete against foreign brands.

Depending on the market, tariffs can still be a significant obstacle to imports. Japan imports leaves and products duty-free. Taiwan imposes a 20% rate on leaves and a 50% duty on products. Hong Kong, a duty-free port for all agricultural products except tobacco and alcohol, imposes a prohibitive 250% tariff rate on tobacco products.

Tobacco Products

Asian imports of tobacco products have grown much faster than those of raw tobacco over the last ten years. The 24.6% annual growth rate resulted in \$4.6 billion in tobacco products imports in 1995. The Japanese market, after growing 30.9% on average over the study period, consumed 34.3% of total Asian imports in 1995. Hong Kong imported another quarter of the Asian total. The SE Asian and South Korean markets were substantial in 1995, accounting for 18% and 11% shares of the Asian import market. SE Asia and all markets in East Asia, except China, increased their imports more than 20% per year. South Korea's \$507 million market set the standard with a 68% per annum growth rate. China managed a 7.3% annual import growth rate.

Western Hemisphere producers supplied 43% of Asian demand for imported tobacco products in 1995. The US exported \$2 billion worth or over 99% of the hemisphere's total to Asia. Country markets which have been well penetrated by the US include Japan (94% import market share), South Korea (27% share), and SE Asia (21% share). It has met with less success in Hong Kong (12%), Taiwan (11%), Oceania (11%), China (3%), and South Asia where it supplied less than 1% of imported tobacco products. Although Latin American producers have been increasing their exports by 18.4% per year and sold \$525 million worth in 1995, only 0.4% of that amount was shipped to Asia. In contrast, 37.7% of the US's \$5.2 billion in exports in 1995 were destined for Asian ports.

Cocoa

Asian demand for imported cocoa beans and products grew 8% annually over the study period to top \$1 billion for the first time in 1995. Japan purchased \$431 million, 38.8% of the Asian total. SE Asia accounted for another 34% of Asian imports by buying \$378 million worth. The markets in China, Hong Kong, and South Korea were also substantial, importing \$65-100 million into each. Oceania is a large market in its own right, importing \$175 million in 1995. Korea and Taiwan expanded their markets the

fastest with 21% import growth rates. Hong Kong expanded its imports 12.7% annually and China increased its purchases at a rate just below double-digits, 9.8% per year.

Western Hemisphere producers sold Asian markets 10.7% of their import demand for cocoa in 1995. This market share is down from 18.4% in the mid-1980s since hemispheric exports to the region are expanding at approximately one-half of the rate of Asia's total imports. The US exported the bulk, 71.0%, of cocoa beans and products from the Western Hemisphere to Asia. Brazil supplied 14.1% and the Andean Pact countries sold another 9.9% of exports to Asia from the hemisphere. In Japan, the largest market, Western Hemisphere producers provided 13.4% of total imports. The US supplied almost half, 47.8%, of this trade. Brazil sold 27% and the Andean Pact countries shipped another 19.1% of the hemisphere exports to Japan. The US controls an even larger share of Western Hemisphere exports to SE Asia and the other East Asian markets: SE Asia, 95%; China, 99%; South Korea, 86%; Hong Kong, 91%; and Taiwan, 97%. The sales by other Western Hemisphere countries to each of these markets amounted to only a few hundred thousand dollars, at best. Latin American countries shipped only 4.8% of their total cocoa beans and products exports to Asian destinations. The only country south of the US to sell more than 5% of its exports to Asia was Brazil, which sent 7.0%. The US, in contrast, sent 23.9% of its exports to Asia in 1995. Total Latin American exports contracted 5.5% annually over the study period and declined even faster to Asia, 6.1% per annum. Only two Latin American countries recorded positive growth rates in their exports: Argentina and Chile. Argentina has recently increased its exports of cocoa beans and products several fold. From an average of less than \$3 million in the early 1990s, the country's exports jumped to \$17 million in 1994 and \$51 million in 1995. Its export growth rate of 50.6% annually has had minimal impact on Argentina's trade with Asia, however, as exports to Asia during these two years averaged only \$380 thousand. Chile has enjoyed a similar high growth rate, 46.4%, to reach \$18 million in total exports in 1995. Again like Argentina, Chile's sales to Asia have not been a major factor in this export expansion.

Cotton

Asia increased its imports of raw cotton 4.4% per year to reach \$5.4 billion in 1995. SE Asia imported 32.6% of the Asian total and China imported \$1.3 billion worth to account for another 23.7% share. The other markets which demanded over \$300 million in 1995 were Korea (\$701 million), Japan (\$676 million), South Asia (\$402 million), and Hong Kong (\$324 million). Taiwan was a substantial market as well at \$248 million. The markets for cotton have been shifting from the more developed economies to the less developed ones. China led the increases with an annual growth rate of 24.5%, followed by SE Asia and South Asia with growth rates of 13.2% and 10.0%. The more developed economies had stagnant import growth and Japan's imports contracted 5.2% per year. This shifting of the markets is to be expected given the cost of labor in the developed economies and the impact of labor costs on textile industries.

