

*AN IMPORTERS GUIDE  
TO NONTRADITIONAL  
AGRICULTURAL  
PRODUCTS FROM  
GUATEMALA*

# AN IMPORTER'S GUIDE TO NONTRADITIONAL AGRICULTURAL PRODUCTS FROM GUATEMALA

Revised

United States  
Agency for International Development  
(U.S. AID)  
in collaboration with the  
Office of the Agricultural Attaché  
(USDA)

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The revision is based on information compiled by S&W Consultants, Inc., and by the Planning Division (USPADA) of the Ministry of Agriculture and Food. Economic, commercial and labor information was provided by the U.S. Embassy staff in Guatemala. Some statistics were compiled by Richard Brown of the Agriculture and Trade Analysis Division of the Economic Research Service (ERS), USDA. Ricardo Frohmader of the ROCAF export promotion project, PROEXAG, Ray Marin, Economic Officer, and Tully Cornick, Rural Development Office, were also very helpful with the content and final review of the guide. Other sources of information are cited throughout the text.

## PREFACE

The U.S. Mission in Guatemala has compiled the following information as a guide to U.S. importers interested in expanding or initiating a commercial relationship with the Central American Republic of Guatemala. The booklet should be equally useful to potential investors and representatives of related service industries who require a summary of the Guatemalan nontraditional agricultural sector in a concise format.

The U.S. Mission provides this revision to complement the efforts of the Nontraditional Export Guild (Gremial de Exportadores de Productos No-tradicionales) to support one of the most rapidly evolving sectors of this primarily agricultural economy. Export promotion, and particularly diversification to "nontraditional" exports, is one way in which the United States contributes to the success of Guatemala under the Caribbean Basin Initiative, with the goal of improving economic conditions and increasing two-way trade.

The products listed in this guide are those agricultural products considered nontraditional. The most important exports from Guatemala continue to be traditional agricultural exports -- coffee, bananas, and sugar. The winter vegetable, tropical fruit, and herb and spice industries are areas of greater interest in terms of potential expansion, however.

Much of the material presented cannot be officially verified and all of it is subject to change without notice. It is advisable to contact the U.S. Government contacts as well as the exporters themselves, through such organizations as the Nontraditional Export Guild, in order to learn of advances and changes in the industry as time passes. **An Importer's Guide to Nontraditional Agricultural Products from Guatemala**, however, can serve as the first step for deepening a newcomer's knowledge of the framework for entering into trade with the land of the eternal spring, Guatemala.

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FROM GUATEMALA**

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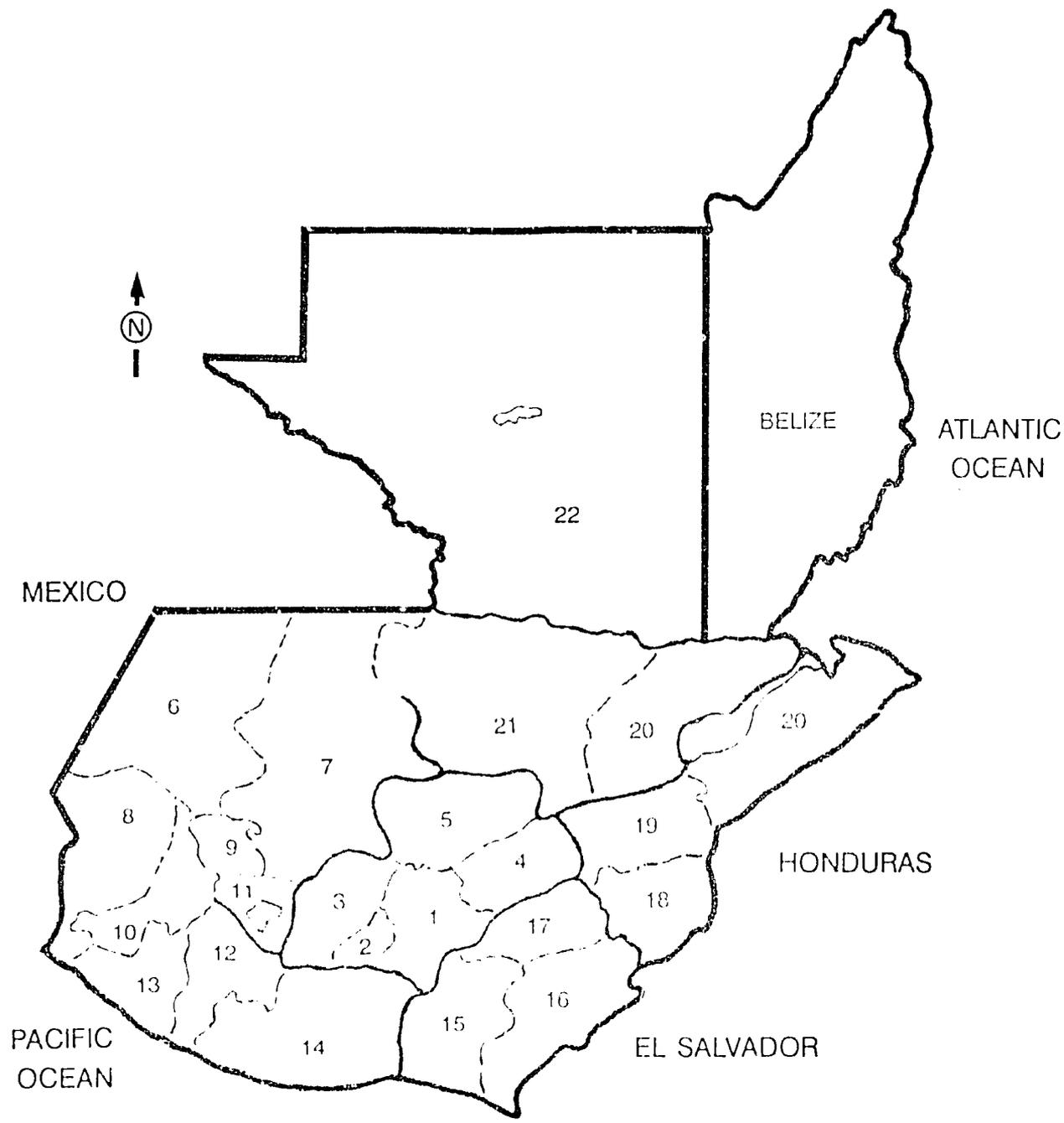
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## **I. INTRODUCTION TO GUATEMALA**



**Departments**

- |                  |                   |                |                  |
|------------------|-------------------|----------------|------------------|
| 1. Guatemala     | 7. Quiche         | 13. Retalhuleu | 19. Zacapa       |
| 2. Sacatepequez  | 8. San Marcos     | 14. Escuintla  | 20. Izabal       |
| 3. Chimaltenango | 9. Totonicapan    | 15. Santa Rosa | 21. Alta Verapaz |
| 4. El Progreso   | 10. Quezaltenango | 16. Jutiapa    | 22. Peten        |
| 5. Baja Verapaz  | 11. Solola        | 17. Japala     |                  |
| 6. Huehuetenango | 12. Suchitepequez | 18. Chiquimula |                  |

FIGURE 1. GUATEMALAN DEPARTMENTS

## I. INTRODUCTION TO GUATEMALA

### The People and the Land

Guatemala is the largest Central American country in terms of population (estimated 8.7 million) and the third largest in size (approximately 42,000 square miles). It is located south of Mexico and also borders with El Salvador, Honduras, and Belize. Guatemala has around 275 miles of coastline, primarily on the Pacific Ocean but also on the Caribbean. The country's geography is impressively diverse. Elevation ranges from sea level to almost 12,500 feet and precipitation, and temperatures vary as dramatically among different regions of the country, thus creating a number of distinct environments.

The official language is Spanish, although many of the Mayans, who constitute about half of the population, have maintained their culture and speak their own dialect -- some of the over 25 different dialects being so unique that they are considered as separate languages. Many business people, particularly in the agricultural export industry, also speak English. About 40% of the population is concentrated in urban areas, with around 2 million in the capital, Guatemala City.

The country is divided into twenty-two political divisions called departments. By far the largest department is the Peten, which covers the northern panhandle of the country, bordering the full length with Belize, and remains to a large extent in jungle. There are other remote areas only now under colonization, such as the northern sections of Huehuetenango, Quiche, Alta Verapaz, and Izabal Departments. The remaining departments -- and the southern or central sections of Huehuetenango, Quiche, and Izabal -- are far more accessible and developed, and therefore more apt for the export of perishables. A map of the country with departmental divisions appears as Figure 1. A map of the administrative divisions used by the Ministry of Agriculture for programs appears in Appendix III.

The country can be divided into regions according to climate and culture. The areas of most interest for a produce buyer or importer based on existing infrastructure and production are the Southern Coastal Plain, the Western Highlands, the Central Highlands, and the Southeast. For example, the Southern Coastal Plain is a warmer area with plentiful rainfall and rich volcanic soils. That is the region with the greatest production of tropical fruits, cotton, sugar cane, and other warm weather crops.

Coffee, flowers, and much of the cool weather vegetable production is centered in the Western Highlands, which have sites that can drop below freezing. A large Indian population accustomed to producing corn and beans has successfully shifted to these other high labor crops.

The Central Highlands is similar to, though slightly warmer than, the Western Highlands. Culturally, this area is largely influenced by the presence of the national capital, Guatemala City, and the related urban population. Fruit, flower, and vegetable production is concentrated in this area. The overwhelming majority of supply for the country's freezing plants, for example, has come from this area. Resulting high land prices and demand for supplies have made it far more competitive than the other regions in recent years. Most companies have offices in the capital and many farm owners live there and commute to their production sites. In recent years, some

exporters have opened offices in the second largest city, Quezaltenango (also called Xela after its Mayan name, Xelaju), which is more central to the Western Highlands. A branch of the Nontraditional Export Guild also operates out of Quezaltenango and air service from Guatemala City is being offered on a more regular basis for those who wish to avoid the four-hour drive. One of the principal freezing companies is planning to open a plant near Xela to tap that area's supply. Nonetheless, Guatemala City promises to remain the central location for the export industry for some time.

The Southeastern area, bordering Honduras, is a drier zone with much of its production under irrigation. This is an excellent production area for melons, tomatoes, cucumbers, and other crops that can be sensitive to heavy rainfall.

Major highways connect the capital with important production zones, and these with the major maritime ports: Puerto Santo Tomás de Castillo and, Puerto San José on the Caribbean, and Puerto Quetzal on the Pacific. Both the Guatemala City airport and the airport at the departmental capital of the Peten, Las Flores, are international. The map of Guatemala shows the location of these points. In Table 1, characteristics of the departments are listed, including the approximate distance on major highways to the Guatemala City airport, Puerto Quetzal and Puerto Santo Tomás de Castillo. (Puerto San José and other Pacific ports are not important for shipments of fruits and vegetables.) Evaluations of the maritime ports are available through the Office of the Agricultural Attache (see Appendix IV). The transportation committee of the Nontraditional Export Guild (see Appendix V) could also elaborate on the facilities and services currently available at the maritime ports and at the international airport.

## History and Politics

Centuries before the arrival of Columbus, Guatemala was already the center of the culturally rich Mayan civilization. Descendants of the Maya today make up half of this country's population of nearly nine million. Advanced in astronomy and mathematics, the ancient Maya invented calendars as accurate as those of today.

In the sixteenth century, Guatemala became the political and cultural center of Central America under Spanish rule. In the early nineteenth century, following the region's independence from Spain, Guatemala became the capital of the United Provinces of Central America. After that federation broke up in 1838, Guatemala became an independent republic, as did the other Central American states.

For the next one-and-a-half centuries, Guatemala alternately enjoyed periods of civilian democratic rule, and periods of dictatorship and/or military government.

In 1985, Guatemala adopted a new constitution. Free and fair elections followed, with a democratic civilian administration again scheduled for November 1990, when a new Congress will also be elected. After two unsuccessful coup attempts -- in May 1988 and May 1989 -- Guatemalans appear more than ever determined to ensure the long-term survival of their new democracy.

TABLE 1. CHARACTERISTICS OF GUATEMALA'S DEPARTMENTS\*

Name	Elevation (feet)		Annual Rainfall (inches)			Average Annual Temperature		Distance (miles) to:		
	Maximum	Minimum	Maximum	Minimum	Average (14 years)	(°F)	(°C)	Capital	Puerto Quetzal	Puerto St. Tomás
Guatemala	8,202	1,640	117	39	78	68	20	0	68	190
Sacatepequez	8,202	4,921	156	39	98	68	20	25	93	215
Chimaltenango	8,202	1,640	156	39	109	68	20	32	100	223
El Progreso	4,921	328	78	20	45	73.4	23	47	115	143
Baja Verapaz	6,562	328	78	39	59	73.4	23.5	96	164	177
Huehuetenango	12,467	328	234	31	111	64.4	18	162	231	353
Quiche	9,842	328	234	39	117	63.5	17.5	102	170	292
San Marcos	9,842	0	156	39	78	68	20	167	235	357
Totonicapán	9,842	4,921	78	39	59	59	15	118	186	308
Quezaltenango	9,842	0	156	39	98	59	15	144	212	334
Sololá	9,842	3,281	156	78	130	63.5	17.5	80	148	270
Suchitepequez	3,281	0	195	78	137	77	25	102	170	292
Retalhuleu	4,921	0	156	78	117	77	25	121	189	311
Escuintla	4,921	0	156	59	102	77	25	35	32	226
Santa Rosa	4,921	0	78	39	65	68	20	43	112	234
Jutiapa	4,921	0	78	39	65	68	20	77	145	267
Jalapa	4,921	1,640	39	20	29	68	20	104	172	295
Chiquimula	4,921	328	39	20	29	77	25	107	175	83
Zacapa	6,562	328	23	16	20	77	25	94	162	95
Izabal	3,281	0	156	78	125	77	25	191	259	0.4

SOURCE: INSIVUMEH, 1986, and maps.

\*Excluding Alta Verapaz and the Peten which are not yet accessible for mainstream agricultural export.

\*\*Distance is estimated from the departmental capital city to Guatemala City (international airport), to the principal Pacific port for this industry, Puerto Quetzal, and to the Atlantic port, Puerto Santo Tomás de Castillo. This is to give a general indication of the time in transport.

The present government is headed by Vinicio Cerezo, a Christian Democrat. The new Guatemalan constitution restricts the President to a single five-year term. President Cerezo therefore cannot run for reelection. There are some fifteen organized political parties in Guatemala, ranging from moderate left to extreme right. Most of them have representatives in the 100-member unicameral legislature, where the Christian Democrats have an absolute majority.

The government consists of three branches: executive, legislative, and judicial with the executive branch broken down into 14 government ministries (departments).

### The Economy

The country is primarily agricultural, with farming contributing around 26% of the gross domestic product (GDP). Agriculture also provides an important source of foreign exchange for Guatemala. In 1988 approximately two-thirds of Guatemala's exports were agricultural.

Until the late 1970s, the Guatemalan economy was stable. Low inflation, a stable currency, and balanced budgets were the norm. Guatemala's industrial sector (the country has no heavy industry) benefited from the protection afforded by the Central American Common Market, established in 1961. The intensification of Guatemala's guerrilla wars in the late seventies-early eighties, the outbreak of civil wars elsewhere in the region, and the devastating effect on the world trade of the international debt crisis presented monumental challenges to the military governments of the day. The economy went into a tailspin; by 1985, the average Guatemalan standard of living had plummeted to levels not seen since the 1960s.

The new democratic regime installed in 1986 was successful in stabilizing the economy, and by 1987 real growth had resumed (real growth in 1988 reached 3.7 percent). Inflation was slashed, and the international value of the Quetzal became more stable. Guatemalan entrepreneurs found the new environment congenial for launching new ventures, particularly in the area of nontraditional exports. The latter (including products covered in this guide) have been enjoying a boom since 1986. Tourism also rebounded, to the point where now additional investments in tourism infrastructure are clearly needed.

The fruit and vegetable industries have continued expanding and have become far more organized and attuned to U.S. regulations and market demands over the past five years. Tourism has returned as an important industry and is now expanding at a rate of 20 to 30% per year. The total number of tourists visiting the country has risen from approximately 250,000 in 1985 to over 400,000 in 1988. Considerable potential exists for developing new tourism infrastructure, as existing infrastructure is already being strained by current demand.

A new export promotion law was passed in 1989 and a Free Trade Zone law is nearing completion. Updates on such legislation can be obtained from the Commercial Attaché in the U.S. Embassy in Guatemala or the Camara Empresarial (CAEM) which is setting up an investment information center (see Appendix V).

## **Employment and Labor**

The official unemployment rate is only 6% but underemployment affects over half the economically active population. Since the restoration of democratic government in 1986, many new labor unions have been formed, although the proportion of the labor sector that is organized remains small. "Solidarity associations," adopted from Costa Rica, have also grown tremendously. The associations, however, include management along with workers in the membership and are not recognized as labor unions by the Government.

Farm workers earn Q5.50 a day. Real wages appear to be increasing for the first time since the severe drop in the early 1980s that affected primarily unskilled labor.

Guatemala has a large pool of mid-level managers and young entrepreneurs, many of whom were educated in the United States or Europe. The Managers Association (Asociación de Gerentes) has ongoing training programs and services. This group could be of assistance to a company seeking local managers or intending to upgrade their local employees' skills.

Farming employs about 60% of the labor force and manufacturing is the next largest employer. Pharmaceuticals and textiles are also important industries. Government accounts for only 12% of gross national product (GNP).

## **II. OVERVIEW OF THE IMPORTANCE OF NONTRADITIONAL AGRICULTURAL PRODUCTS IN GUATEMALA**

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## II. OVERVIEW OF THE IMPORTANCE OF NONTRADITIONAL AGRICULTURAL PRODUCTS IN GUATEMALA

Agricultural exports have historically constituted a major source of foreign exchange for Guatemala. Primary among these exports have been bananas, sugar, cotton, coffee, beef, tobacco, cocoa, and rubber. While world prices for these commodities suffered in the 1980s, as a result of world-wide recession, they remain important to Guatemala. For example, in 1985 they made up 60% of the total export earnings while in 1986 they constituted 68% and in 1987 58%. In 1989, these traditional exports will constitute about 62% of the value of exports (US\$211.66 million for cotton, tobacco, rubber, cacao, and coffee, as of July, 1989, according to the Bank of Guatemala's informative bulletin no. 2).

Nontraditional agricultural products, on the other hand, have contributed an average of 3% of total export earnings in 1983-85, and from 5% to almost 15% in the subsequent years. Although this percentage is minor compared to the traditional crops, the nontraditional sector continues to increase and provides an important buffer for the economy. In addition, the nontraditional agricultural sector has tended to be highly labor intensive, thus providing new jobs and expanding the rural economy.

Table 2 reflects the importance of some of the categories of nontraditional agricultural exports. The principal Guatemalan nontraditionals of greatest importance to the U.S. are covered in Table 3. The most successful exports in terms of consistent expansion are broccoli (frozen and fresh), melons, flower seeds, roses, and nuts.

Though melons and roses are highly perishable, the other products among the principal nontraditional exports are often processed (frozen or dried), thereby circumventing several barriers to international commerce. Also, the ten leading nontraditional exports tend to be expanding in the U.S. market at the same time that production is increasing there, so that increases are more related to shifts in consumption patterns than to replacement of any domestic supplies.

Because of its increasing percentage of the total exports, the nontraditional export sector has also been given greater importance in Guatemala's governmental planning and policy making in the past three years. Greater cooperation and interest have evolved in the form of expanded research in fruits and vegetables, diversification programs, international agreements on pest control, and increased status of the Nontraditional Export Guild as the industry representative.

These changes have helped to establish Guatemala as a leader among Caribbean Basin countries in taking advantage of the duty-free status granted those countries under the Caribbean Basin Economic Recovery Act (CBERA). Table 4 shows a comparison of Caribbean Basin countries for key commodity categories in terms of value of exports to the U.S. Despite its increasing importance for each of these countries, the nontraditional agricultural export sector for the entire region is still dwarfed next to Mexico's fruit and vegetable industries. Mexico continues to supply over 80% of all vegetables imported to the United States.

TABLE 2. TOTAL AGRICULTURAL EXPORTS FROM GUATEMALA, 1986-1989  
(FOB VALUES, IN THOUSANDS OF U.S. DOLLARS)

Commodity	1986		1987		1988		January-April 1989	
	MT	1000 US\$	MT	1000 US\$	MT	1000 US\$	MT	1000 US\$
Vegetables	13,996.6	4,288.7	16,755.4	4,839.4	18,028.8	5,025.2	3,176.8	770.6
Fresh fruits	25,661.0	4,334.3	29,532.0	5,669.6	28,775.2	6,926.2	10,262.8	2,750.0
Plantains	5,439.6	577.3	3,125.1	804.4	15,334.5	485.9	1,382.7	111.3
Nuts and oil seeds	1,220.6	1,648.4	1,194.7	1,158.9	534.4	601.6	101.3	337.9
Flowers	628.6	1,289.3	1,056.4	2,109.4	1,113.1	2,514.3	247.3	728.4
Live plants	501.1	285.2	4,723.2	2,374.1	12,650.2	5,188.3	3,646.2	1,384.1
Seeds and propagative materials	65.9	1,551.9	245.7	2,322.2	258.1	2,716.6	77.4	904.8
Honey	3,162.2	2,267.9	2,759.2	2,141.0	2,307.8	1,785.6	326.6	269.3
Total Agricultural Exports:	--	789,000	--	692,000	--	not available	--	314,149
Total Exports:	--	1,062,000	--	987,000	--	1,164,000	--	340,497.1

SOURCE: Bank of Guatemala. Compiled by the U.S. Foreign Commercial Service, American Embassy, Guatemala.

TABLE 3. PRINCIPAL NONTRADITIONAL AGRICULTURAL EXPORTS FROM GUATEMALA TO THE UNITED STATES, 1981-1988 (CIF VALUES, IN MILLIONS OF DOLLARS)

Commodity	1981	1982	1983	U.S. Import Value		1986	1987	1988
				1984	1985			
1. Broccoli, cauliflower	4.6	7.3	5.9	6.5	7.0	8.9	13.5	10.0
2. Live plants	3.0	2.6	2.5	3.1	3.2	2.3	2.3	2.6
3. Melons, cantaloupes	0.8	1.6	1.3	2.1	2.6	0.8	1.3	1.0
4. Flower seeds	1.4	1.7	1.2	2.6	1.8	2.7	3.4	2.0
5. Brussels sprouts	0.2	0.4	1.1	1.4	1.3	0.6	--	0.5
6. Roses, fresh cut	0.4	0.4	0.7	1.1	1.0	1.5	2.4	2.3
7. Nuts, edible	0.5	0.6	0.7	0.3	0.5	1.3	1.4	1.0
8. Honey	0.3	0.6	0.7	0.5	0.5	0.5	0.3	0.3
9. Plantains, fresh	0.1	--	0.1	0.2	0.5	0.6	0.6	0.3
10. Okra, fresh or frozen	0.6	0.8	0.4	0.6	0.5	0.04	--	--

SOURCE: U.S. and Foreign Commercial Service, American Embassy, Guatemala.

TABLE 4. GUATEMALAN NONTRADITIONAL AGRICULTURAL EXPORTS TO THE UNITED STATES JANUARY TO JULY, 1988, IN RELATION TO OTHER CBI COUNTRIES (CIF VALUES, IN MILLIONS OF DOLLARS)

Country	Vegetables (fresh, frozen)	Fruit (fresh, dried)	Nuts	Spices	Cut Flowers	Nursery	Seeds for Planting	Honey	Country Total
Dominican Rep.	7.4	2.7	0.6	--	0.6	0.65	--	0.11	12.06
Costa Rica	4.8	1.8	0.19	--	4.6	6.0	0.59	--	17.98
Guatemala	10.5	2.9	0.08	--	1.2	1.4	2.2	0.17	18.45
Honduras	0.1	6.7	--	--	--	0.7	--	--	7.5
Jamaica	4.5	--	--	0.13	0.6	.69	0.06	--	5.98
Haiti	0.08	--	--	--	--	.12	--	--	0.2
El Salvador	1.1	0.7	--	--	--	--	--	0.07	1.87
Panama	--	0.2	--	--	--	--	--	--	0.2
Bahamas	--	--	--	--	--	--	--	--	--
Netherlands Ant. Leeward and Westward Is.	--	--	--	0.15	0.9	3.2	6.6	--	10.85
	0.2	--	--	0.2	--	--	--	--	0.4
Total U.S. Nontraditional Ag Imports*									
from CBI Countries	28.68	15.0	0.87	0.48	7.9	12.76	9.45	0.35	75.49

SOURCE: U.S. and Foreign Commercial Service, American Embassy, Guatemala.

\* Totals from the categories listed. Other nontraditional agricultural U.S. imports may have appeared under miscellaneous categories or under specific headings, such as oranges or plantains and bananas, and were not included in this table. Values below \$100,000 were not listed.

### **III. PROFILE OF SELECTED NONTRADITIONAL CROPS**

### III. PROFILE OF SELECTED NONTRADITIONAL CROPS

#### Introduction

The crops included in this more detailed section were selected on the basis of their potential for export. Therefore, some are already established as export crops, such as broccoli and cauliflower, and may be exported in processed form as well as fresh. Other crops included are not yet being exported to the U.S., such as several minor tropical fruits, hot peppers, and some herbs known for medicinal qualities. These "new" products might require more involvement and organizational support from the importer than the more established exports, but could provide greater earnings in specialty markets. The process for selecting the commodities to appear in more detail has, therefore, resulted in a kind of smorgasbord of products, but one that would appear to be of interest for a U.S. importer or investor.

Information on competitiveness of Guatemalan products is reviewed in a separate chapter. Opportunities and constraints to export are also outlined in a separate chapter, and generally would apply to all the products in this commodity section.

Projects sponsored by the U.S. Agency for International Development (U.S. AID) and the Regional Office for Central American Programs (ROCAP) of AID to improve the capabilities of private laboratories in Guatemala in pesticide residue analysis and in quality control are discussed in the chapter on opportunities and constraints, along with similar efforts of the Government of Guatemala, the private sector, and industry groups such as the agrochemical suppliers association (GREPAGRO).

#### How to Use This Section

Each crop is listed in alphabetical order according to its common name in English. Spanish common names and scientific names, which are required on some documentation, are also provided. These names were taken from several reference lists published by USDA, including the botanical glossary of common and scientific names of fruits and vegetables, from the APHIS quarantine manual, and the "Perennial Edible Fruits of the Tropics," published by the Agricultural Research Service (Handbook No. 642). A variety of other botanical references and books on medicinal plants were also consulted. Despite this effort, it is difficult to confirm that what is referred to by a given common name is truly the product described with its scientific name, particularly at the species level.

When there are a number of minor crops or a category of exports, they are grouped under one heading. These consist of berries (blackberry, blueberry, and raspberry); citrus fruit (limes, mandarins, and oranges); foliage (araucaria leaf, cypress leaf, eucalyptus, leather leaf, palm leaf, spate); herbs (basil, culantro, oregano, parsley, rosemary, and thyme); "medicinal" plants and "teas" (aloe vera, ambrosia, boldo, cedar, chamomile, fenugreek, hibiscus, lavender, lemon grass, mallow, marigold, mistletoe, quinine, valerian, and wormwood); ornamental plants (around 25 varieties); spices (ginger, allspice, and annatto -- cardamon is listed separately); and minor tropical fruits (chico, loquat, mamey, mombin, nance, passion fruit, pitaya, sapodilla, and tamarind -- tropical fruits

with over 1000 MT annual exports are listed separately). A list of all of the products included in this section precedes the individual product pages.

The statistics on production are always suspect since there is not a systematic method for compilation or verification of this data. Statistics have become more reliable over the past three years (since the original guide appeared), however, due to adjustments in tax laws and export incentives which encourage more accurate reporting by the exporters. Export figures were generally obtained from the Bank of Guatemala which regulates foreign exchange and taxes on exports and imports, or from the Quarantine Division of the Ministry of Agriculture, which has authority to inspect all agricultural products entering or leaving the country. All agricultural products entering the U.S. must be accompanied by a phytosanitary certificate issued by the Quarantine Division of Plant Health (Sanidad Vegetal), so that statistics for exports to the U.S. should be reliable.

Each commodity page touches on some of the U.S. regulations affecting entry of that product. All of the products in this guide are covered under the Caribbean Basin Initiative which provides for duty-free entrance to the U.S. market under stated conditions. The Customs Service of the Treasury Department has the authority to review products entering the United States, even if no duty is charged. Customs checks for appropriate documentation and screens for illegal materials such as drugs. The Commercial Office of the U.S. Embassy in Guatemala and the U.S. Commerce Department or Customs Service in Washington, DC or at regional offices throughout the United States could respond to any questions on these requirements (see Appendix IV).

All processed foods are regulated by the Food and Drug Administration of the Department of Health and Human Services (FDA) so that questions on processing techniques, additives, labeling, and other matters applicable to frozen, canned, dried or roasted products should be directed to that agency. In addition, FDA has authority to regulate all products, fresh or processed, for pesticide residues and basic sanitation. These regulations are too complicated to list on each commodity sheet. Questions on which chemicals may be used in production of any given product, the tolerance levels for residues of these products, and sanitation standards may therefore be addressed to FDA as well. These questions cannot always be answered by authorities in Guatemala since FDA has no overseas representatives, the staff at the regional export promotion project funded by ROCAP/U.S.AID, PROEXAG (see Appendix IV), can provide some guidance in pesticide tolerance levels which they have compiled from FDA sources. The best source for answers on this topic is the Latin America Desk Officer of FDA who can be contacted at the FDA headquarters in Rockville, Maryland (see Appendix IV).

Regulations to prevent the entry of exotic pests to the United States are handled by the Department of Agriculture. Plant products which are included in this guide can be inspected by the Animal and Plant Health Inspection Service (APHIS) upon entry to the U.S. or, under special arrangement, before leaving Guatemala in a sealed and certified container. Inspection prior to shipment is required when a treatment is necessary in order for the product to be allowed into the U.S. in fresh form. This would apply to any fruits which may be host to economically important fruit flies (e.g., mango, papaya, tomato). The headquarters for APHIS in Central America is located in Guatemala City. Questions on these regulations or necessary treatments should be directed to that office (see Appendix IV) in Guatemala or to the National Headquarters of APHIS in Hyattsville, Maryland or to regional offices throughout the United States.

Only federal regulations are noted in the commodity section. Some states have additional regulations or requirements such as for a minimum grade of some product. This is particularly true for California. Information on state regulations must be requested from the state in question.

Comments are made on some commodities. Most of this commentary is not official data, but tips and background information of common knowledge to the local industry but useful for an importer less familiar with the country.

When available, cost of production figures were included in the comments section, but these figures vary considerably due to the range of technology used -- from primitive to highly advanced -- and the cost of imported agricultural inputs. Cost of production figures were included as a very general guide and should not be used for decision-making by potential investors or for feasibility studies.

Occasionally, grades and standards have been established for a commodity to maintain a certain quality level or to protect the market. Only required grades and standards are noted in the comments section. Within Guatemala, the headquarters for the Institute of Central American Industrial Technological Studies (ICAITI) reviews grades and standards established for trade within Central America. Though not official representatives, ICAITI inspectors might be able to provide a similar verification service for products destined to the U.S. market.

The sources of statistics are noted on each page. If the usual sources are not used, then the alternative source was considered more accurate. For example, the strawberry industry is well organized so that the exporters themselves seemed to have a better feel for total export volume for the current year than did the Bank of Guatemala.

Questions on the availability of products which are not listed in this section may be addressed to the Nontraditional Export Guild (see Appendix V). All of the information in this section is subject to change without notice and should serve only as an introduction or basis for further personalized inquiry.

**COMMON NAMES IN ENGLISH AND SPANISH OF  
NONTRADITIONAL CROPS INCLUDED IN THIS DOCUMENT**

Asparagus	Espárrago
Berries (blackberries, blueberries, raspberries)	"berris", frutillas
Broccoli	Brócoli
Brussels Sprouts	Col de Bruselas
Cantaloupe and Honey Dew	Melón
Cardamon	Cardamomo
Carrot	Zanahoria
Cashew Nuts	Marañón (semilla)
Cauliflower	Coliflor
Chayote	Guisquil
Citrus Fruits (limes, oranges, tangerines)	Frutas Cítricas
Coconut	Coco
Flowers	Flores
French Green Beans	Ejote Francés
Foliage	Follaje
Garlic	Ajo
Herbs (basil, culantro, oregano, parsley, rosemary, thyme)	Hierbas aromáticas
Leek	Puerro
Lettuce	Lechuga
Macadamia Nut	Macadamia
Mango	Mango
Medicinal Plants and Herb Teas	Plantas Medicinales y Té de Hierbas
Okra	Okra
Ornamental Plants	Plantas Ornamentales
Onion	Cebolla
Pacaya	Pacaya
Papaya	Papaya
Pepper (Hot)	Chile
Pineapple	Piña
Plantain	Plátano
Snow Pea	Arveja China
Spices (ginger, annato, allspice)	Especias
Squash (baby squash)	Ayote
Strawberry	Fresa
Sugar Snap Peas	Arveja Dulce
Tomato	Tomate
Tropical Fruits (chico, loquat, mamey, mombin, nance, passion fruit, pitahaya, sapodilla, tamarind)	Frutas Tropicales
Watermelon	Sandía

ASPARAGUS/ESPARRAGOS (Asparagus officinalis)

VARIETIES: UC-157, Mary Washington, Clover's Colossal, Jersey Giant, Ida Lee, Brock Red

FORM OF EXPORT: Fresh

TOTAL NATIONAL PRODUCTION: 663 MT (1987)

TOTAL NATIONAL EXPORTS: 11 MT (1988)  
26 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: Import permit required, no other APHIS requirement. Grades and standards are established but not required. Pesticide regulations are available from the Food and Drug Administration.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX											

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COMMENTS: Asparagus is a relatively new crop in Guatemala at the commercial level. Production has been increasing rapidly over the past three years and is well organized. Exporters have formed an active Commission within the Nontraditional Export Guild, and can be contacted through that office.

To date, only green asparagus is being produced in quantity and exports are only in fresh form. The product is packed in 13 lb. half cartons or wooden pyramids or half crates. All sizes are available. The packaged and classified product is shipped primarily by air to the United States.