Western Hemisphere producers expanded their exports to Asia 2.5% annually over the study period. The \$3.2 billion shipped to Asia represented 67.3% of the hemisphere's total exports. The US provided \$2.8 billion or 87.3% of the total to Asia after expanding its exports 3.8% annually. Three other countries sold over \$20 million to Asia: Argentina, \$181 million (5.7% of the hemisphere total to Asia); Mexico, \$96 million (3.0%); and Brazil, \$60 million (1.9%). Argentina increased its exports to Asia 15.0% per year, while Mexico and Brazil had their exports across the Pacific shrink by 5.1% and 6.6% annually. These trends are representative of each country's overall cotton export performance, but Mexico's and Brazil's total exports actually contracted more sharply than those to Asia. Central America, which was exporting \$230 million of cotton per year in the mid-1980s, suffered a 30.5% annual contraction to export only \$5 million worth in 1995. Producers from this hemisphere captured 45.4% of the large SE Asian market with the US providing 80.1% of this amount. Three other countries sold more than \$10

million worth of cotton to SE Asia: Argentina (\$77 million); Mexico (\$37 million); and Brazil (\$28 million). Western Hemisphere penetration of China reached 73.1% in 1995. The distribution of trade with China was similar with the US supplying \$829 million, 89.2% of the hemisphere's total exports, and Argentina (\$42 million) and Mexico (\$20 million) being the only other producers exporting substantial amounts. In the other East Asian markets, Western Hemisphere producers captured a market share of 53-70%. The US dominated hemisphere exports to each of these markets: over 90% to Japan and South Korea, 82% to Taiwan, and 72% to Hong Kong. In some markets, Latin American countries supplied over \$10 million. Argentina sold \$30 million to Hong Kong and \$17 million to Taiwan. Mexico exported \$22 million to Japan. Of the 68.3% share of the South Asian import market captured by Western Hemisphere producers, the US supplied 93%, \$255 million, and Argentina sold \$12 million.

Non-Traditional Agricultural Exports (NTAEs)

Horticultural Products

Demand in Asia for horticultural products has grown 9.7% annually over the ten-year period 1985-95, reaching \$7.0 billion in 1995. Japan was the major market for these goods, consuming 46.2% of all fresh horticultural goods shipped to Asia. Hong Kong received another 14.1% while the other East Asian countries imported 10.4% of Asian imports. SE Asia accounted for 23.2% of Asian imports. South Korea and China showed the strongest growth: 18.0% and 16.2% annually.

The Western Hemisphere increased its exports to Asia 12.0% annually over the study period to reach \$2.0 billion in 1995. This figure represented 11.8% of the hemisphere's total horticultural exports, an increase of almost 3% above a decade ago, and 28.4% of Asia's total imports. Japan received \$1.2 billion from the hemisphere, 58% of the total to Asia. Three other Asian markets purchased over \$100 million: Hong Kong, \$273 million; SE Asia, \$224 million; and Taiwan, \$191 million. Sales from the hemisphere to China and Korea expanded the fastest, over 30% annually. Hong Kong was the only market to expand its imports from the hemisphere at below a double-digit pace. Western Hemisphere penetration of most markets was 25-35%. The outliers on the low side were China (13.1%), South Asia (16.7%), and SE Asia (13.7%). Penetration of Taiwan exceeded that of any other market, 56.7%. The US supplied \$1.6 billion, almost 80% of the hemisphere's exports to Asia. This was essentially the condition for all markets in East Asia except China. The Andean Pact dominated the exports from the hemisphere (71%) to this smallest of the Asian markets and limited the US to a 16% share.

The importance of Asian markets to Latin American exporters increased marginally over the decade. While Latin American total horticultural exports increased at a 9.3% annual pace, those to Asia grew 22.5% per annum. However, exports to Asia still represented only 3.1% of Latin America's \$10.7 billion total exports. Japan was the largest market in Asia for these exports, receiving 68.9% of the goods shipped to Asia, and growing at a 26.3% annual pace. Hong Kong's imports from Latin America grew over 20% per year as well, representing 13.4% of Asian imports in 1995. SE Asian imports accounted for 8.5% of Latin America's exports to Asia, growing 9.3% annually. Given Asia's \$7 billion appetite for fresh horticultural goods in 1995, Latin America's meager \$335 million in exports illustrate that most suppliers south of the US could reap significant gains by giving greater emphasis to the lucrative and growing markets across the Pacific Ocean.