SOURCE:

Production - Ministry of Agriculture Statistics, USPADA  
Exportation - Ministry of Agriculture Statistics, Quarantine

BERRIES/"BERRIS"

Blackberry/Mora (Rubus spp.)  
Blueberry/Arandano (Vaccinium spp.)  
Raspberry/Frambuesa (Rubus spp.)

VARIETIES: Blackberry - Darrow, Hedrick, Lawton, Native,  
Brazos, Raven, Evergreen  
Blueberry - ---  
Raspberry - Heritage

FORM OF EXPORT: Fresh, frozen

TOTAL NATIONAL PRODUCTION: Data not available

TOTAL NATIONAL EXPORTS: Blackberry - 19 MT (1988)  
23 MT (1-5/89)  
Blueberry - None to date  
Raspberry - 1 MT (1988)  
1 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: Import permit required, no other APHIS requirement for Rubus spp. Currently, Vaccinium spp. does not appear on the admissibles list for Guatemala and therefore cannot enter the U.S. in fresh form. (See comments.) Grades and standards are established but are not required. Pesticide regulations are available from the Food and Drug Administration.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX	XX	XX	XX	XX		XX	XX			XX	XX

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COMMENTS: Commercial production is relatively recent and is being promoted among producers and by a regional agricultural export promotion project (PROEXAG) under the auspices of the Regional Office for Central America of the U.S. Agency for International Development (ROCAP/U.S.AID). Details on production and availability can be obtained from the Nontraditional Export Guild (see Appendix V) or the PROEXAG office (see Appendix IV).

Berries are being packaged in half-pint baskets and shipped by air to the United States. Some trials with controlled atmosphere and wraps are underway to extend shelf life. Other types of berries could be introduced such as loganberry or boysenberry (Rubus spp.). Most production of berries is in the cooler zones of Chimaltenango and Sacatepequez Departments.

Field trials on a number of berry varieties are under way. No blueberry variety has yet proven superior.

**SOURCE:**

Exportation - Ministry of Agriculture Statistics, Quarantine

BROCCOLI-BROCCOLI (Brassica oleracea)

VARIETIES: Green Valiant, Shogun, Green Comet, Green Duke, Packman, Samurki, Future, Green Charger

FORM OF EXPORT: Fresh, frozen

TOTAL NATIONAL PRODUCTION: 80,630 MT (1988)

TOTAL NATIONAL EXPORTS: 57,627 MT (1988)  
4,272 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: Import permit required, no other APHIS requirement. Pesticide regulations are available from the Food and Drug Administration.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
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COMMENTS: Moderately volatile prices. The majority of broccoli production is close to the capital, in Chimaltenango and Pinula. Production cost in 1988 was an estimated \$1,100/ha. Hollow stem is a problem in some cases.

SOURCE:

Production - Ministry of Agriculture Statistics, USPADA

Exportation - Ministry of Agriculture Statistics, Quarantine

Costs - Bank of Guatemala

BRUSSELS SPROUTS/COL DE BRUSELAS (Brassica oleracea)

VARIETIES: Jade Cross, Prince Marvell, Roger, Marvell Lunet, Rowena

FORM OF EXPORT: Fresh, frozen

TOTAL NATIONAL PRODUCTION: 1,142 MT (1985)

TOTAL NATIONAL EXPORTS: 789 MT (1988)  
278 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: Import permit required, no other APHIS requirement. Pesticide regulations are available from the Food and Drug Administration.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
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COMMENTS: Estimated cost of production in 1988 was \$1,694/ha. Frozen brussels sprouts can be packed in the individual trays and boxes which reach the final consumer, so that only the vendor's label need be added in the U.S. Brussels sprouts are less popular among farmers and are usually contracted in conjunction with another crop such as broccoli.

SOURCE:

Production - Ministry of Agriculture Statistics, DIGESA  
Exportation - Ministry of Agriculture Statistics, Quarantine  
Costs - Bank of Guatemala

CANTALOUPE or HONEY DEW/MELON (Cucumis melo)

VARIETIES: Honey Dew - Tom Dew, Mayan Sweet, Orange Clesa  
Cantaloupe - Mission, Sweet (Dulce), Top Mark,  
Hymark

FORM OF EXPORT: Fresh

TOTAL NATIONAL PRODUCTION: 30,377 MT (1987)

TOTAL NATIONAL EXPORTS: 22,560 MT (1988)  
24,617 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: Import permit required, commercial shipments only.  
Pesticide regulations are available from the Food and  
Drug Administration.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
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COMMENTS: Production costs in 1988 were an estimated \$1,250/ha. Most melons are produced in the Southeast area along the border with Honduras. Melons are shipped by sea in containers. In the past, melon balls have been produced by hand for export. INAPSA will have mechanized production of frozen melon balls by the end of 1989, in addition to as much as 50,000 MT of frozen vegetables (broccoli, peas) and strawberries annually. Interested parties can contact INAPSA through the Nontraditional Export Guild.

SOURCE:

Production - Ministry of Agriculture Statistics, DIGESA  
Exportation - Ministry of Agriculture Statistics, Quarantine  
Costs - Bank of Guatemala

CARDAMON/CARDAMOMO (Elettaria cardamomum)

VARIETIES:

FORM OF EXPORT:

TOTAL NATIONAL PRODUCTION: 12,500 MT (1988)

TOTAL NATIONAL EXPORTS: Pergamino - 12,118 MT (1988)  
5,951 MT (1-5/89)

Oro - 753 MT (1988)  
186 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: As a processed spice, cardamon is regulated by the Food and Drug Administration.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
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COMMENTS: The large majority of exports are in pergamino form. Markets are (in percentage of total exports): Saudi Arabia (90%), the U.S. (5%), and Europe (5%). Guatemala surpassed India as the largest producer of cardamon in the mid-1980s and is considered to have top quality. In the most recent years, a mosaic virus which lowered production in India has become more widespread in Guatemala. Coupled with lower world prices, this has caused a decrease in production.

SOURCE:

Production - CARDINSA (Cardamon Association)

Exportation - Ministry of Agriculture Statistics, Quarantine

CARROT/ZANAHORIA (Daucus carota)

VARIETIES: Chantenay, Red Cored, Nantes

FORM OF EXPORT: Fresh (primarily as "mini" or "baby" carrots)

TOTAL NATIONAL PRODUCTION: 18,405 MT (1987)

TOTAL NATIONAL EXPORTS: 7,803 MT (1988)  
2,416 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: Import permit required, no other APHIS requirement. Pesticide regulations available from the Food and Drug Administration.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
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COMMENTS: The estimated cost of production in 1988 was \$600/ha. The production of mini carrots has started recently, which explains why in 1988 carrots were still being exported to Central American countries exclusively while in 1989 most of the exports are to the U.S. Standard size carrots can compete in the U.S. market only when prices are unusually high.

SOURCE:

Production - Ministry of Agriculture Statistics, USPADA  
Exportation - Ministry of Agriculture Statistics, Quarantine  
Costs - Bank of Guatemala

CASHEW NUT/SEMILLA DE MARAÑON (Anacardium occidentale)

VARIETIES: Trinidad, Jamaican, **Native**

FORM OF EXPORT: Shelled

TOTAL NATIONAL PRODUCTION: 975 MT (1987)

TOTAL NATIONAL EXPORTS: 744 MT (1988)  
22 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: No import permit required for dried or roasted nuts which are shelled.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
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COMMENTS: The estimated cost of production in 1988 was \$530/ha. CAROHE, which is a member of the Nontraditional Export Guild (see Appendix V), exports large cashews in packaging appropriate for retail. They also offer gift packages. One company (Las Nubes) advertises their roasted cashew nuts as organic. The largest cashew plantation is in Zacapa and supplies extract, concentrate for animal consumption, and seed husks for use in brake disks at the industrial level. Production occurs throughout the Coastal Plain.

SOURCE:

Production - Ministry of Agriculture Statistics, USPADA  
Exportation - Ministry of Agriculture Statistics, Quarantine  
Costs - Bank of Guatemala

CAULIFLOWER COLIFLOR (Brassica oleracea)

VARIETIES: Christmas White, Snow Ball-Y, Candy Charm, Early Snowball

FORM OF EXPORT: Fresh

TOTAL NATIONAL PRODUCTION: 2,850 MT (1987)

TOTAL NATIONAL EXPORTS: 1,973 MT (1988)  
584 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: Import permit required, no other APHIS requirement. Pesticide regulations are available from the Food and Drug Administration.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
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COMMENTS: Production costs in 1988 were an estimated \$963/ha. Production is under irrigation which allows for a supply throughout most of the year. Green stem is a problem in some areas, as well as hollow stem.

Other Brassica is also permitted into the U.S. (e.g., B. vulgaris - swiss chard, beets; and B. napus - rutabaga) but is not being exported to the U.S. at this time.

SOURCE:

Production - Ministry of Agriculture Statistics, USPADA  
Exportation - Ministry of Agriculture Statistics, Quarantine  
Costs - Bank of Guatemala

CHAYOTE or CHRISTOPHINE/CHAYOTE or GUISSUIL (Sechium edule)

VARIETIES: (See comments)

FORM OF EXPORT: Fresh

TOTAL NATIONAL PRODUCTION: 6,365 MT (1987)

TOTAL NATIONAL EXPORTS: 287 MT (1988)  
25 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: Import permit is required and the product can only enter the U.S. through Atlantic Ports south of Baltimore, Gulf Ports, and Puerto Rico or the Virgin Islands. Pesticide regulations are available from the Food and Drug Administration.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
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COMMENTS: Estimated cost of production in 1988 was \$3,740/ha, with a yield of approximately 50 MT/ha. Chayote is a perennial cucurbit, often grown on trellises to facilitate harvesting. The main production site is around the city of Palencia, Guatemala Department, about thirty minutes from Guatemala City. These producers are not yet members of an association or cooperative.

The majority of exports have been to Central America. In 1989 one U.S. shipment went by air. The only varieties in production currently are spiny, except for one smooth variety which is white and is called "peruleno" locally. A potential market could be for this white variety as mini or baby chayote.

The export situation has improved for chayote since it has been recognized as a cucurbit for the purpose of pesticide registration in the U.S.

SOURCE:

Production - Ministry of Agriculture Statistics, USPADA

Exportation - Ministry of Agriculture Statistics, Quarantine

Costs - Bank of Guatemala

CITRUS FRUITS/FRUTAS CITRICAS

Limes (sour)/Lemones or Limas (C. aurantiifolia & C. latifolia)

Oranges (sweet)/Naranjas (dulces) (C. sinensis)

Tangerines/Mandarinas (C. reticulata)

VARIETIES:

Limes - Key (C. aurantiifolia), Persian  
(C. latifolia)

Oranges - Valencia, Washington, Jaffa, Native

Tangerines - Native

FORM OF EXPORT:

Fresh (see comments)

TOTAL NATIONAL PRODUCTION:

Data not available

TOTAL NATIONAL EXPORTS:

Limes - 152 MT (1988)  
20 MT (1-5/89)

Oranges - 2,168 MT (1988)  
438 MT (1-5/89)

Tangerines - 14 MT (1988)  
52 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.:

Import permit required for all citrus. Treatment for fruit fly control required for tangerine, oranges, ethrog and grapefruit; these are also restricted to entry through Atlantic Ports north of Baltimore (including Great Lakes and Dulles airport). Lemon (C. limon) can enter with no treatment through the North Atlantic Ports if it is a smooth-skinned variety (see comments). Sour or key lime enters any port without treatment. Persian lime is treated as a sour lime for entry from countries other than Mexico, where a citrus canker problem exists. At times, certificates of origin have been issued by APHIS for limes to demonstrate enterability. This seems to be of interest only when shipments are made by land, and must pass through Mexico where regulations are different. Questions should be directed to APHIS in Guatemala. Pesticide regulations are available from the Food and Drug Administration.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
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COMMENTS: As noted in status for entry, other species of citrus are admissible in fresh form to the U.S. but are not featured in detail here. Lemons would not meet U.S. demands in appearance. There seems to be a considerable quantity of dried lemon being exported, however: 809 MT (1988) and 336 MT (1-5/89). It is difficult to distinguish limes and lemons in statistics since both are commonly called "lemones" by consumers and producers alike.

All citrus can enter the U.S. without restriction if it is segmented or cut and packed in natural juice using a commercial treatment. Juices and concentrates can also enter the U.S. without requirements by APHIS. The Food and Drug Administration would regulate those products.

Limes and oranges have established USDA grades.

All orange exports have been Valencia and have gone to El Salvador in the past two years. Juice production in 1987 was an estimated 1,053 MT but a superior processing plant would be needed to make the quality of orange juice desired in the U.S. Juice also tends to be light, and would need to be mixed with Washington or other varieties from different parts of the country to deepen the orange color.

Production costs for tangerines were an estimated \$923/ha in 1988; for limes, \$729/ha; and for oranges, \$846/ha. Currently, wax is not being used on citrus in Guatemala. Production occurs throughout the Coastal Plain.

SOURCE:

Production - Ministry of Agriculture Statistics, USPADA  
Exportation - Ministry of Agriculture Statistics, Quarantine  
Costs - Bank of Guatemala

COCONUT/COCO (Cocos nucifera)

VARIETIES: Native

FORM OF EXPORT: See entry status

TOTAL NATIONAL PRODUCTION: Data not available

TOTAL NATIONAL EXPORTS: 8,576 MT (1988)  
3,891 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: No import permit required if either the green husk or the milk is removed prior to shipment.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
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SOURCE:

Exportation - Ministry of Agriculture Statistics, Quarantine

FLOWERS/FLORES

VARIETIES: Baby's Breath/Llovizna, Bird of Paradise/Ave del Paraiso, Carnation/Clavel, Chrysanthemum/Crisanterno, Gladiola/Gladiola, Rosr/Rosa, Tuberose/Nardo, Others

FORM OF EXPORT: Fresh cut

TOTAL NATIONAL PRODUCTION: Data not available

TOTAL NATIONAL EXPORTS: 473 MT (1988)  
122 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: Import permit required, contact APHIS/Guatemala for shipping regulations and level of risk for interception of pests.\*

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX											

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COMMENTS: U.S. holiday markets are Valentines, Easter, Secretary's Day, Mother's Day, Memorial Day, Christmas.

Guatemala has developed a quality flower industry in recent years. The country is especially known for its range of colors and varieties of roses. These roses have been introduced to the U.S. at discount prices, encouraging large volume sales. Some flowers are produced in greenhouses or under mesh curtains with automatic light and water systems. Most production is in Sacatepequez Department, near the capital city.

\* Some ports of entry have fumigation facilities if treatment of the flowers became necessary, but not all ports do. This can be determined when applying for an import permit.

SOURCE:  
Exportation - Ministry of Agriculture Statistics, Quarantine

FOLIAGE/FOLLAJE

VARIETIES: Shate Leaf/Shate, Leather Leaf/Hoja de cuero, Araucaria, Palm Leaf, Cypress Leaf, Others

FORM OF EXPORT: Fresh, dried (see eucalyptus under medicinal plants)

TOTAL NATIONAL PRODUCTION: Data not available

TOTAL NATIONAL EXPORTS:

Shate Leaf -	1,407 MT (1988)
	1,110 MT (1-5/89)
Leather Leaf -	574 MT (1988)
	326 MT (1-5/89)
Araucaria -	18 MT (1988)
Palm Leaf -	157 MT (1988)
	220 MT (1-5/89)
Cypress Leaf -	0.5 MT (1988)

STATUS FOR ENTRY TO THE U.S.: Requirements vary according to variety of foliage. Contact APHIS/Guatemala for details.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX											

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COMMENTS: Foliage is also exported to Europe and Central America, although the majority of exports is to the U.S.

SOURCE:

Exportation - Ministry of Agriculture Statistics, Quarantine

FRENCH GREEN BEANS or HARICOT VERTS/EJOTE FRANCES (Phaseolus vulgaris)

VARIETIES: Delinen

FORM OF EXPORT: Fresh, frozen

TOTAL NATIONAL PRODUCTION: 1,500 MT\*

TOTAL NATIONAL EXPORTS: 1,100 MT\*

STATUS FOR ENTRY TO THE U.S.: Import permit required, no other APHIS requirements. Pesticide regulations are available from the Food and Drug Administration.

HARVEST SEASON:

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	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	XX										

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COMMENTS: The majority of exports have been in fresh form, but recently frozen French green beans have also been exported. Only the highest quality is exported in order to compete in this narrow market. The price has been averaging \$2.50/pound. The strongest window market for Guatemala is October and April.

\* Production figures are based on separate estimates by major suppliers. Exports are assumed to be all of the production which fulfills quality standards. Because green beans are in a single category on exports, there are no official statistics for French green bean exports per se. This type of annual crops with high labor is quickly adopted by smaller farmers; similar crops could probably also be introduced with equal success.

SOURCE:  
Industry representative

GARLIC/AJO (Allium spp.)

VARIETIES: Native, Elephant

FORM OF EXPORT: Fresh, dried

TOTAL NATIONAL PRODUCTION: 2,945 MT (1988)

TOTAL NATIONAL EXPORTS: 1,724 MT (1988)  
887 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: Import permit required, no other requirements. Pesticide regulations are available from the Food and Drug Administration.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
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COMMENTS: Garlic producers are organized into two associations in the town of Aguacatan (1,200 Members) and of Chichar (38 Members). Both associations can be contacted through CLUSA in Guatemala City at (5022) 32-2247 or 32-0808 and FAX 340282. The estimated cost of production in 1988 was \$2,950/ha with an average yield of 10 MT/ha. Varieties come from Taiwan, Mexico and Chile. Popular varieties for local consumption have an average of 18 or 20 cloves but "Elephant" varieties have been successfully introduced with an average of 8 to 10 large cloves, which would be more accepted on the U.S. market.

SOURCE:

Production - Ministry of Agriculture Statistics, USPADA  
Exportation - Ministry of Agriculture Statistics, Quarantine  
CLUSA  
Costs - Bank of Guatemala

HERBS/HIERBAS AROMATICAS

VARIETIES: Basil/Albahaca (Ocimum basilicum), Coriander Leaves/Culantro or Cilantro (Coriandrum sativum), Oregano/Oregano (Origanum vulgare), Parsley/Perejil (Petroselinum crispum), Rosemary/Romero (Rosmarinus officinalis), Thyme/Tomillo (Thymus vulgaris)

FORM OF EXPORT: Dried

TOTAL NATIONAL PRODUCTION: Data not available

TOTAL NATIONAL EXPORTS:

Basil -	0.2 MT (1988)
Culantro -	23 MT (1988)
Oregano -	1.5 MT (1988)
Parsley -	11 MT (1988)
Rosemary -	1.3 MT (1988)
Thyme -	0.1 MT (1988)

STATUS FOR ENTRY TO THE U.S.: Dried herbs require no import permit. Currently, only thyme is allowed entry from Guatemala in fresh form as well.\*  
Pesticide regulations are available from the Food and Drug Administration.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX											

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COMMENTS: Commercial production of herbs for export is relatively recent but is expected to expand.

\* Sorrell is also on the admissibles list from Guatemala in fresh form. A request has been made to APHIS to expand the list to include about twenty herbs for entry in fresh form. APHIS/Guatemala or the PROEXAG Project could inform on the progress of this change (see Appendix IV).

SOURCE:

Exportation - Ministry of Agriculture Statistics, Quarantine

LEEK/PUERRO (Allium porrum)

VARIETIES: American Flag  
FORM OF EXPORT: Fresh  
TOTAL NATIONAL PRODUCTION: Data not available  
TOTAL NATIONAL EXPORTS: 96 MT (1988)  
59 MT (1-5/89)  
STATUS FOR ENTRY TO THE U.S.: Not available  
HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX											

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COMMENTS: Most of this export is to the U.S. by air. Currently only Agroverde, S.A. is exporting in quantity.

SOURCE:  
Exportation - Ministry of Agriculture Statistics, Quarantine

LETTUCE/LECHUGA (Lactuca sativa)

VARIETIES: Salinas, Great Lakes, Calmar

FORM OF EXPORT: Fresh

TOTAL NATIONAL PRODUCTION: 372 MT (1987)

TOTAL NATIONAL EXPORTS: 7,741 MT (1988)  
1,152 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: Import permit required, no other restrictions. Pesticide regulations are available from the Food and Drug Administration.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX											

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COMMENTS: The company using most advanced technology for lettuce production is La Meseta (Highlands brand). This technology was adopted from California and has resulted in very high quality. Production area has been expanded by providing transplants and extensive technical assistance to farms near the original La Meseta farm.

SOURCE:

Exportation - Ministry of Agriculture Statistics, Quarantine

MACADAMIA NUTS/NUEZ DE MACADAMIA (Macadamia spp.)

VARIETIES: Tretaphylla, Integrifolia, Ternifolia  
FORM OF EXPORT: Shelled  
TOTAL NATIONAL PRODUCTION: 140 MT (1987)  
TOTAL NATIONAL EXPORTS: 119 MT (1988)  
STATUS FOR ENTRY TO THE U.S.: No import permit is required for shelled nuts.  
HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
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COMMENTS: The months of peak harvest are similar to Hawaii's. Most of the production/export from Guatemala is handled by Hawaiians.

SOURCE:  
Production - Ministry of Agriculture Statistics, USPADA  
Exportation - Ministry of Agriculture Statistics, Quarantine

MANGO MANGO (Mangifera indica)

VARIETIES: Tommy Atkins, Zill, Kent, Keitt, Hayden, Irwin

FORM OF EXPORT: Fresh, pulp, preserve

TOTAL NATIONAL PRODUCTION: 4,000 MT (1989)

TOTAL NATIONAL EXPORTS: Fresh - 635 MT (1988)  
171 MT (1-5/89)  
Pulp - 80.5 MT (1988)  
Preserved - 9 MT (1988)

STATUS FOR ENTRY TO THE U.S.: Import permit required. For restrictions contact APHIS/ Guatemala. Pesticide regulations are available from the Food and Drug Administration.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	XX	XX	XX	XX	XX						

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COMMENTS: Currently fresh mango is restricted because it is host to the Mediterranean fruit fly and Anastrepha fruit fly species. A treatment is necessary to eliminate the potential fruit fly larvae. Previously, ethylene dibromide (EDB) was the most popular treatment. This treatment has not been permitted since September, 1986. However, research on an alternative treatment, hot water dip, is completed and is under review by the Agricultural Research Service of USDA. Shipments of fresh fruit should be reinitiated by the 1991 season, if not sooner. The Commission of Mango Producers and Exporters in the Nontraditional Export Guild could advise on progress and supplies (see Appendix V). Production is increasing 25% annually, since a number of plantations were started in the past few years.

SOURCE:

Exportation - Ministry of Agriculture Statistics, Quarantine  
Production - Nontraditional Export Guild

MEDICINAL PLANTS AND HERB TEAS/PLANTAS MEDICINALES Y TE DE HERBAS

VARIETIES: See attached

FORM OF EXPORT: Fresh, dried

TOTAL NATIONAL PRODUCTION: Data not available

TOTAL NATIONAL EXPORTS: See attached

STATUS FOR ENTRY TO THE U.S.: Import permit required, check with APHIS in Guatemala for information on individual plants. Most herbs and other plants can enter the U.S. if free of soil and dried, once they have been added to the country's admissibles list. Presently very few of these plants are admitted fresh, but many would be dried and therefore not regulated by USDA.

The Food and Drug Administration has rigid standards for any product claiming to have medicinal properties since these are classified not as foods but drugs. These plants are included in the medicinal plant section because many are bought with this use or perception in mind. Such products essentially cannot enter the U.S. with any claims of these properties on labels or documentation, however. For more information on this issue, contact the Latin America Desk Officer for FDA (see Appendix IV).

HARVEST SEASON:

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX											

COMMENTS: Plants in this category often grow wild. Guatemala has a particularly rich tradition of using plants for medicinal purposes. There are innumerable plants available which are not listed here. Many people continue using these plants in Guatemala today.

This is not an organized or developed industry in Guatemala, but would have great potential in terms of diversity and availability. As seen in the following table, most exports are only at the level of samples or special requests. Export statistics are listed under the Spanish common name. Every attempt was made to accurately match these to scientific and English common names.

Contact the Nontraditional Export Guild (see Appendix V) for guidance, which has been contracted for a major study on the plants being used and collected for medicinal purposes. The Guild is starting a project to promote medicinal plant industrialization.

**SOURCE:**

Exportation - Ministry of Agriculture Statistics, Quarantine

MEDICINAL PLANTS AND HERB TEAS/PLANTAS MEDICINALES Y TE DE HIERBAS

Common Name			1988 Exports	
English	Spanish	Scientific Name	Qty. (kg.)	Value (Q)*
Aloe vera	Sabila	<u>Aloe vera</u>	16,000	--
Ambrosia	Apasote	<u>Chenopodium spp.</u> [family with lamb's quarters & wormseed]	--	--
Boldo	Boldo	<u>Boldea fragans</u> or <u>Peumus boldus</u>	10	25
Chamomile	Manzanilla	<u>Matricaria chamomilla</u> or <u>Anthemis nobilis</u>	24	40
Fenugreek or Foenugreek	Fenogreco	<u>Trigonella foenumgraecum</u>	20	40
Hibiscus or Rosselle**	Rosa de Jamaica	<u>Hibiscus sabdaritta</u> (1-5/89)	1,413 24,000	62,965 29,000
Lavender	Alhucema	<u>Lavandula officinalis</u>	1	3
Lemon grass	Té de Lemon or Zacate de Lemon	<u>Cymbopogon spp.</u>	52,628	3,556
Mallow	Malva	<u>Malva sylvestris</u>	20	10
Marigold or Mace***	Pericon	<u>Tajetes lucida</u>	7	12
Mistletoe	Muérdago	<u>Viscum album</u>	30	50
Quinine	Quina	<u>Cinchona calisaya</u>	3,000	2,550
Rhubarb	Ruibarbo	<u>Rheum palmatum</u>	1	--
Valerian	Valeriana	<u>Valeriana officinalis</u>	2	6
Verbena	Berbena	<u>Lippia citriodora</u>	10	25
Wormwood	Ajenjo	<u>Artemisia absinthium</u> (1-5/89)	230 363	300 90

\* The exchange rate of quetzales (Q) to U.S. dollars averaged Q2.70/\$1 in 1988.

\*\* Already appears on APHIS admissibles list. Main ingredient for Celestial Seasonings' Red Zinger Tea.

\*\*\* Tajetes is the marigold family. Mace is not to be confused with the spice, mace, from nutmeg.

OKRA/OKRA (Abelmoschus esculentus)

VARIETIES: Clemson Spineless, Emerald

FORM OF EXPORT: Fresh, frozen

TOTAL NATIONAL PRODUCTION: 4,111 MT (1987)

TOTAL NATIONAL EXPORTS: 4,193 MT (1988)  
1,527 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: Import permit required, no other APHIS restriction.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX											

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COMMENTS: Airshipped if fresh. Window market runs November through February. Production has increased since 1987, but official figures were not available.

SOURCE:

Production - Ministry of Agriculture Statistics, USPADA

Exportation - Ministry of Agriculture Statistics, USPADA

ONION/CEBOLLA (Allium cepa)

VARIETIES: Chata Mexicana, Cristal Wax, Yellow Granex, White Bermuda

FORM OF EXPORT: Fresh, dried

TOTAL NATIONAL PRODUCTION: 31,442 MT (1987)

TOTAL NATIONAL EXPORTS: 6,129 MT (1988)  
1,476 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: Import permit required, no other restriction.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	XX	XX	XX	XX				XX	XX	XX	XX

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COMMENTS: Most exports are to Central America. Exports to the U.S. are almost entirely green onions. The principal exporter is Agroverde, S.A.

Fresh onions have established USDA grades.

SOURCE:

Exportation - Ministry of Agriculture Statistics, Quarantine

ORNAMENTAL PLANTS/PLANTAS ORNAMENTALES

VARIETIES: See attached

FORM OF EXPORT: Stakes or whole plants without soil, depending on kind of plant

TOTAL NATIONAL PRODUCTION: Data not available

TOTAL NATIONAL EXPORTS: 20,032 MT (1988)  
4,433 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: Import permit required, for regulations contact APHIS. Regulations are more lenient if soil is absent.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX											

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COMMENTS: Most exports are to the U.S. and Europe by air. Some exports are to Central America and Mexico.

SOURCE:  
Exportation - Ministry of Agriculture Statistics, Quarantine

ORNAMENTAL PLANTS/PLANTAS ORNAMENTALES

Name	1988 Exports	
	Qty. (MT)	Value (Q)
Aphelandia	25	94,069
Aralia	23	19,634
Arum (Pothos)	1,500	372,511
Beacarnia	179	72,841
Bromeliads	354	202,728
Calamondin	6	131,282
Croton	242	54,403
Dracaena	2,190	1,144,537
Equisetum arvense (Pony Tail)	275	54,000
Ficus	510	234,158
Fitonia	3	15,641
Hedera	3	38,686
Maranta	205	405,964
Marginnata	155	41,604
Peperomia	128	112,332
Philodendrum	364	152,758
Sanseveria	54	70,264
Schefflera	32	43,824
Syngonium	4	906,024
Tillandsias	288	1,079,830
Yucca elephantipes	10,864	3,204,251
Total for plants listed:	17,404	8,451,341

SOURCE:

Exportation - Ministry of Agriculture Statistics, Quarantine

PACAYA (Chamacrodea humilis)

VARIETIES: Native

FORM OF EXPORT: Fresh, preserved

TOTAL NATIONAL PRODUCTION: Data not available

TOTAL NATIONAL EXPORTS: 95 MT (1988)  
8 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: Currently, pacaya cannot enter the U.S. in fresh form. Inquiries on the possibility of changing this status should be made by a U.S. import firm and addressed to the import permit office of APHIS (see Appendix IV).

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX	XX	XX							XX	XX	XX

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COMMENTS: Pacaya grows wild in Guatemala. It is an edible palm known throughout the region. The product is being promoted as an export in the preserved form. The main production areas are the departments of Sacatepequez and Alta Verapaz.

SOURCE:

Exportation - Ministry of Agriculture Statistics, Quarantine

PAPAYA/PAPAYA (Carica papaya)

VARIETIES: Native and hybrid

FORM OF EXPORT: Pulp, frozen, dried

TOTAL NATIONAL PRODUCTION: Data not available

TOTAL NATIONAL EXPORTS: Fresh - 3 MT (1988)  
2 MT (1-5/89)  
Dried - 11 MT (1988)

STATUS FOR ENTRY TO THE U.S.: Fresh papaya is currently not allowed entry to the U.S. Fruit fly treatments are being developed to facilitate reentry.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX	XX	XX	XX	XX	XX		XX	XX	XX	XX	XX

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COMMENTS: In 1988, all exports were to Central America. In 1989, a small quantity went to the U.S. market.

SOURCE:

Exportation - Ministry of Agriculture Statistics, Quarantine

PEPPER (HOT)/CHILE (Capsicum spp.)

VARIETIES: Native

FORM OF EXPORT: Fresh, dried

TOTAL NATIONAL PRODUCTION: Data not available

TOTAL NATIONAL EXPORTS: General - Fresh - 9 MT (1-5/89)  
- Dried - 33 MT (1988)  
7 MT (1-5/89)  
Jalapeño - Fresh - 19 MT (1988)  
Canned - 37 MT (1988)

STATUS FOR ENTRY TO THE U.S.: Fresh capsicum peppers are not allowed into the U.S. without treatment due to potential fruit fly infestation. Most peppers would be dried for ethnic markets. Dried peppers would be regulated by FDA.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX											

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COMMENTS: There are abundant varieties of hot peppers in Guatemala which are currently not exported. Some of the local names include chiltepe (coffee zones), chile chamborote (Petén), Siete Caldos, Diente Perro (Alta Verapaz), and chileguaque. Each area has traditional recipes using different hot peppers. Some recipes call for a number of types together. Each has a distinctive size, shape and color and varying degrees of spiciness.

SOURCE:  
Exportation - Ministry of Agriculture Statistics, Quarantine

PINEAPPLE/PINA (Ananas comosus)

VARIETIES: Smooth Cayena, Montufar, Red Spanish

FORM OF EXPORT: Fresh

TOTAL NATIONAL PRODUCTION: 2,111 MT (1987)

TOTAL NATIONAL EXPORTS: Fresh - 406 MT (1988)  
Canned - 30 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: Import permit required. Cannot enter Hawaii.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
		XX	XX	XX	XX	XX			XX	XX	

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COMMENTS: Most exports are to Central America. Exports to the U.S. are by air. Production is concentrated on the Coastal Plain.

SOURCE:

Exportation - Ministry of Agriculture Statistics, Quarantine

PLANTAIN/PLATANO (Musa spp.)

VARIETIES: Native, Enano, Cayuga

FORM OF EXPORT: Fresh, dried

TOTAL NATIONAL PRODUCTION: 4,082 MT (1987)

TOTAL NATIONAL EXPORTS: Fresh - 5,225 MT (1988)  
Dried - 61 MT (1988)  
Fresh - 1,397 MT (May 1989)  
Dried - 9 MT (May 1989)

STATUS FOR ENTRY TO THE U.S.: Import permit required, no other APHIS restriction.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX											

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COMMENTS: The production area is in the Coastal Plain. Export to the U.S. is by both air and maritime. Plantain is also being exported to Europe and the U.S. as a dried fruit.

SOURCE:

Production - Ministry of Agriculture Statistics, USPADA  
Exportation - Ministry of Agriculture Statistics, Quarantine

SNOW PEA ARVEJA CHINA (Pisum sativum)

VARIETIES: Oregon, Mettin Sugar, Mammoth  
FORM OF EXPORT: Fresh, frozen  
TOTAL NATIONAL PRODUCTION: 6,365 MT (1987)  
TOTAL NATIONAL EXPORTS: 9,000 MT (1988)  
4,133 MT (May-1989)  
STATUS FOR ENTRY TO THE U.S.: Import permit required, no other requirements.  
HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX											

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COMMENTS: Production occurs in the West and Central Highlands (Chimaltenango, Sacatepequez, and San José Pinula). Export is almost entirely to the U.S. The estimated production cost is \$3,000/ha. Magdalena and Cuatro Pinos Cooperative are important suppliers. This has been a popular crop for small-scale farmers due to the labor requirements. In 1989 snow peas were detained for unacceptable pesticide residues by FDA. Pesticide use had increased due to an exotic pest problem. The snow pea growers/exporters have responded through their Commission in the Nontraditional Export Guild with research and training to avoid these problems. Guatemalan frozen snow peas are purchased by such companies as La Choy.