Fresh Fruit

Asian imports of fresh fruit increased 9.4% annually over the period 1985-95, reaching a total of \$2.8 billion. Japan imported \$1.3 billion or 44.6% of the Asian total in 1995. SE Asia received \$607

million. Other East Asian markets also imported significant amounts of fresh fruit in 1995: Hong Kong, \$573 million; Taiwan, \$234 million; and South Korea, \$91 million. The smaller markets of China, Korea, and Taiwan grew at double-digit rates as high as 34%. SE Asia also increased its imports slightly greater than 10% per year.

Western Hemisphere exports to Asia grew 10.3% per year, slightly faster than the 9.3% growth rate for total exports, to capture 44.1% of total Asian imports. Although Latin American exports to the region (\$206 million) grew 25.6% annually during this period, Latin America's share in 1995 was still only 16.5% of the total provided by the Western Hemisphere (\$1.3 billion). Latin American producers who exported significant amounts to Asia were Chile (6.9%) and the Andean Pact (6.6%). The US's 8.9% annual growth rate in exports to Asia was well below the Andean Pact's 30.7% and Chile's 23.2% annual increases. While the US and Chile sold a variety of fruits to Asia, the Andean Pact's exports were almost exclusively bananas and plantains. Western Hemisphere producers penetrated the East Asian markets with either one-third or one-half shares of each country's total imports. The one exception was Taiwan where they captured over two-thirds of the import market. In every East Asian market except China, the US supplied over 80% of the hemisphere's exports. The Andean Pact countries sold the Middle Kingdom almost 80% of the \$18 million of fresh fruit it purchased from Western Hemisphere producers.

Asian excess demand for fresh fruit grew 11.1% annually to reach \$1.7 billion in 1995, 61.0% of total imports. The Western Hemisphere supplied 72.4% of excess demand.

Bananas and Plantains

Asia's appetite for imported bananas and plantains averaged 6.9% annual growth, reaching \$560 million in 1995. Japan dominated the Asian import market, receiving 77.9% of all Asian imports in 1995. China increased its imports dramatically the last few years, reaching \$41.8 million in 1995, third in Asia only to Japan and South Korea, which imported \$49.5 million. Korea has been an erratic market, spiking up to over \$203 million in 1991 before stabilizing at around \$50 million the last few years. SE Asia, as expected of a tropical region, imported only 2.2% of the Asian total in 1995. Oceania, although it registered 10.2% annual growth over the span of the study period, has actually been decreasing its purchases from Latin America since a peak of \$32 million in 1991. Latin America had almost completely captured the Oceania market in the early 1990s, but by 1995 its market share had slipped to 72%.

The Latin American share of the Asian market increased to 14.8% in 1995, a result of 29.6% annual export growth. Asia still consumes a rather small 2% portion of Latin America's total exports. Almost all Latin America exports to Asia were shipped from Andean Pact countries (over 99% in 1995). Although Central America and the Andean Pact exported similar amounts of bananas, less than 0.1% of Central America's exports were destined for Asian markets.

Dried Fruit

The Asian dried fruit import market grew at a moderate 7.5% annual pace over the study period to a value of \$259 million in 1995. Purchases of these goods were more evenly spread across the countries than was the case for many other commodities. The four largest importers in 1995 were Japan (37.8%), SE Asia (20.8%), Hong Kong (15.5%), and South Asia (12.5%). Only the smaller markets grew at double-digit rates.

The Western Hemisphere provided almost half, 47.2%, of Asia's dried fruit imports in 1995. The bulk of this trade, 97.6%, originated from the US. Chile supplied an additional 2.2%. The Asian market is fairly

important to Western Hemisphere suppliers, buying 22.5% of their total exports in 1995. Chile is better represented in two of the markets across the Pacific. Its exports in 1995 accounted for 11.4% of total Western Hemisphere exports to Hong Kong and 16.8% of those shipped to Oceania.

Non-Asian suppliers provided 64.1% of Asia's total imports of dried fruit. While this excess demand grew at a moderate 7.2% annual rate, the amount supplied by the Western Hemisphere, 73.7% of excess demand, grew 8.9% per annum.

Processed Fruit

Asian consumption of imported processed fruit has increased 13.4% annually from the mid-1980s to the mid-1990s, reaching \$1.3 billion in 1995. Japan imported 65.3% of all Asian imports. The other East Asian countries imported another 21% share of the Asian total with Hong Kong receiving 10.2%.

Korea and Taiwan increased their imports by 27-30% per year to combine for 10.4% of Asian imports in 1995. SE Asia was a significant market, consuming 13.0% of all Asian imports. However, the region's import growth rate was only 6.5%, less than half of the Asian average. Demand for imported processed fruit in Oceania was relatively small, \$98.9 million in 1995.

In 1995, Western Hemisphere exporters captured 18.7% of the Asian import market and achieved similar market penetration in each of the countries or regions analyzed, with the exception of South Asia. The NAFTA countries provided 88.6% of these exports, with the US supplying 74.4%. Mexico and Chile are the only two Latin American countries which sold considerable amounts to Asia. Mexico sold 11.4% of the total as Chile provided another 8.6%. Overall, Western Hemisphere exports to Asia have grown 17.7% per year. The US growth rate was slightly below this level at 16.8% per annum. Mexico and Chile expanded their exports to the region much faster, at annualized rates of 34.0% and 43.7%. Asian markets purchased 21.9% of all Western Hemisphere processed fruit exports in 1995.

Asians purchased \$434.1 million, 33.3% of their total processed fruit imports, from non-Asian suppliers. The 15.9% annual increase in excess demand exceeded total import growth. Western Hemisphere producers sold 56.0% of non-Asian imports purchased by Asian markets. NAFTA suppliers provided half and Latin American suppliers claimed a 12.8% share of excess demand after enjoying 33.4% annual export growth for a decade.

Fresh and Preserved Vegetables

Asian consumers have been demanding more imported vegetables. They increased their imports 10.9% annually over the period being analyzed, to reach \$4.8 billion in 1995. Demand in Japan was the greatest, 57.1% of the Asian total in 1995, and has been growing quickly, 13.5% per year. Korean consumption grew even faster, 16.9% annually, but accounted for less than 4% of all Asian imports in 1995. SE Asia purchased over \$915 million of vegetables in 1995, 19.2% of the Asian total, after it increased its imports 9.7% annually over the study period. Hong Kong purchased over \$500 million to account for another 10.5% of the Asian total.

Western Hemisphere suppliers provided 20.7% of Asian vegetable imports, almost \$1 billion, in 1995. NAFTA's 95.1% of this total had the following country breakdown: US, 75.2%; Canada, 11.7%; and Mexico, 8.2%. The only non-NAFTA country to sell a substantial amount to Asia was Chile: \$30.7 million or 3.1% of the Western Hemisphere total. Western Hemisphere exports to Asia grew 17.4% annually, led by the US and Canada with each enjoying 17% annual growth. Mexico and Chile expanded their exports 23.7% and 26.6% annually. Although Asia imported 16.1% of all Western Hemisphere

exports, only three countries shipped more than 10% of their exports to Asian destinations in 1995: the US, 31.3%; Canada, 12.3%; and Chile, 11.6%. Only 4.7% of all Latin American vegetable exports were bound for Asian markets. Western Hemisphere penetration of the Asian markets ranged from a low of 3% in China to a high of 38% in Taiwan, with 25% penetration of the large Japanese and Korean markets. Western Hemisphere producers supplied only 11% of the second largest market, SE Asia. With three exceptions, the US sold 70-95% of all exports from the hemisphere to each market and Canada provided the next largest share of 5-25%. In the Japanese market, Mexico was the second largest provider with over 11% of the hemisphere's share. In South Asia, the US was limited to a 4% share as Canada exported 94% of the hemisphere total.

Asian excess demand for vegetables expanded 13.9% annually to reach \$1.8 billion in 1995. The Western Hemisphere's share of excess demand was 55.3%, with 52.6% being captured by NAFTA countries. Latin America's 19.0% annual export growth allowed it to \$129 million, 7.2% of Asia's excess demand in 1995.

Fruit and Vegetable Juices

Asian consumption of imported fruit and vegetable juices grew robustly over the study period, 21.5% annually, surpassing \$745 million in 1995. Japan, with an annual growth rate of 23.1%, consumed 65.9% of the Asian imports. Korea increased its consumption significantly over the last few years to achieve an annual import growth rate of 32.7% and exceeded \$125 million in imports in 1995, 16.8% of Asia's total. SE Asian import demand grew 11.3% annually to reach \$59.3 million in 1995, 7.9% of the Asian total. Oceania expanded its imports of juices by 3.8% annually to import a total of \$75 million in 1995.

Western Hemisphere exporters supplied 36.3% of Asia's imports. The US and Brazil captured most of this market, providing 50.6% and 40.9% of the hemisphere's exports to Asia. Chile, the only other substantial exporter to Asia, supplied 4.9% of Western Hemisphere exports. Western Hemisphere fruit and vegetable juice exports to Asia grew 19.9% annually, expanding from a small 4.6% share of the hemisphere's total exports in the mid-1980s to a substantial 18.3% share in 1995. Exports from the US and Brazil expanded 16.1% and 24.7% annually. Chile, starting from essentially no trade with Asia in the mid-1980s, increased its exports to that continent very rapidly to become the third largest exporter to Asia from the Western Hemisphere. Argentina expanded its exports by 20.9% annually to provide 2.4% of hemisphere exports to Asia.