SOURCE:  
Production - Ministry of Agriculture Statistics, USPADA  
Exportation - Ministry of Agriculture Statistics, Quarantine

SPICES ESPECIAS

VARIETIES: Ginger/Jengibre (Zingiber officinalis),  
Allspice/Pimienta Gorda (Piper arietinum),  
Annato/Achiote (Bixa orellana)

FORM OF EXPORT: Dried, candied, paste

TOTAL NATIONAL PRODUCTION: Data not available

TOTAL NATIONAL EXPORTS: Ginger - 63 MT (1988)  
Allspice - 373 MT (1988)  
Annato - 306 MT (1988)

STATUS FOR ENTRY TO THE U.S.: Dried spices, seeds and herbs have no USDA restrictions and do not require an import permit. Ginger root does require an import permit and is on the admissibles list for Guatemala.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX											

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COMMENTS: The production cost for annato is \$590/ha. (Costs for ginger and allspice are not available.) Annato is exported as a paste and seed to the U.S. and Central America. Principal production occurs on the Coastal Plain. Allspice is produced in the departments of Peten and Coban. Almost 85% of the allspice exports are to the U.S., with the rest going to Europe.

SOURCE:

Exportation - Ministry of Agriculture Statistics, Quarantine  
Costs - BANDESA

SQUASH AYOTE (Cucurbitacea spp.)

VARIETIES: Green Zucchini, Yellow Zucchini, Patty Pan, Patty Green

FORM OF EXPORT: Fresh, as baby squash only

TOTAL NATIONAL PRODUCTION: 472 MT

TOTAL NATIONAL EXPORTS: 472 MT

STATUS FOR ENTRY TO THE U.S.: Import permit required. No other APHIS requirements. Commercial shipments only.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX											

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SOURCE:

Production and exports - Industry representatives

STRAWBERRY/FRESA (Fragaria spp.)

VARIETIES: Selva, Tiyoga, Chandler, Pajaro, Sequoia

FORM OF EXPORT: Fresh, processed, or frozen

TOTAL NATIONAL PRODUCTION: 12,600 MT (1989)

TOTAL NATIONAL EXPORTS: 5,500 MT (1988)  
Jelly - 35 MT (1988)  
Jelly - 47 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: Import permit required, no other restrictions.  
California State Department of Agriculture has recently changed state restrictions and should be consulted before entering their ports.  
Pesticide regulations are available from the Food and Drug Administration.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX	XX	XX	XX	XX	XX				XX	XX	XX

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COMMENTS: Strawberry is cultivated with high technology by Chestnut Hill and the Rincon Grande Cooperative. All major strawberry exporters work closely together, and would recommend each other in terms of pesticide practices and reputations. Anyone outside this existing network should be suspect until proven otherwise. The production costs average \$8,840/ha. Export usually is in fresh form and sometimes as a jelly to the U.S. and Central America. Shipments have been by air, but with controlled atmosphere packing recent shipments by sea have proven commercially viable.

SOURCE:  
Production - CLUSA  
Exportation - Ministry of Agriculture Statistics, Quarantine  
Costs - BANDESA

SUGAR SNAP PEAS/ARVEJA DULCE (Pisum sativum)

VARIETIES: Sugar Snap, Sugar Mel, Sugar Bon, Sugar Daddy, Super Sugar, Mel

FORM OF EXPORT: Fresh, frozen

TOTAL NATIONAL PRODUCTION: 13,563 MT

TOTAL NATIONAL EXPORTS: Fresh - 354 MT  
Frozen - 11,794 MT

STATUS FOR ENTRY TO THE U.S.: Not available

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX											

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COMMENTS: Guatemala has quickly moved in to this market with a quality supply. Major suppliers include Cuatro Pinos Cooperative

SOURCE:  
Industry representatives

TOMATO/TOMATE (Lycopersicon esculentum)

VARIETIES: Napoli, Roma, Roforto, Manzana, Gamud, UC82

FORM OF EXPORT: Fresh, paste and sauce

TOTAL NATIONAL PRODUCTION: 102,507 MT (1987)

TOTAL NATIONAL EXPORTS: 47,229 MT (1988)  
3,018 MT (1-5/89)  
Paste - 135 MT (1988)  
Paste - 156 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: Import permit required. Enterable through North Atlantic and North Pacific Ports only. If processed, it would be regulated by the Food and Drug Administration. Tomatoes may also enter the U.S. market when the fruit is mature green, prior to the time a fruit fly would infest it. Contact APHIS/Guatemala for details.

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX											

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COMMENTS: Tomatoes must meet minimum grade requirements to enter the U.S.

Tomato is grown in dry zones (Zacapa, Progreso, etc.) under irrigation. Production cost is an estimated \$990/ha. Exports have been going to Central America, Europe, and the U.S.

SOURCE:

Production - Ministry of Agriculture Statistics, USPADA  
Exportation - Ministry of Agriculture Statistics, Quarantine  
Costs - Bank of Guatemala

## TROPICAL FRUITS/FRUTAS TROPICALES

### VARIETIES:

Chico/Chico (Achras zapota),  
Loquat or Japanese Medlar/Nispero  
(Eriobotrya japonica L.),  
Mamey/Mamey (Mammea americana),  
Mombin (Red)/Jocote de Corona (Spondias  
purpurea),  
Nance (Byrsonima crassifolia),  
Passion Fruit/Granadilla (Passiflora spp.),  
Pitahaya or Pitaya (Hylocereus spp.),  
Sapodilla or Zapote (Calocarpum zapota),  
Tamarind/Tamarindo (Tamarindus indica)

**STATUS FOR ENTRY TO THE U.S.:** Currently most tropical fruits are restricted because they are hosts to the Mediterranean fruit fly and Anastrepha fruit fly species. A treatment is necessary to eliminate the potential fruit fly larvae. Research on potential treatments, such as forced hot air, is being conducted by the Agricultural Research Service of USDA. Shipments of fresh fruit could be initiated by the 1992 season. In the meantime, these fruits may enter the U.S., under FDA surveillance, as a puree, or in frozen form, canned or otherwise processed. For an update on the status of individual fruit varieties, contact APHIS/Guatemala. Pesticide regulations are available from the Food and Drug Administration.

TROPICAL FRUITS/FRUTAS TROPICALES

CHICO/CHICO (Achras zapota)

VARIETIES: Native  
FORM OF EXPORT: Fresh  
TOTAL NATIONAL PRODUCTION: Data not available  
TOTAL NATIONAL EXPORTS: 2 MT (1988)  
2 MT (1-5/89)  
STATUS FOR ENTRY TO THE U.S.: See Tropical Fruits  
HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
									XX	XX	XX

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COMMENTS: This plant grows wild in the Chiquinula and Progreso-Guastatoya areas. Exportation is exclusively to Central America.

SOURCE:  
Exportation - Ministry of Agriculture Statistics, Quarantine

TROPICAL FRUITS FRUTAS TROPICALES

LOQUAT or JAPANESE MEDLAR, NISPERO (Eriobotrya japonica L.)

VARIETIES: Native  
FORM OF EXPORT: Fresh  
TOTAL NATIONAL PRODUCTION: Data not available  
TOTAL NATIONAL EXPORTS: 10 MT (1988)  
STATUS FOR ENTRY TO THE U.S.: See Tropical Fruits  
HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
							XX	XX	XX		

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COMMENTS: Exportation is exclusively to Central America. This fruit is grown in the eastern part of Guatemala.

SOURCE:  
Exportation - Ministry of Agriculture Statistics, Quarantine

TROPICAL FRUITS FRUTAS TROPICALES

MAMEY MAMEY (Mammea americana)

VARIETIES: Native  
FORM OF EXPORT: Pulp and fresh  
TOTAL NATIONAL PRODUCTION: Data not available  
TOTAL NATIONAL EXPORTS: 96 kg. (1988)  
STATUS FOR ENTRY TO THE U.S.: See Tropical Fruits

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX											

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SOURCE:

Exportation - Ministry of Agriculture Statistics, Quarantine

TROPICAL FRUITS/FRUTAS TROPICALES

MOMBIN (Red)/JOCOTE DE CORONA (Spondias purpurea)

VARIETIES: Native  
FORM OF EXPORT: Frozen  
TOTAL NATIONAL PRODUCTION: Data not available  
TOTAL NATIONAL EXPORTS: 100 MT (1988)  
STATUS FOR ENTRY TO THE U.S.: See Tropical Fruits

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
							XX	XX	XX		

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COMMENTS: The production zone is in the Central Highlands (Guatemala department).

SOURCE:

Exportation - Ministry of Agriculture Statistics, Quarantine

TROPICAL FRUITS/FRUTAS TROPICALES

NANCE (Byrsonima crassifolia)

VARIETIES: Native

FORM OF EXPORT: Frozen, preserved

TOTAL NATIONAL PRODUCTION: Data not available

TOTAL NATIONAL EXPORTS: 127 MT (1988)  
37 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: See Tropical Fruits

HARVEST SEASON:

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JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	XX	XX	XX	XX	XX						

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COMMENTS: Exportation is exclusively to the U.S. by air. The production zone is the Coastal Plain and Progreso-Guastatoya department. This crop grows wild.

SOURCE:

Exportation - Ministry of Agriculture Statistics, Quarantine

TROPICAL FRUITS/FRUTAS TROPICALES

PASSION FRUIT/GRANADILLA (Passiflora spp.)

VARIETIES: Native  
FORM OF EXPORT: Fresh  
TOTAL NATIONAL PRODUCTION: 105 MT (1-5/89)  
TOTAL NATIONAL EXPORTS: 742 MT (1988)  
STATUS FOR ENTRY TO THE U.S.: See Tropical Fruits  
HARVEST SEASON:

---

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX	XX									XX	XX

---

COMMENTS: Exportation is exclusively to Central America. This plant grows wild. In higher elevations P. ligularis is grown for its purple to reddish fruit. In the lowlands, P. edulis, a yellow passion fruit often called "maracuya," is grown for juices or puree.

SOURCE:  
Exportation - Ministry of Agriculture Statistics, Quarantine

TROPICAL FRUITS/FRUTAS TROPICALES

PITAHAYA or PITAYA (Hylocereus spp.)

VARIETIES: Native  
FORM OF EXPORT: Fresh  
TOTAL NATIONAL PRODUCTION: Data not available  
TOTAL NATIONAL EXPORTS: 25 MT (1988)  
STATUS FOR ENTRY TO THE U.S.: See Tropical Fruits  
HARVEST SEASON:

---

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
				XX	XX	XX	XX				

---

COMMENTS: Currently most exports are to Central America and Europe. Production occurs in the Central Highlands. The plant grows wild. The most common variety of pitaya in Guatemala has a fuchsia-colored pulp and small seeds.

SOURCE:  
Exportation - Ministry of Agriculture Statistics, Quarantine

TROPICAL FRUITS/FRUTAS TROPICALES  
SAPODILLA OR ZAPOTE (Calocapum zapota)

VARIETIES: Native

FORM OF EXPORT: Fresh, pulp

TOTAL NATIONAL PRODUCTION: Data not available

TOTAL NATIONAL EXPORTS: 125.0 MT (1988)  
 Frozen pulp - 0.1 MT

STATUS FOR ENTRY TO THE U.S.: Import permit required, check with  
 APHIS/Guatemala.

HARVEST SEASON:

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
XX								XX		XX	XX

COMMENTS: Sapodilla is exported in fresh and pulp form to the U.S. and Central American markets. There are some improved varieties, however, variety trials should be carried out before serious industrialization of the crop could occur.

SOURCE:  
 Exportation - Ministry of Agriculture Statistics, Quarantine

TROPICAL FRUITS/FRUTAS TROPICALES

TAMARIND/TAMARINDO (Tamarindus indica)

VARIETIES: Native

FORM OF EXPORT: Fresh

TOTAL NATIONAL PRODUCTION: Data not available

TOTAL NATIONAL EXPORTS: 70 MT (1988)  
13 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: The tamarind bean pod can enter the U.S. without an import permit.

HARVEST SEASON:

---

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	XX	XX	XX	XX	XX						

---

COMMENTS: Tamarind grows wild. Production costs and national production data are not available. The production zone is the drier area of the Coastal Plain and Chiquimula department.

SOURCE:  
Exportation - Ministry of Agriculture Statistics, Quarantine

WATERMELON SANDIA (Citrullus vulgaris)

VARIETIES: Jubilee, Crimson Sweet, Sugar Baby, Charleston Gray, Mickey Lee

FORM OF EXPORT: Fresh

TOTAL NATIONAL PRODUCTION: 47,331 MT (1987)

TOTAL NATIONAL EXPORTS: 1,448 MT (1988)  
1,129 MT (1-5/89)

STATUS FOR ENTRY TO THE U.S.: Import permit required, commercial shipment only.

HARVEST SEASON:

---

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	XX										

---

COMMENTS: Production is under irrigation. Exports are to Europe, U.S. and Central America. Estimated production costs are \$765/ha. The main zone of production is the southeastern part of Guatemala.

SOURCE:

Production - Ministry of Agriculture Statistics, USPADA

Exportation - Ministry of Agriculture Statistics, Quarantine

Costs - BANDESA

**IV. RELATIVE COMPETITIVENESS OF GUATEMALAN NONTRADITIONAL  
AGRICULTURAL PRODUCTS IN THE U.S. MARKET**

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#### IV. RELATIVE COMPETITIVENESS OF GUATEMALAN NONTRADITIONAL AGRICULTURAL PRODUCTS IN THE U.S. MARKET

The bottom line of any import-export venture is whether the product can compete economically in the U.S. market. Guatemala has the advantages of relatively low production costs, competitive freight rates, and a close proximity to the market, as well as a wide diversity in climates within the country and seasonal weather patterns that allow the harvest of many crops during those months in which U.S. domestic production has dropped off.

It is unusual to produce cool weather "temperate" crops such as Brassica and berries so close to production of tropical crops including bananas, pineapples and mangoes. As pointed out in this guide, the diversity of as-yet-unexploited exports -- exemplified by hot peppers, herbs for teas and tropical fruits -- cannot be matched by many countries within the preferred Caribbean Basin region.

The principal competition for Guatemala would, therefore, be Mexico. Mexico's exports to the U.S. far overshadow the total exports from all CBI countries combined. Most crops produced in Guatemala can also be produced in Mexico and be delivered by land at lower cost.

Guatemala has had high transport rates due to the Conference system for maritime shipping and controls set to protect recently privatized AVIATECA air service. An interesting alternative is the overland route through Mexico which has been reopened the past two or three years after encouragement from the PROEXAG Project described earlier. The private sector is also organizing to negotiate lower ocean freight rates. Any changes in air rates rely more on the Guatemalan Government, however, and are not anticipated to be forthcoming.

The majority of shipments by sea arrive at Miami or other Florida ports or New Orleans. Sea-Land, CCT and Sea Board have provided steady service for a number of years. Juno has been added more recently. Tropical Shipping is reportedly considering adding service. Other shipping lines provide infrequent or intermittent service. Guatemalan exporters will be able to provide the latest information on available service and rates. See Table 5 for ocean freight rates at the time of writing.

Air transportation is more problematic from Guatemala. Foreign airlines give preference to their country's exporters so that flights of airlines such as LACSA often arrive already full and one such as MEXICANA can actually remove Guatemalan freight in Mexico to board Mexican freight. Eastern and Pan American airlines do not follow this practice but are limited in space as well due to their passenger service. AVIATECA, formerly the Guatemalan airline, is equally given preferential treatment due to air transport policies. Cargo service has increased the past five years, however. Table 6 lists the now controlled rates from 1989.

Transport to Europe is relatively good for the region. Both KLM and Iberia have regular flights and a consortium of ocean liners provides service every 10 to 14 days for a 16 to 22 day transit time. There are also monthly refrigerated shipments to Japan with Ned Lloyd.

TABLE 5. RATES FOR OCEAN FREIGHT OF NONTRADITIONAL AGRICULTURAL PRODUCTS FROM PORT SANTO TOMAS, GUATEMALA, TO MIAMI OR OTHER FLORIDA OR GULF PORTS

Company*	Product	Freight (lbs.)		Rate (FOB)	Additional Costs		
		Minimum	Maximum				
CCI, Sea-Land, Sea Board Marine	frozen vegetables	-	44,000	\$1,815/trailer (marine freight)	Operational charge Handling/dockage Demurrage ? Bunker (min) Security (min)	\$54.45 \$410 \$110 \$70 \$50	(3% of marine freight)   (\$4.50/2,000 lbs.) (\$4.00/2,000 lbs.)
	snow peas (refrigerated)	24,000	44,000	\$132/2,000 lbs.	-		
	cantaloupe	740 boxes	-	\$3.05/box (\$2,257 for 740 boxes marine freight)	Operational charge Handling/dockage Bunker Security (min)	\$67.71 ** \$51.80 \$50	(3% of marine freight)  (\$0.0+/box) (\$4.00/2,000 lbs.)
	honey dew or maya sweet	980 boxes (40 lb. box)	-	\$1.96/box	Internal handling: from Escuintla from Retalhuleu from Zacapa	Q0.68/box Q0.91/box Q0.34/box	

\*These rates were provided by CCI as the Conference rates. Other, non-Conference shipping lines are serving Guatemala but not yet on a regular or frequent basis.