Wine

Asian consumption of imported wine increased 18.0% annually, reaching \$666 million in 1995. Japan, increasing its imports by 18.2% annually, imported 73.1% of the Asian total. SE Asia was the next largest market in Asia, importing 14.1% of Asia's total in 1995 after growing 17.5% annually from the mid-1980s to the mid-1990s. South Korean and Taiwanese import markets grew rapidly over the last several years but still lag behind Hong Kong's 5.7% share of Asian imports.

Asia purchased 9.5% of its wine imports from Western Hemisphere suppliers. The US provided 68.2% of these exports, followed by Argentina with 20.8% and Chile's 9.0% of Western Hemisphere exports. While total Western Hemisphere exports grew 23.0% annually, those to Asia grew at a slower, but still robust, 17.9% pace. Exports to Asia from the US grew 22.8% per annum. Those from Argentina and Chile grew slower: 11.1% and 7.5% annually. Western Hemisphere producers provided 9.6% of the \$487 million Japanese import market. The US supplied 60.8% of this total. The two other primary hemisphere exporters to Japan were Argentina with a 27.9% share and Chile with a 10.5% share of the

hemisphere total. While Chile's exports to Japan grew at a moderate 5.7% annual pace, those from the US and Argentina grew much faster, 23.2% and 11.0% annually. Exports to SE Asia did not fare as well as Western Hemisphere exporters captured only 6.7% of that developing market. Again, the US dominated Western Hemisphere exports, accounting for 85.4% of the 1995 total. The other two substantial exporters were Mexico with an 8.1% share and Chile with 4.4%. Argentina was the primary exporter to Oceania in 1995, capturing 55.0% of the \$5 million hemisphere exports. The US and Chile split the remaining Western Hemisphere exports to Oceania with shares of 36.4% and 8.5%.

Edible Nuts

Asian imports of edible nuts have grown 11.7% annually to reach \$723 million in 1995. Japan consumed 47.7% of these imports, registering a 10.7% annualized growth rate. Hong Kong was the next largest market for imported edible nuts, receiving 18.4% of the Asian total. SE Asia imported 12.2% as South Korea and Taiwan combined for another 6.6% share of total Asian imports. China and South Korea registered the highest growth rates of 38.4% and 33.3% annually. South Asia obviously has the potential to become a very large market as it has imported as much as or more than Japan in certain years. However, its imports have been extremely volatile, ranging from \$68 million to almost \$300 million over the study period but were only \$95 million in 1995. The three-year average from 1993-95 was considerable at \$204 million, 27.0% of the Asian three-year average.

Western Hemisphere producers supplied 33.2% of Asia's imports in 1995 after their exports grew 14.8% annually over the study period. While Asia has become a considerable market for the Western Hemisphere, importing 17.1% of its total edible nuts exports, the US was the only significant supplier to Asia, providing 99.5% of the exports from the Western Hemisphere. Latin America has yet to capitalize on the Asian markets, selling only 0.3% of its \$325 million in exports to Asian buyers. Brazil, the dominant Latin American edible nuts supplier, has the same minuscule ratio of exports, 0.3%, headed for Asian ports. Actually, Brazil sold five times that amount to the much smaller \$75 million market in Oceania in 1995, capturing 4.3% of that import market. The US, the only other significant Western Hemisphere exporter to Oceania, supplied 20.9% of Oceania's edible nuts imports in 1995.

Groundnuts

Asia's groundnuts imports grew 8.4% annually to reach \$260 million in 1995. SE Asian imports grew 18.8% annually, reaching \$201 million, 77.1% of the Asian total. Japan's imports have been declining by 2.5% annually, falling to 14.7% of total Asian imports in 1995.

Western Hemisphere exports to Asia declined 6.4% annually over the study period, falling to a 4.4% share of all Asian imports in 1995. The amount shipped to Asia in 1995 represented only 2.9% of all Western Hemisphere groundnuts exports. The US provided 94.3% of these nuts. Latin American countries exported \$173 million of nuts in 1995, but only \$550 thousand went to Asia, 4.8% of Western Hemisphere exports across the Pacific Ocean and only 0.3% of Latin American total exports.