\*\*At Port Santo Tomás, Q0.60/box. Internal freight cost is Q0.99/box from Escuintla, Q1.32/box from Retalhuleu, and Q0.50/box from Zacapa.

Note: Prices are subject to change without notice. Current exchange rate is Q2.80/\$1.00 (September, 1989).

TABLE 6. STANDARDIZED RATES FOR INTERNATIONAL AIR FREIGHT OF NONTRADITIONAL AGRICULTURAL PRODUCTS FROM GUATEMALA, JULY 1989 (U.S. \$)

Destination	Product	Cost per Pound* (U.S. \$)	Minimum Cargo (kg.)
Miami	all	0.23	--
Los Angeles	fruits and vegetables	0.66	300
	flowers and foliage	1.08	500
	spices	0.55	1,000
Houston**	all	0.43	1,000
New Orleans	all	0.43	1,000

\*The following have to be added to the total:

Taxes	- Sales (IVA)	7%
	- Services (timbres)	3%
Handling		\$2.25
Guide		\$5.00

\*\*Aerovias carries cargo to Houston via Miami for \$0.45/lb. with 100 lb. minimum. Above figures are for Continental or Aviateca.

Note: Prices subject to change without notice.

In 1985, the survey which served as the basis for the first edition of this guide revealed that high production costs were a constraint to export. This was mainly due to the cost of agrochemicals, replacement parts for machinery, and fuel, all of which are imported. Since that time, inflation has been checked considerably and imported goods have become more accessible.

Packaging materials continue to be costly. It is often more economical for the U.S. importer to supply packaging than to purchase it locally. This, however, seems to be true for much of the region. Low wages make it advantageous to process and/or package a product to the greatest degree possible prior to shipment.

The factors presented here and other issues affecting exports are discussed in the following section on opportunities and constraints.

The information summarized in Table 7 provides an overall view of the competitiveness of Guatemalan agricultural products. Price variability for the featured products is presented in Table 8 for Guatemala. This may be related to the U.S. market trends by comparing it with New York wholesale prices in Table 9. The difference between FOB prices plus transport costs would give a theoretical U.S. price at the port of entry (see Table 7). An analysis of the current U.S. market is still needed, however, to complete the picture. This will have to be carried out by each company before investments are made. Some of the cost factors might also need updating once a specific product has been identified for importation.

TABLE 7. COMPETITIVENESS OF GUATEMALAN NONTRADITIONAL AGRICULTURAL EXPORTS TO THE U.S. MARKET (U.S. \$ PER METRIC TON)

Commodity <sup>1</sup>	Price (FOB) <sup>2</sup>	Ocean Freight <sup>3</sup>	Estimated CIF <sup>4</sup>	N.Y. Wholesale Prices <sup>5</sup>
Annato Seed	1,298	154	1,452	--
Asparagus	942	507 <sup>a</sup>	1,449	2,500
Broccoli	662	145	807	900
Baby Vegetables	997	145	1,442	--
Brussels Sprouts	310	145	455	1,190
Cantaloupe	125	336	461	940
Cashew Nuts	4,265	130	4,395	6,000
Cauliflower	251	145	396	970
Garlic	340	145	485	2,205
Lettuce	782	145	927	450
Macadamia Nuts	11,000	129	11,129	9,000
Mango	298	188	486	1,650
Okra	330	145	475	1,760
Onion	162	145	307	485
Plantain	156	145	301	--
Roses	4,960	507 <sup>a</sup>	5,467	--
Shade Leaf	870	185	1,055	--
Snow Pea	1,436	145	1,581	--
Strawberry	877	507 <sup>a</sup>	1,384	2,750
Tomato	220	145	365	1,200
Watermelon	388	336	724	440

Only commodities with sufficient trade data were included in the table.

Prices (FOB) are the average price for each commodity for the period from June, 1988 through May, 1989 as calculated from the monthly publication "Datex of Guatemala." See Table 8 for minimum and maximum prices over the same period.

Ocean freight is based on the Conference rates (CCT, Sea-Land, Sea Board Marine) for types of commodities. For rate structure, see Table 5.

Estimated CIF is the sum of average FOB and freight costs. This is only a theoretical figure for comparison purposes.

See Table 9 for detail. Source USDA/ERS.

This product normally is transported by air. With controlled atmosphere packaging, some maritime shipping has begun.

TABLE 8. PRICE VARIABILITY OF GUATEMALAN NONTRADITIONAL AGRICULTURAL EXPORTS (FOB, U.S. DOLLARS PER METRIC TON)\*

Commodity	Minimum	Annual Price Average	Maximum
Annatto Seed	670 (May)	869	1,298 (June)
Asparagus	840 (January)	942	943 (January)
Baby Vegetables	382 (March)	652	997 (March)
Broccoli	580 (October)	623	662 (August)
Brussels Sprouts	310 (December)	310	310 (November)
Cantaloupe	110 (March)	121	125 (May)
Cashew Nuts	3,688 (August)	3,878	4,265 (January)
Cauliflower	248 (September)	251	255 (November)
Garlic	305 (May)	340	341 (April)
Lettuce	496 (November)	611	782 (August)
Macadamia Nuts	3,846 (June)	8,601	11,000 (May)
Mango	273 (March)	283	298 (March)
Okra	234 (February)	324	330 (May)
Onion	121 (September)	146	162 (January)
Plantain	94 (May)	148	156 (October)
Roses	2,227 (December)	2,161	4,960 (March)
Shade Leaf	626 (December)	726	870 (January)
Snow Pea	922 (September)	970	1,436 (August)
Strawberry	749 (December)	870	877 (December)
Tomato	220 (January)	220	220 (January)
Watermelon	388 (December)	388	388 (May)

\*Prices per metric ton in US\$ FOB Guatemalan Port are from the period of June, 1988 to May, 1989.

SOURCE: Monthly Publication of Datex de Guatemala.

TABLE 9. PRICE VARIABILITY OF NONTRADITIONAL AGRICULTURAL EXPORTS IN THE NEW YORK MARKET (WHOLESALE, U.S. DOLLARS)\*

Commodity	Minimum (per unit)	Average (per unit)	(MT)	Maximum (per unit)	Unit (crates)
Asparagus	18	34	2,500	45	30 lb. pyramid crate
Broccoli	8	9.50	900	13	23 lb.
Brussels Sprouts	10	13.50	1,190	18	25 lb.
Cantaloupe	8	17	940	26	40 lb.
Cashew Nuts (shelled)	--	--	6,000	--	--
Cauliflower	9	11	970	17	25 lb.
Garlic	0.50	1	2,205	1.50	1 lb.
Lettuce (Iceberg)	7	10	450	30	50 lb.
Macadamia Nuts (shelled)	--	--	9,000	--	--
Mango	5	7.50	1,650	10	10 lb. flat
Okra	10	12	1,760	20	15 lb.
Onion	6	11	485	16	50 lb. sack
Peas	10	15	1,100	20	30 lb. bushel
Strawberry	0.80	1.25	2,750	2.25	1 lb. pint
Tomato	8	13.60	1,200	20	25 lb.
Watermelon	10	15	440	30	75 lb.

\*Prices in US\$ are from AMS records covering the N.Y. wholesale market from 1985 to 1987. The unit of sale is described and average prices are also reported on a metric ton basis for comparison with the previous table. Cashew and macadamia nuts are priced from import unit values at port of entry.

SOURCE: Economic Research Service, USDA.

**V. OPPORTUNITIES AND CONSTRAINTS FOR INCREASING  
EXPORTATION OF NONTRADITIONAL CROPS  
FROM GUATEMALA**

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## V. OPPORTUNITIES AND CONSTRAINTS FOR INCREASING EXPORTATION OF NONTRADITIONAL CROPS FROM GUATEMALA

In addition to short-term competitiveness of nontraditional agricultural products, judged primarily in terms of production and transportation costs versus U.S. market prices, it is important to consider the factors which influence these values in the longer term.

Over the past decade, U.S. buyers have become more familiar with the potential of Guatemala's agricultural sector as production and quality of products have consistently improved. Whereas marketing issues were of greatest concern only five years ago, the main constraint at this time may be insufficient production to meet current demand. The best way to ensure success as a buyer, therefore, is to contact growers prior to the season when produce will be needed. Also, the increasing coverage of the Nontraditional Export Guild (see Appendix V) enables that staff to connect buyers and investors to serious exporters and producers of a variety of products.

### Opportunities for Expanding Production

The Agency for International Development (U.S. AID) has financed several loans for agricultural diversification under projects such as Small Farmer Diversification (\$5.5 million in loans), the Highlands Agricultural Development (\$12.0 million in loans), and a current second phase of that project which will extend to 1995. The projects include loans for land terracing and small irrigation units, research, institutional strengthening, and training.

A small irrigation unit consists of a group of people who each own up to 3 hectares of land in the same proximity and join together to form a unit for the construction and operation of a simple irrigation system. The units are termed "small" because each member has a small amount of land that would not be feasible to irrigate separately. The entire unit, however, may reach 100 hectares in size. From 1979 to the present around 100 of such units have been formed across the country, with the exclusion of the Peten and the South Coast which are not included in the program.

The creation of irrigation units and construction of terraces are the primary means for bringing new land into production and lengthening the growing season to permit two harvests per year in most crops.

The status of credit for agricultural diversification also influences the ability of many farmers to shift away from traditional crops to the nontraditional ones which are under high demand in the U.S. market. Projects in this area include a \$50 million loan for small farmer credit to diversify, which will be financed by the Inter-American Development Bank (IDB) through BANDESA. Some farmers stated, however, that although they qualified for credit they hesitated to risk borrowing to produce a new crop which they had never marketed and for which they were not sure of a market.

Appendix III has a breakdown of credit granted by BANDESA for diversification by Region and by crop. This is particularly useful for predicting future production of fruit trees which have been planted but do not yet appear in production statistics.

## Infrastructure

A constraint in exporting from some regions of the country is the lack of first grade roads, particularly in the North of the Highlands and in the Department of Peten. Because this limitation will not be remedied in the near future, these areas were not covered in the guide. A U.S. AID program to finance construction or improvement of access roads is ongoing, however, and a new highway south of the capital to the major Pacific ports has been completed.

Private companies have improved and increased cooling and freezing facilities. The cold rooms that have been constructed by private companies do not always have the pre-cooling chambers required to maintain a homogeneous temperature in the cold rooms. Far too few cold rooms and pre-cooling chambers exist in Guatemala, however, so that some producers utilize refrigerated containers from the sea lines for temporary storage of their produce in the field before shipping, thus exacerbating the seasonal shortage of refrigerated containers.

The lack of cooling facilities has also intensified the losses from unreliable air transport since highly perishable products arrive at the airport at field temperature and any delays permit deterioration to begin. There is no public cold room near the airport that may be rented for such an emergency.

## Opportunities for the United States Market

Guatemala is continually entering new niche markets in the United States and other countries. An early example was the rapid development of a cardamon industry to supply the world market at the height of the spice's value. In less than 20 years, Guatemala became the number one producer of cardamon in the world, surpassing even India.

More recent examples include snow peas, specialty melons, and roses. The past two years production of baby or mini-vegetables, sugar snap peas, and haricot verts has escalated to meet a sudden rise in demand in the U.S. This adaptability is important for meeting future demands in tropical and exotic products.

A constraint for expanding Guatemalan exports to the U.S. is the lack of cargo transport to the West Coast and Midwest. Entry to the U.S. remains heavily centered on Florida ports. The trend for California to establish more stringent pesticide and quarantine laws than the Federal Government has enacted may also create barriers to expanded trade. These are mentioned in Table 10.

## Opportunities for Alternate Markets

The United States and the Central American Common Market countries (Costa Rica, Nicaragua, Honduras, El Salvador, and, to some extent, Panama) have dominated as destinations for Guatemalan exports. Recently, however, interest has grown in accessing the European and Asian markets. In some cases, shipping to Europe brings a higher price while avoiding some of the plant protection quarantine regulations affecting the United States. For example, many tropical fruits require treatment for entry to the U.S. to prevent the spread of certain fruit fly species. These same fruits can generally enter the European Community without treatment since the threat of fruit

fly introduction is far less severe, given that some species are already established in Europe and that there are no large fruit industries to protect.

Trade with Europe is facilitated by the relatively frequent flights of KLM and Iberia. Shipments to Europe may go by sea every 10 to 14 days for a 16 to 22 day transit time. Refrigerated ocean cargo service is also available on a monthly basis to Japan from Ned Lloyd.

Another interesting market for the country is the Caribbean region which imports a surprising amount of the produce and seafood used for the tourist industry. Trade with South American countries is also expanding. Increasing this "intraregional" trade among Central America and Mexico, the Caribbean, and South America is emphasized in the Organization of American States' latest agricultural plan which is coordinated by the Inter-American Institute for Cooperation in Agriculture (IICA). Some U.S. companies are buying fresh produce from Caribbean Basin countries and selling high value (value-added) items such as canned goods or paper products in return. Associations in the U.S., such as the National American Wholesale Grocers Association (NAWGA) in Falls Church, Virginia, have been assisting their members in accessing these markets for two-way trade.

Some of the factors affecting the increase of exports of nontraditional agricultural products are summarized in Table 10.

TABLE 10. OPPORTUNITIES AND CONSTRAINTS FOR INCREASING EXPORTATION OF NONTRADITIONAL CROPS FROM GUATEMALA

Constraint	Commodities Affected	Opportunities
1. Demand for quality products has recently surpassed production in the most accessible areas.	Changes year by year but tends to be products such as broccoli, peas, Brussels sprouts, etc. which are in demand by buyers for both freezing and fresh export.	<p>Current:</p> <ul style="list-style-type: none"> <li>- One company is expanding its freezing facilities to a new plant near Quezaltenango. This should encourage increased production in that area, which would surpass demand at one plant.</li> </ul> <p>Future:</p> <ul style="list-style-type: none"> <li>- As the market has been established, more companies are expanding production and cooperatives are becoming more sophisticated in providing quality products to the international market.</li> </ul>
2. Phytosanitary restrictions and regulations of U.S. federal and state governments make it difficult to enter some products, particularly if exported fresh and not processed	Primarily tropical fruits, tomatoes, strawberries, and other berries. All products are affected to some degree, since "hitchhiking" pests are more commonly intercepted than pests specific to the crop in question.	<p>Current:</p> <ul style="list-style-type: none"> <li>- Research and the cooperation of well-organized industry groups have taken Guatemala to the final stage of the approval process for a fruit fly control treatment for mangoes that will enter the U.S. fresh. Similar work on other restricted tropical fruits will be easier after this initial experience.</li> <li>- The private sector has begun to work closely with their Ministry of Agriculture on phytosanitary issues.</li> <li>- Increased freezing and pulping facilities in the country are allowing buyers to obtain these fruits in processed form and, therefore, avoid fruit fly or other pest control concerns.</li> </ul> <p>Future:</p> <ul style="list-style-type: none"> <li>- Trials with tomato varieties resistant to fruit fly infestation are being organized.</li> </ul>

TABLE 10. OPPORTUNITIES AND CONSTRAINTS FOR INCREASING EXPORTATION OF NONTRADITIONAL CROPS FROM GUATEMALA (Continued)

Constraint	Commodities Affected	Opportunities
3. Changes in pesticide registrations have limited the number of products useful for pest control in nontraditional crops and have contributed to occasional violations.	Snow peas, chayote, any new "exotic" crops which are produced in relatively small volumes.	<ul style="list-style-type: none"> <li>- Recent changes in California state regulations which could inhibit export of berries to the West Coast will be challenged through research and in industry forums in the U.S. This effort has already begun.</li> <li>- A five-year AID project will be training and strengthening the quarantine and inspection divisions of the Guatemalan Ministry of Agriculture.</li> </ul> <p>Current:</p> <ul style="list-style-type: none"> <li>- Snow pea growers have worked through their highly organized industry commission to learn of alternative control measures for common pests and to disseminate information on FDA-approved pesticides.</li> <li>- The AID Regional Office (ROCAP) through the PROEXAG Project has provided crop-specific guidelines on FDA regulations.</li> <li>- Chayote has been reclassified so that products registered for use on other squashes may be used on it.</li> </ul> <p>Future:</p> <ul style="list-style-type: none"> <li>- The ROCAP/PROEXAG Project is studying programs such as IR-4, to alleviate the situation of pesticides for minor crops.</li> <li>- A ROCAP environmental project will be strengthening the Guatemalan pesticide registration and control divisions in the Ministry of Agriculture.</li> </ul>

TABLE 10. OPPORTUNITIES AND CONSTRAINTS FOR INCREASING EXPORTATION OF NONTRADITIONAL CROPS FROM GUATEMALA (Continued)

Constraint	Commodities Affected	Opportunities
4. Air transport has limited freight capacity and is not always reliable for scheduling. The airport is not well equipped for storage and handling of perishables.	Highly perishable crops including strawberries, other berries, asparagus, and roses.	<p>Current:</p> <ul style="list-style-type: none"> <li>- Increased freezing or processing makes air transport less attractive.</li> <li>- Products once shipped only by air are now being sent by sea in controlled atmosphere packaging or containers. One important company in this field, Transfresh, is rumored to be opening a branch in Guatemala.</li> </ul> <p>Future:</p> <ul style="list-style-type: none"> <li>- The privatization of the Guatemalan airline, AVIATECA, should lead to increased availability of competitive service once rate restrictions and other protectionistic measures are eliminated.</li> </ul>
5. Ocean freight rates are considered high.	All products.	<p>Current:</p> <ul style="list-style-type: none"> <li>- Seminars and studies on the tariffs and conference rates are improving the export industry's understanding of this constraint, so that future negotiations may be more successful.</li> <li>- Alternative shipping lines are providing intermittent service to Guatemala and would increase, in most cases, as demand is better established.</li> </ul>