Cut Flowers

The Asian import market for cut flowers is still fairly small, reaching only \$328 million in 1995 with Japan consuming 75.3% of this total. SE Asia and Hong Kong were also large markets, purchasing 12.2% and 7.8% of Asia's cut flower imports in 1995. Japan's 26.5% annual growth rate fueled the 23.4%

annual surge in Asian imports. SE Asia and all markets in East Asia registered annual growth rates in excess of 14% with South Korea recording the highest rate, 34.9%.

Western Hemisphere growers accounted for \$28 million, only 8.7% of Asia's import consumption, with the Andean Pact countries providing 41.6% of this total. Next in importance were the US with 38.3% and Central American countries with 14.9% of exports to the Asian region. Western Hemisphere exports to Asia grew 22.3% annually, 10% faster than total Western Hemisphere exports of cut flowers. The US enjoyed a growth rate of 13.3% in its exports to Asia. The growth rates of the Andean Pact and Central American countries are undefined given the low levels from which they started. The Andean Pact countries and the US are penetrating all of the major markets in Asia, but Central American countries are selling large numbers of cut flowers only to the Japanese. Only 2.8% of Western Hemisphere exports are shipped to Asian ports. For the Andean Pact, the percentage is even smaller, 1.8%.

Asian excess demand for imported cut flowers was \$186.3 million, 56.8% of total imports. Imports from non-Asian sources grew 30.1% per year, substantially above the overall import growth rate. Western Hemisphere producers' \$28 million in sales to Asia in 1995 represented 15.3% of excess demand.

Beef

The Asian market for imported beef is large and growing quickly, 15.1% per year over the study period. The \$4.1 billion total in 1995 was dominated by Japan's \$3.1 billion imports, which grew at a 16.1% annual rate. Other large and growing markets include South Korea with imports of \$534 million and an annual growth rate of 19.1%, SE Asia with \$244 million and a 10.9% annual increase, and Taiwan with a 10.6% annual growth rate and \$181 million in imports in 1995.

Western Hemisphere suppliers have not ignored the Asian beef market. An amazing 50.6% of all Western Hemisphere exports were bound for Asian destinations in 1995. The hemisphere has been expanding exports to Asia by 17.2% annually. Only large Western Hemisphere countries are currently supplying Asian markets with substantial amounts of beef. The US provided \$2.1 billion, 95.9% of all Western Hemisphere trans-Pacific beef exports. Canada contributed 2.1% of the exports to Asia. Argentina and Brazil each supplied 0.8% of the beef shipped to Asian markets from the hemisphere. In most of the country markets, the US supplied over 95% of the beef from the Western Hemisphere. However, MERCOSUR producers have penetrated the Hong Kong and SE Asian markets with greater success. They provided one quarter of Hong Kong's total beef imports, 57.8% of the total from the hemisphere. In SE Asia, they provided a 36% share of Western Hemisphere exports.

Pork

Asian imports of fresh and frozen pork reached \$3.9 billion in 1995 after a decade of 15.1% annual growth. Japanese consumption of imported pork grew 16.1% annually to reach \$3.6 billion in 1995, 92.7% of all Asian pork imports. Hong Kong has purchased over \$100 million in most years and imported \$145 million in 1995. South Korea has been a less stable market with many years' imports being less than \$1 million, but in 1995 it imported \$110 million. Given the recent actions by the Korean government to improve access to the Korean market, Korean imports of pork are likely to be substantial and more stable but may not maintain the high level attained in 1995.

Western Hemisphere exports to Asia grew 13.5% per year over the study period, reaching a 23.9% market share with \$922 million in 1995. The US exported the majority, 66.0%, of hemisphere pork sales

to Asia. Canada provided \$219 million to capture a 23.7% share of hemisphere exports. Mexico and Brazil were the only Latin American suppliers to sell significant amounts to Asia in 1995 as they exported 5.0% and 4.8% of the hemisphere total. Canada was the only major supplier to Asia that had exports grow at a moderate, 4.3%, annual rate. The other three enjoyed strong double-digit annual increases. Japan bought Western Hemisphere pork only from the NAFTA countries. This 22.5% share of the total import market was dominated by the US which sold Japan \$561 million, 69.6% of Western Hemisphere exports, in 1995. Canada supplied 24.9% and Mexico the remaining 5.5% of hemisphere exports to Japan. Brazil was the major pork supplier from the hemisphere to Hong Kong. Brazil's \$46 million in sales to the former British colony represented 32.1% of the total import market and 66.4% of exports from the Western Hemisphere. The US and Canada combined for a 29.3% share of hemisphere exports. Those Latin American producers who exported to Asia sold pork to only one market. Mexico exported to Japan; Brazil shipped pork to Hong Kong. Additionally, Argentina sold \$3 million to Hong Kong in 1995, 4.3% of the Western Hemisphere total. Since the US has only recently entered the pork export market in force, it is difficult to estimate how other exporters will fare in Asian markets. The sooner they establish a foothold and a loyal consumer base, the better.

Japan's market has been very volatile under the terms of the Uruguay Round Agreement. The greater access provided has caused a surge in imports of chilled and frozen pork. However, the URA allows Japan to impose prohibitive safeguard measures when this surge exceeds a percentage of the previous few quarters' imports. This has created a market in which importers purchase huge quantities of frozen pork when the low tariff is in effect and very little when the safeguards are imposed, increasing the minimum import price by as much as 24%. This cyclical trade has created problems for importers as they attempt to gauge whether the volumes traded will be sufficient to last until the next period in which the safeguard is removed and the buying binge can begin anew. Suppliers and shippers are affected, too, as they must attempt to transport the sudden, large volume of pork to Japan. This situation should not last long as the threshold for triggering the safeguard measures keeps rising as imports increase. In the short-term, however, it is causing odd trade patterns.

Taiwan's recent outbreak of foot-and-mouth disease is causing other distortions in pork trade flow. Exports to Taiwan will not increase since the infected animals pose no hazard to humans who eat pork. However, it will affect trade in Asia as Taiwan has been a major supplier of pork to Japan and other markets. Japan has had a particular penchant for Taiwanese pork cuts. This sudden void created by the embargo on Taiwanese pork exports has provided opportunities for other exporters, notably those in the US, who can react quickly to capitalize on this situation.

Poultry

Asian imports of fresh and frozen poultry have grown even more robustly than those of beef or pork. After 19.5% annual expansion over the study period, Asia imported \$2.1 billion of broilers in 1995. Japan's \$1.2 billion led Asia, but Hong Kong's \$639 million was still substantial. In addition to this 88.4% of all Asian imports, SE Asia imported another 6.8% or \$146 million. Two other sizable markets in 1995 were South Korea with \$48 million and China with \$46 million. All of these major markets in Asia recorded double-digit annual growth rates: Japan, 19.6%; Hong Kong, 21.7%; SE Asia, 10.2%; Korea, 70.4%; and China averaged a doubling of its imports every year over the ten year period.

Western Hemisphere producers supplied 46.1% of Asia's fresh and frozen poultry imports in 1995. Of this \$982 million, the US provided \$655 million or 66.7%. Brazil was the only other major supplier, selling \$300 million worth or 30.5% of the total from the hemisphere. Brazil's exports to Asia grew 31.6% annually, more than twice as fast as the US's 14.1%. This 70-30 split is true for SE Asia and for East Asia as a whole. However, the picture on a country-by-country basis in East Asia is quite different.

The US has cornered the market for exports from the Western Hemisphere to the smaller markets of East Asia, providing at least 95%. Interestingly, in the two largest markets in East Asia, Japan and Hong Kong, the picture was somewhat different. In Hong Kong, Brazil limited the US's dominance to 84.8% of the market while taking 10.4% for itself in 1995. In the largest market, Brazil commanded a 60.4% share of Japanese imports from the hemisphere. However, 1995 was the first year in which Brazil's exports to Japan exceeded those from the US. More data will be required to assess whether this is the new order in that market or merely an anomaly. Given Brazil's 29.5% growth rate in exports to Japan, it seems likely that Brazil, at least temporarily, has wrested the top position from the US.

Oilseed cake

Asian imports of oilseed cake increased 13.4% annually over the study period to reach \$1.3 billion in 1995. Of the three major import markets in Asia, SE Asia was the largest, importing \$745 million in 1995. Korea and Japan followed with imports of \$350 million and \$211 million. All of these markets grew faster than 11% per year, with Korea growing the fastest, 20.8% annually. China, with imports of \$21 million in 1995, is still a small market, but could soon become very substantial given its 57% annual growth rate for the last decade.