**APPENDIX I**  
**TRADE STATISTICS**

TABLE A-1. QUANTITIES AND VALUES OF NONTRADITIONAL GUATEMALAN AGRICULTURAL COMMODITIES IMPORTED BY THE UNITED STATES

Commodity	Average 1983-1985		1986		1987		1988	
	Qty	Value CIF (\$ 000)	Qty	Value CIF (\$ 000)	Qty	Value CIF (\$ 000)	Qty	Value CIF (\$ 000)
<b>I. FRUITS</b>								
Apples:								
Apples - pres.	0	0.4	0	0				
Apple juice (liter)	1,041	0.6	5,727	2.5	0	0	20,725	12.6
Cashew - apple - paste								
	1	1.7	86	92.6	118	128.7	64	71.3
prep	186	168.9	51	56.7	27	30.6	45	52.3
Citrus:								
Orange juice (liter)	754,968	145.3	2,367,781	303.2				
Orange - pres.	147	15.2	105	12.4				
Lemon peel	2	3.7	0	0				
Lemon, fresh	54	11.1	49	6.6	0	0	18	2.3
Limes, fresh or brine	80	17.9	101	14.5	2	4.0	33	4.4
Mango:								
Mango - pres.	13	11.1	15	10.4	50	39.1	50	42.4
Mango - pulp	10	8.0	24	19.3	17	11.8	23	16.9
Mango - fresh	89	52.8	107	18.4	7	1.7	10	8.8
Melons:								
Melons - fresh	9,205	1,074.2	13,826	3,374.4	9,984	2,574.0	7,633	2,516.7
Cantaloupe	667	186.7	3,557	879.1	4,766	1,042.4	10,163	2,825.1
Melon - prep., pres.	7	3.3	785	569.3	984	771.2	842	627.3
Papaya:								
Papaya - pres.	68	37.2	0	0	0	0	19	13.2
Papaya - paste	19	7.5	40	22.0	30	17.1	3	1.5
Papaya - fresh	2	1.2	1	1.9				

TABLE A-1. QUANTITIES AND VALUES OF NONTRADITIONAL GUATEMALAN AGRICULTURAL COMMODITIES IMPORTED BY THE UNITED STATES (continued)

Commodity	Average 1983-1985		1986		1987		1988	
	Qnty •	Value CIF (\$ 000)	Qnty •	Value CIF (\$ 000)	Qnty •	Value CIF (\$ 000)	Qnty •	Value CIF (\$ 000)
I. FRUITS (continued)								
Plantain:								
Plantain - pres.	68	15.8	436	92.4	62	14.6	0	0
Plantain - fresh	720	146.2	1,615	372.7	1,650	386.7	1,430	319.8
Pineapple:								
Pineapple juice (liter)	1,517	0.8	5,387	2.5	17,034	1.4	14,437	7.3
Pineapple jam and jelly	1	0.5						
Pineapple - prep.	16	12.9	20	8.0	42	50.6	18	12.9
Pineapple - canned	8	5.3	37	20.5				
Pineapple - fresh (bulk and crate)	294	84.0	1,519	443.7	425	107.8	50	13.4
Strawberry:								
Strawberry - froz.	2	2.4	308	56.2	1,155	509.9	482	197.5
Strawberry jam	0	0.1						
Strawberry - fresh	1	2.0	89	43.2	377	371.7	526	547.3
Tamarind:								
Tamarind - fresh, pres.	27	11.8	0	0				
Tamarind - paste	0	0.4						
Watermelon - fresh	254	21.3	1,973	260.1	2,575	293.9	939	197.9
SUB-TOTAL:		2,050.3		6,682.9		6,357.2		7,490.9

TABLE A-1. QUANTITIES AND VALUES OF NONTRADITIONAL GUATEMALAN AGRICULTURAL COMMODITIES IMPORTED BY THE UNITED STATES (continued)

Commodity	Average 1983-1985		1986		1987		1988	
	Qty. •	Value CIF (\$ (000))	Qty. •	Value CIF (\$ (000))	Qty. •	Value CIF (\$ (000))	Qty. •	Value CIF (\$ (000))
<b>II. VEGETABLES</b>								
Asparagus:								
Asparagus - fresh	0	0.2	0	2.8	1	1.1	7	10.2
Asparagus - frozen	2	2.4	32	16.2	27	18.6	0	0
Broccoli - frs. froz.	5,124	3,687.9	8,229	5,763.5	27,844,020	8,706.0	22,146,576	7,111.3
Brussels Sprouts - frs. froz.	1,421	1,048.2	945	515.7	583	392.1	1,055	670.5
Cabbage - frs. ch. pres.	99	36.9	146	62.5	15	3.5	17	16.8
Cassava and Other Root Crops:								
Cassava (yuca)	135	16.0	89	15.7				
Dasheen (taro)	3	0.5			18	2.8	0	0
Tapioca, Cassava - pres.	3	0.7						
Cauliflower - frs. froz.	1,584	1,170.8	1,289	721.8	855	578.6	936	626.6
Chayote	14	2.2	0	0	36	11.6	0	0
Garlic:								
Garlic - fresh	73	53.8	103	103.6	125	50.2	13	2.2
Garlic - dried	3	7.7	9	9.0	24	27.6	0	1.1
Lettuce	51	15.3	0	0	132	23.8	160	29.2

TABLE A-1. QUANTITIES AND VALUES OF NONTRADITIONAL GUATEMALAN AGRICULTURAL COMMODITIES IMPORTED BY THE UNITED STATES (continued)

Commodity	Average 1983-1985		1986		1987		1988	
	Qty •	Value CIF (\$ 000)	Qty •	Value CIF (\$ 000)	Qty •	Value CIF (\$ 000)	Qty •	Value CIF (\$ 000)
II. VEGETABLES (continued)								
Okra - fresh, froz.	1,796	1,344.4	2,350	1,224.1	3,946	2,154.9	3,780	2,113.6
Onion	22	2.5	437	107.8	800	183.9	889	169.6
Snow Pea **	228	193.8	3,588	2,903.9	4,861	3,952.3	5,319	4,730.6
Tomato	7	3.3						
SUB-TOTAL:		7,586.6		11,446.5		16,107.0		15,481.7
III. NUTS & SPICES								
Cashew Nut - shld, etc.	3	13.9	98	471.8	16	44.8	55	321.3
Coconut:								
Coconut - shred	27	16.6	0	0	0	0	20	14.1
Coconut - pres, froz.	1	0.6			2	3.9	1	1.2
Coconut - in shell	120	0.1	14,978	2.5				
SUB-TOTAL:		31.2		474.3		48.7		336.6
IV. NURSERY & SEED								
Bulbs - nec, wols	169,588	50.3	23,023	16.3	20,000	2.0	6,000	1.2
Cut flowers - total	6,156,630	870.7	9,289,081	1,226.8	13,392,670	1,787.2	16,973,780	2,110.7
Roses (included in total)	5,930,783	778.8	9,224,081	1,213.6	13,392,670	1,778.2	16,952,780	2,073.7

TABLE A-1. QUANTITIES AND VALUES OF NONTRADITIONAL GUATEMALAN AGRICULTURAL COMMODITIES IMPORTED BY THE UNITED STATES (continued)

Commodity	Average 1983-1985		1986		1987		1988	
	Qty <sup>*</sup>	Value CIF (\$ 000)	Qty <sup>*</sup>	Value CIF (\$ 000)	Qty <sup>*</sup>	Value CIF (\$ 000)	Qty <sup>*</sup>	Value CIF (\$ 000)
IV. NURSERY & SEED (continued)								
Live Plants:								
Live Plants w/s	133,177	6.7	30,000	1.8	0	0	3,605	1.2
Live Plants - nec	35,862,520	2,143.3	46,059,572	1,777.3	57,615,664	1,831.8	67,913,408	2,133.6
Carnation Plants	9,005	1.1	0	0				
Orchid	3,356	6.4			0	0	569	3.0
Seeds:								
Flower Seeds	2	1,825.3	4	2,742.7	3	3,387.5	3	3,261.4
Other (Shrub, tree)	27	160.4	5	235.3	2	114.1	6	218.6
SUB-TOTAL:		5,843.0		7,213.8		8,900.8		9,803.4
V. HONEY								
	699	504.2	488	482.8	338	289.6	199	185.8
TOTAL:		16,015.3		26,300.4		31,703.3		33,298.4

\* In metric tons unless otherwise noted.

\*\* Snow peas were probably listed under another category up to 1985 since Cuatro Pinos Cooperative alone exported 290 MT at \$315 thousand in 1983 and 500 MT at \$756 thousand in 1984, but this did not appear in the USDA statistics.

Note: 1. Bulbs, orchid plants and live plants are in number of units/pieces.  
 2. Broccoli for 1987-88 are in lbs.  
 3. Coconuts in shell 1986 are in number of nuts.

Source: U.S. Department of Agriculture.

**APPENDIX II**  
**AGROCHEMICALS REGISTERED FOR USE IN GUATEMALA**

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## APPENDIX II

### AGROCHEMICALS REGISTERED FOR USE IN GUATEMALA

The importation and use of agrochemicals in Guatemala is regulated by the Plant Health Section (Sanidad Vegetal) of DIGESA in the Ministry of Agriculture. Guidelines for import permits are based on the regulations set by the Environmental Protection Agency of the United States. Therefore agricultural products from Guatemala should not suffer any chemical contamination at levels unacceptable to the agencies regulating entrance into the U.S. nor to the consumer. DIGESA professionals from the Crop Protection Section monitor the use of the most hazardous ("restricted") agrochemicals. Additionally, all products must be registered and must be labeled in Spanish following an official format consisting of complete identification of the product, instructions on its use and preparation, symptoms and treatment for intoxication with the chemical, and expiration date. The tags are color coded according to the danger of toxicity for each identification.

Detentions have occurred when a product is used on a crop for which it is not registered. Occasionally, a product is detained because a pesticide which is registered for that crop has residues above acceptable levels. A GAO report on pesticide use in Guatemala will be released in late 1989 and can provide more details. Guatemala is not historically a country with many FDA detentions for pesticides.

TABLE A-2. CLASSIFICATION OF AGROCHEMICALS REGISTERED IN GUATEMALA

Generic Name	Commercial Name	Application	Control	Restrictions
carbofuran	Furadan	Soil	Nematodes, insects	Apply before or after sowing
diazinon	Diazinon	Soil	Insects	Apply before sowing
methomyl	Lannate	Foliage	Chewers	No more than 3 applications per crop, suspend one day before harvest
deltamethrin	Decis	Foliage	Chewers, suckers	Do not apply more than two times per crop
endosulfan	Thiodan	Foliage	Suckers	
phenamiphos	Nemacur	Soil	Nematodes, some suckers	Apply before sowing
chlorpyrifus	Lorsban	Soil	Soil pests	One application during the season before or at the time of sowing
Bacillus thuringiensis	Thuriade	Foliage	Chewers	Last application 7 days before harvest
malathion	Malathion	Foliage	Suckers, chewers	
permethrin	Pounce	Foliage	Suckers, chewers	

SOURCE: Guide to Production, Postharvest Management, Marketing, Pests and Diseases.  
Association of Exporters of Nontraditional Products

TABLE A-3. AGROCHEMICALS USED IN THE PRODUCTION OF NONTRADITIONAL CROPS IN GUATEMALA\*

CROP**	APPLE	APRICOTS	BRUSSELS SPR	CABBAGE	MELON	CARROTS	CASHW NUTS	YUCCA	CAULIFLOWER	GOBBI	CITRUS FRUIT	ORANGE	LEMON	COCONUT	FLOWERS	GARLIC	HONEY	LETTUCE	MACADAMIA NUTS	MAMME	MANHO	OKRA	ORNAM PLANTS	PAPAYA	PINEAPPLE	PLANTAIN	SAPODILLA	CHINESE PEAS	SPICES	STRAWBERRY	TOMATO	WATERMELON		
<b>Insecticide</b>																																		
diazinon											X	X	X																			X		
dimethoate	X	X						X		X	X	X	X													X	X					X		
Bacillus thuringiensis	X		X	X	X	X	X		X	X	X	X	X							X	X			X	X	X	X					X	X	
cyethrod		X	X	X	X	X			X	X	X	X	X																				X	
carbofuran																																	X	
methamidophos							X																										X	
methomyl			X	X	X	X			X			X	X	X				X					X	X								X	X	
<b>Herbicide</b>																																		
ben-zon			X																															
dalapon	X											X	X	X																				
methyl bromide																										X	X						X	
fluzafop-butyl			X	X	X	X	X		X		X	X	X									X	X										X	
triazine																																		
evik																										X	X						X	
<b>Soil Disinfectant</b>																																		
<b>Fungicide</b>																																		
Indemorph																																		
maneb (80%)	X	X	X	X	X	X	X		X		X	X	X	X								X	X										X	
tridemorph + maneb																																		X
copper oachlonde			X	X	X	X	X		X		X	X	X																					X
carbendazin	X	X	X	X	X	X	X		X		X	X	X																					X
vinclozolin	X	X	X	X	X	X	X		X		X	X	X																					X
diademorph acetate																																		X

SOURCE: SUPERB

\* This list of the most commonly used agrochemicals is based on information from national supply houses and may not be complete. The crops marked are those noted in the promotional literature accompanying the products.

\*\* Abbreviations used for some crops: Brussels spr = Brussels sprouts; ornam plants = ornamental plants.

**APPENDIX III**

**CREDIT FROM THE AGRICULTURAL DEVELOPMENT BANK**

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TABLE A-4. CREDIT FROM THE AGRICULTURAL DEVELOPMENT BANK (BANDESA) FOR CROP DIVERSIFICATION NATIONAL AND REGIONAL TOTALS (AMOUNTS IN QUETZALES\*)

Crop Category	Year	National Total		Region I		Region IV		Region V		Region VI		Region VII	
		No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.
Citrus	1986												
	1987	4	27000			1	1000			1	15000		1000
	1988	11	112976			2	11400	2	45000	1	5076	2	8000
Deciduous Fruit	1986	2	10000	2	10000								
	1987	3	9500	1	1500			1	5000	1	3000		
	1988	3	3100					3	3100				
Plantain	1986	4	25278			2	8900	1	11378	1	5000		
	1987	7	29500			5	22500			2	7000		
	1988	26	138366			16	87900			8	28466	2	22000
Vegetables	1986	9	40385	4	17900					1	2485	4	20000
	1987	481	1891453	187	492640	3	4700	115	534753	107	455200	59	356360
	1988	793	3530858	85	252021	7	31355	436	1545046	247	1162226	78	537710
Flowers	1986												
	1987	24	137600					22	127600	1	5000		
	1988	12	120745			1	30000	11	90745				
TOTAL	1986	15	75663	6	27900	2	8900	1	11378	2	7485	4	20000
	1987	519	2095053	188	494140	9	28200	138	667353	112	486200	59	357360
	1988	845	3906045	85	252021	26	160655	452	1683891	256	1195768	82	567710

SOURCE: BANDESA (Statistical Section)

\*The average exchange rates of the Quetzal to the U.S. Dollar in 1986, 1987 and 1988 were Q1.8750, Q1.8750 and Q2.6196, respectively.