Western Hemisphere producers sold to Asia \$643 million of their total \$5.1 billion exports. Sales to Asia grew 8.3% annually, more than double the 3.1% growth rate in total exports. Brazil sold the most to Asia, \$283 million or 44.1% of the Western Hemisphere total. The US was next, selling 30.2% of the hemisphere total to Asia. The other significant exporters to Asia in 1995 were Argentina with an 18.1% share and Canada with 6.9%. Only Argentina and Canada were able to exceed the average growth rate of hemisphere sales to Asia with rates of 13.2% and 8.9% annually. Western Hemisphere suppliers were successful in capturing 51.0% of the largest import market in Asia, SE Asia. However, supplying the majority of the imports to this market may soon be a thing of the past as Western Hemisphere exports to SE Asia grew at a 7.0% annual rate, slower than the market's import growth rate of 11.5%. Brazil exported 43.8% of the \$380 million worth of oilseed cake shipped to SE Asia from the hemisphere. The US provided another 37.3% while Argentina supplied 15.1% of the hemisphere total. Brazil was the only hemisphere exporter to achieve a growth rate above the hemisphere average. Brazil was the largest provider from the hemisphere to the second largest import market in Asia as well, selling \$82 million, 63.9% of the hemisphere total, to Korea in 1995. Argentina and Canada sold 23.7% and 10.3% shares of the hemisphere total. Brazil was the only exporter from the hemisphere to increase its sales to Korea more than 5% annually, achieving 9.2% annual export growth. The US suffered a -6.8% annual contraction in shipments to Korea but fared far better in Japan, where it supplied 44.6% of the hemisphere's \$111 million exports. Other providers contributing to the 52.5% share of the Japanese import market captured by the hemisphere included Brazil with 20.0% of the hemisphere total, Canada with another 18.7% share and Argentina with 16.8%. Except for Brazil, Western Hemisphere providers enjoyed strong export growth to Japan, over 20% annually. Brazil's exports were volatile but produced a flat growth rate when measuring from a three-year-average in the mid-1980s to another in the mid-1990s.

Oilseed oils

After experiencing very modest growth in the late 1980s and early 1990s, Asian imports of oilseed oils exploded in 1994 and 1995 to achieve an overall growth rate of 8.4% annually for the study period. From an average level of approximately \$2.6 billion, imports soared to \$4.7 billion in 1994 and \$6.5 billion in 1995. China increased its imports 41.3% annually over the ten-year period to become the largest Asian import market, purchasing \$2.4 billion in 1995. South Asia imported the second largest amount in

1995, \$2.0 billion. Despite the sub-continent's negative growth rate over the entire ten-year period, -0.2% annually, it was increasing its imports over the last five years. SE Asia was the next largest market with imports of \$695 million in 1995 after growing 9.3% per annum during the study period. Other East Asian markets imported substantial amounts in 1995: Japan, \$538 million; Hong Kong, \$522 million; and South Korea, \$250 million. Taiwan imported the smallest amount in East Asia, \$93 million, but recorded an 18.5% annual growth rate, second only to China's.

Western Hemisphere producers captured a 29.4% share of the Asian import market in 1995 after increasing shipments across the Pacific 7.3% annually. Brazil was the major supplier to Asian markets from the Western Hemisphere, exporting \$795 million in 1995 to capture a 41.8% share of total hemisphere exports to Asia. The US was the next largest supplier, selling \$624 million to Asia. Argentina shipped \$373 million or 19.6% of exports to Asia from the hemisphere while Canada supplied another 5.7% or \$109 million. Argentina and Brazil enjoyed strong export growth rates of 21.2% and 10.4% annually. Canada was the only major supplier to experience declining exports over the study period with a -4.1% annual growth rate. Regional performance can be summed up as follows. The US dominates in all East Asian markets, except China where Brazil is being the most successful. Latin American producers set the pace for Western Hemisphere suppliers to South Asia, SE Asia, and Oceania. Canada currently sells significant amounts only to East Asian countries, despite its past success in South Asia. In the Chinese market, all major suppliers from the hemisphere enjoyed growth rates in excess of 25% per year. Overall, Western Hemisphere exports to China increased 51.6% annually. The South Asian market purchased \$502 million, a quarter of its imports, from the Western Hemisphere. Argentina provided the lion's share in 1995, 49.5%. Brazil was close behind, supplying another 40.1%. The US was the only other significant exporter from the hemisphere with a 9.8% share. Argentina was the only Western Hemisphere supplier to record a positive growth rate, 17.9% annually, in this contracting market. SE Asia was another boom market for Western Hemisphere producers as they increased oilseed oil sales to the region 12.6% annually. Of the \$94 million shipped to SE Asia from the hemisphere, Argentina captured the largest share, 40.1%, followed by the US with 33.2% and then by Brazil which sold 24.0%. These same producers did not fare as well in the Hong Kong market. Although the former colony increased its imports 15.4% annually, it increased its purchases from Western Hemisphere producers at a much lower 3.8% annual rate. Hemisphere producers' share of the Hong Kong market slipped from 32% in the mid-1980s to 11% in the mid-1990s. In fact, the US was the only one to enjoy a positive growth rate in exports to Hong Kong. Western Hemisphere producers' share of the Japanese market has slipped slightly to 17.7% in 1995. The US supplied almost all, 91.4%, of the \$95 million of oil shipments to Japan from the hemisphere. The \$250 million Korean import market received a third of its purchases from the Western Hemisphere. The US provided almost two-thirds of this total, \$54 million. Brazil supplied another 17.4% of the hemisphere total, followed by Argentina and Canada with an 8.3% share each.

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