TABLE A-5. VARIOUS DEVELOPMENT TRUSTS GRANTED BY THE AGRICULTURAL DEVELOPMENT BANK (BANDESA) FOR CROP DIVERSIFICATION IN 1986-1988 - NATIONAL AND REGIONAL TOTALS (AMOUNTS IN QUETZALES\*)

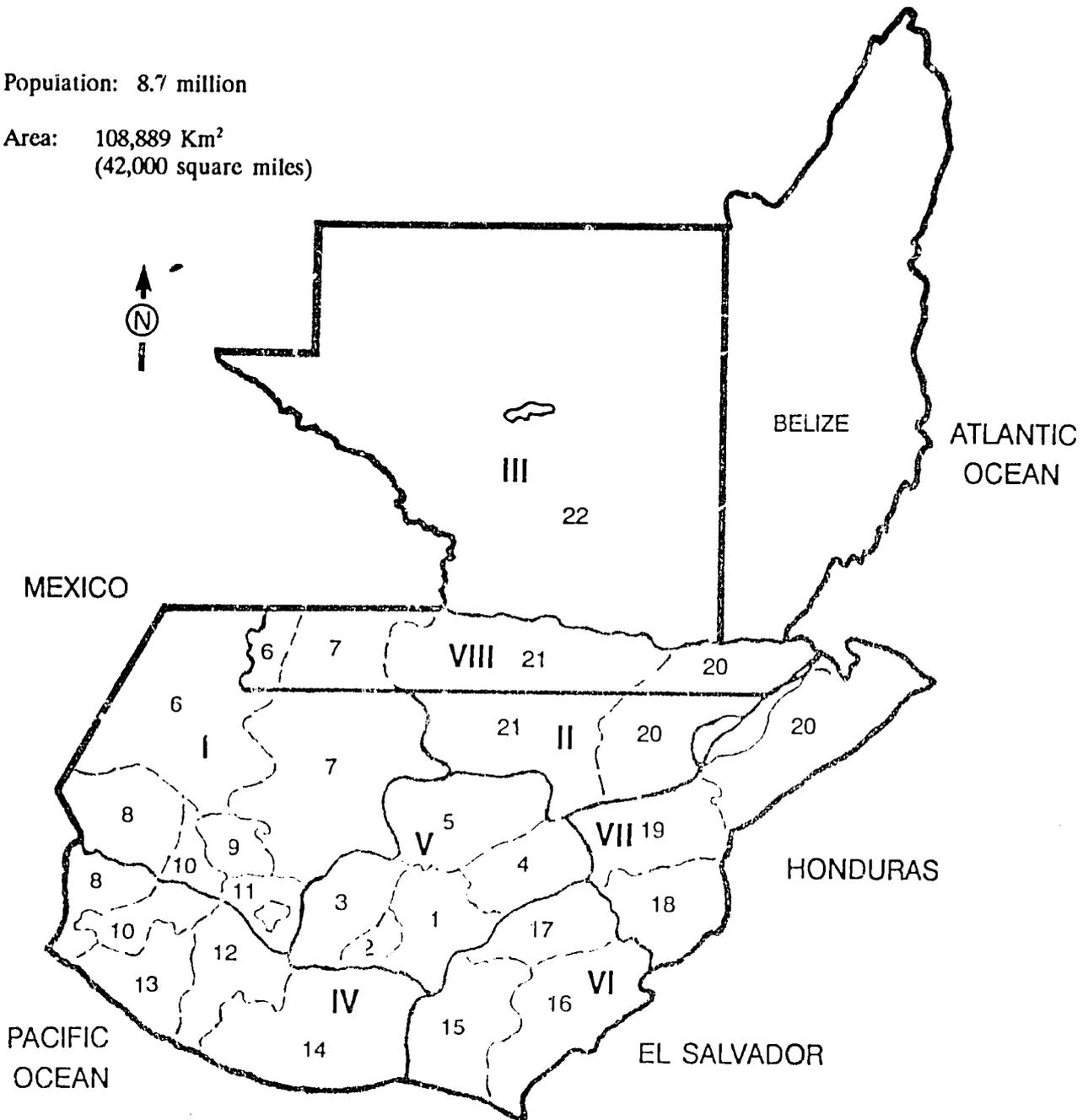
Crop Category	Year	National Total		Region I		Region IV		Region V		Region VI		Region VII	
		No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.
Citrus	1986	14	35100	1	1600	5	8900			1	600	2	7700
	1987	13	32730			7	16850	2	6700	1	1000	2	3180
	1988	10	42770			6	21600			1	8000	2	7200
Deciduous Fruit	1986	92	192106	59	122083	2	6150	12	24200	1	845		
	1987	87	168264	79	155564		700	8	11800		200		
	1988	99	221944	95	209624			4	12320				
Plantain	1986	28	71387			25	60827		2000	1	600		
	1987	36	129809			27	91020			4	4100	2	26000
	1988	25	91770	3	1800	15	77000			3	5000	1	2350
Vegetables	1986	1758	3360425	693	1112893	5	6730	628	1159474	236	45310	166	558315
	1987	1370	3197564	466	861395	4	5394	594	730872	213	411070	57	165353
	1988	1125	2375935	468	861551	5	26947	450	847066	133	361185	59	199146
Flowers	1986	38	146000					38	146000				
	1987	29	138050	1	1400			27	134150			1	2500
	1988	11	39600					11	39600				
TOTAL	1986	1930	3805018	753	1236576	37	82607	678	1331674	239	467355	168	566015
	1987	1535	3666417	546	1018359	38	113964	631	1883522	218	416370	62	173383
	1988	1270	2772019	566	1072975	26	125547	465	898986	137	374185	62	208696

SOURCE: BANDESA (Statistical Section)

\*The average exchange rates of the Quetzal to the U.S. Dollar in 1986, 1987 and 1988 were Q1.8750, Q1.8750 and Q2.6196, respectively.

Population: 8.7 million

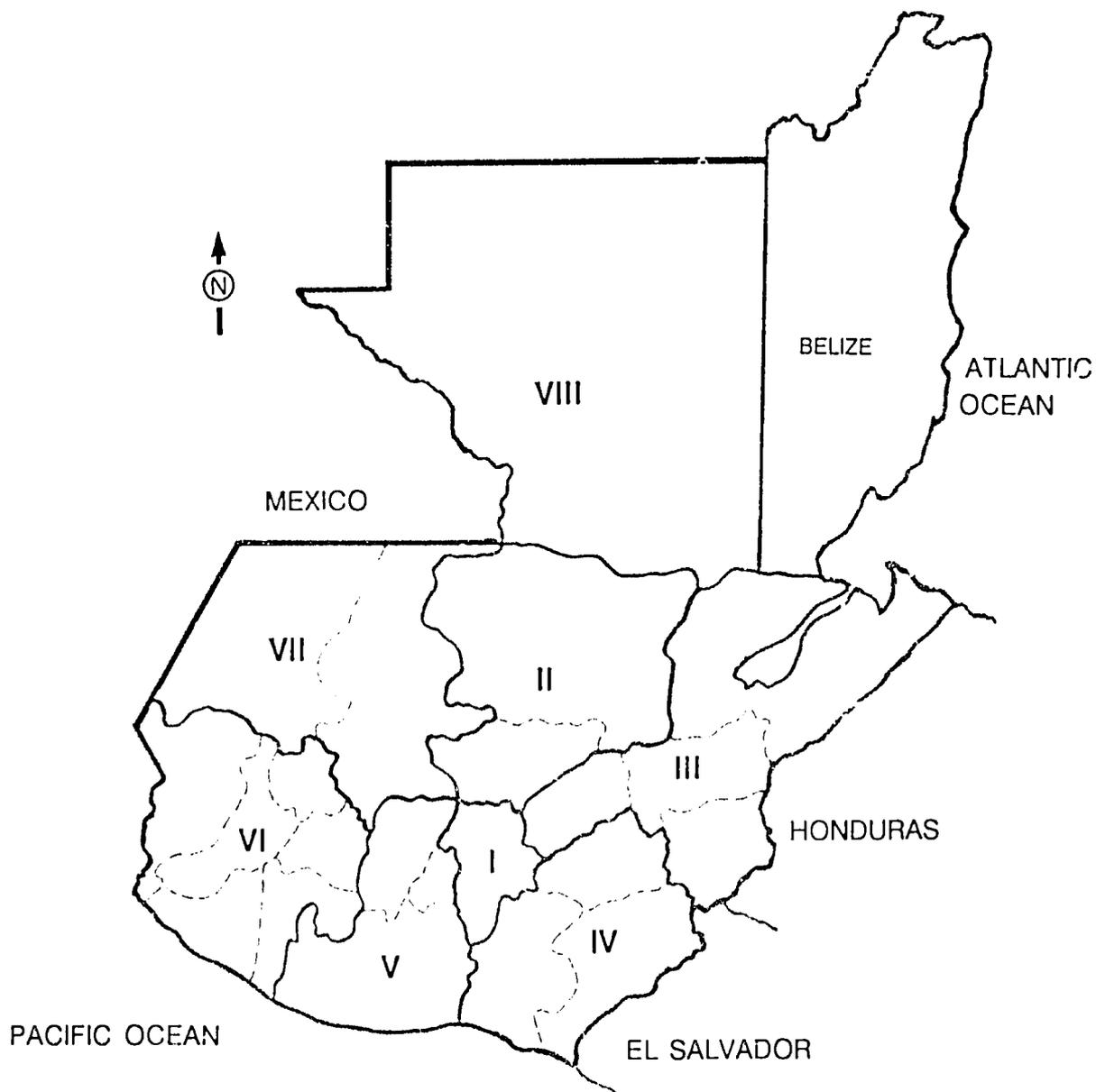
Area: 108,889 Km<sup>2</sup>  
(42,000 square miles)



**Departments**

- |                  |                   |                |                  |
|------------------|-------------------|----------------|------------------|
| 1. Guatemala     | 7. Quiche         | 13. Retalhuleu | 19. Zacapa       |
| 2. Sacatepequez  | 8. San Marcos     | 14. Escuintla  | 20. Izabal       |
| 3. Chimaltenango | 9. Totonicapán    | 15. Santa Rosa | 21. Alta Verapaz |
| 4. El Progreso   | 10. Quezaltenango | 16. Jutiapa    | 22. Peten        |
| 5. Baja Verapaz  | 11. Sololá        | 17. Japala     |                  |
| 6. Huehuetenango | 12. Suchitepequez | 18. Chiquimula |                  |

FIGURE 2. REGIONALIZATION PRIOR TO 1989



- |  |  |  |
|--|--|--|
| <p><b>I. Región Metropolitana</b></p> <ul style="list-style-type: none"> <li>- Guatemala</li> </ul>  | <p><b>IV. Región Suroriente</b></p> <ul style="list-style-type: none"> <li>- Jutiapa</li> <li>- Jalapa</li> <li>- Sta. Rosa</li> </ul>         | <p><b>VI. Región Suroccidental</b></p> <ul style="list-style-type: none"> <li>- San Marcos</li> <li>- Quezaltenango</li> <li>- Totonicapán</li> <li>- Sololá</li> <li>- Suchitepequez</li> </ul> |
| <p><b>II. Región Norte</b></p> <ul style="list-style-type: none"> <li>- Alta Verapaz</li> <li>- Baja Verapaz</li> </ul>  | <p><b>V. Región Central</b></p> <ul style="list-style-type: none"> <li>- Chimaltenango</li> <li>- Sacatepequez</li> <li>- Escuintla</li> </ul> | <p><b>VII. Región Noroccidental</b></p> <ul style="list-style-type: none"> <li>- Huehuetenango</li> <li>- El Quiché</li> </ul>   |
| <p><b>III. Región Nororiente</b></p> <ul style="list-style-type: none"> <li>- Izabal</li> <li>- Chiquimula</li> <li>- Zacapa</li> <li>- El Progreso</li> </ul> |  | <p><b>VIII. Región Peten</b></p> <ul style="list-style-type: none"> <li>- El Peten</li> </ul>  |

FIGURE 3. REGIONALIZATION SINCE 1989

**APPENDIX IV**

**GOVERNMENT CONTACTS FOR EXPORT FROM GUATEMALA TO  
THE UNITED STATES OF AMERICA**

APPENDIX IV

GOVERNMENT CONTACTS FOR EXPORT FROM  
GUATEMALA TO THE UNITED STATES OF AMERICA

IN THE UNITED STATES

U.S. Department of Agriculture (USDA)

For general inquiries and to be directed to proper contact:

Private Sector Relations  
Office of International Cooperation  
and Development (OICD)  
USDA  
Washington, DC 20250-4300

Telephone: (202) 653-7873  
Telefax: (202) 653-7724

Current Director: Dr. Theodore Freeman

For requesting an import permit (from a U.S. address only):

Import Permit Unit  
Animal and Plant Health Inspection Service (APHIS)  
Plant Protection and Quarantine (PPQ)  
USDA  
6505 Belcrest Road  
Hyattsville, MD 20782

Telephone: (301) 436-8447

For importing meat products - the country situation:

Food Safety Inspection Service (FSIS)  
Director  
International Programs Division  
USDA/FSIS/IP  
Washington, DC 20250

Telephone: (202) 447-6933

Current Director: Dr. Larry Skinner

Food Safety Inspection Service  
Director  
Import Inspection Division  
USDA  
Washington, DC 20250

Telephone: (202) 447-2952

Current Director: Mr. Mark Manis

Health and Human Services

For processed foods or pesticide and additive regulations:

Food and Drug Administration (FDA)  
International Affairs Staff  
Americas Desk Officer  
Room 11-45  
5600 Fishers Lane  
Rockville, MD 20857

Telephone: (301) 443-4481

Current Desk Officer: Max Castillo

Department of Commerce (DOC)

U.S. Department of Commerce  
International Trade Administration  
U.S. and Foreign Commercial Service  
The CBI Center  
Room H-3203  
Washington, DC 20230

Telephone: (202) 377-0703

Treasury Department

Commissioner of Customs  
U.S. Customs Service  
Washington, DC 20229

Telephone: (202) 566-8195

Guatemalan Representatives in the U.S.:

Embassy of Guatemala  
2220 R Street, NW  
Washington, DC 20008

Telephone: (202) 745-4952

Current contact on CBI or agricultural issues:  
Lic. José Orive

IN GUATEMALA OR THE REGION

U.S. Department of Agriculture (USDA)

Agricultural Attaché  
U.S. Embassy  
Avenida Reforma 7-01, zona 10  
Guatemala City, Guatemala

Current Ag Att: John Jacobs  
Assistant Ag Att: Chad Russell

From the U.S.:

U.S. Embassy Guatemala  
APO Miami 34024

Telephone: (502-2) 31-1541, ext 300, 301, 302

Area Director  
Animal and Plant Health Inspection  
Service/International Services (APHIS/IS)  
U.S. Embassy  
Avenida Reforma 7-01, zona 10  
Guatemala City, Guatemala

Telephone: (502-2) 31-1541 ext. 313, or 31-3186

Current Area Director: Marshall Kirby  
Assistant Area Director: Nicholas Gutierrez

- for questions from Guatemalans

Chief of Export Plants  
DIGESEPE  
Ministry of Agriculture

Current contact: Dr. Ernesto Yurritta G.

U.S. & Foreign Commercial Service  
U.S. Embassy  
Avenida Reforma 7-01, zona 10  
Guatemala City, Guatemala

Current Commercial Attaché: Chuck Ford

From the U.S.:

U.S. Embassy Guatemala  
APO Miami 34024

Telephone: (502-2) 31-1541  
Telefax: (502-2) 31-7373

U.S. Agency for International Development (U.S. AID)

For inquiries specific to AID projects:

Rural Development Office  
or  
Private Sector Office  
Avenida Reforma 7-01, zona 10  
Guatemala City, Guatemala

Telephone: (502-2) 31-1541 or 32-2431  
Telefax: (502-2) 31-1130  
Telex: 3110 USAID GU

For inquiries specific to the promotion project under the Regional Office of Central American Programs (ROCAP):

PROEXAG  
Edificio Marbella, 3rd floor  
Office 1  
16 Calle 4-53, zona 10  
Guatemala City, Guatemala

Team Leader: John Lamb

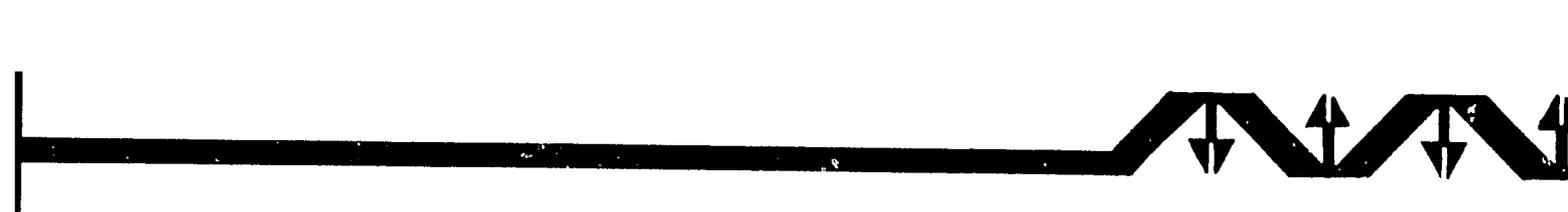
From the U.S.:

ROCAP/U.S.AID  
APO Miami 34024

Telephone: (502-2) 37-3001 or 37-3002  
Telefax: (502-2) 37-1961  
Telex: 5705 IDSSA GU

Attention: Rick Clark

Note: The U.S. Embassy in Guatemala is closed on U.S. and Guatemalan holidays. Guatemalan holidays include New Year's, Holy Thursday and Good Friday, Labor Day (May 1), Army Day (June 30), Feast of Assumption (August 15), Independence Day (September 15 throughout Central America), Revolution Day (October 20), All Saints Day (November 1), and Christmas.



**APPENDIX V**

**PRIVATE SECTOR CONTACTS FOR NONTRADITIONAL  
AGRICULTURAL EXPORTS FROM GUATEMALA**

## APPENDIX V

### PRIVATE SECTOR CONTACTS FOR NONTRADITIONAL AGRICULTURAL EXPORTS FROM GUATEMALA

Gremial de Exportadores de Productos No-tradicionales  
(Nontraditional Export Guild)

Edificio Cámara de Industria, 6th level  
Ruta 6, 9-21 zona 4  
Guatemala City, Guatemala

Telephone: (502-2) 34-6872, 31-8525, 31-5947  
Telefax: (502-2) 32-3590

Cámara Empresarial de Guatemala - CAEM  
(The Enterprise Chamber of Guatemala)

Edificio Cámara de Industria, 8th level  
Ruta 6, 9-21 zona 4  
Guatemala City, Guatemala  
Telephone: (502-2) 31-6513, 34-6878 to 34-6880  
Telefax: (502-2) 32-3590

Contact: Ing. Guillermo Rodriguez  
Coordinator of Foreign Trade

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Guatemala, C.A.**