United States
Department of
Agriculture

Forest Service

Southern Forest Experiment Station

New Orleans,
Louisiana

Research Paper
SO-225
July 1986

Caribbean Markets for U.S. Wood Products

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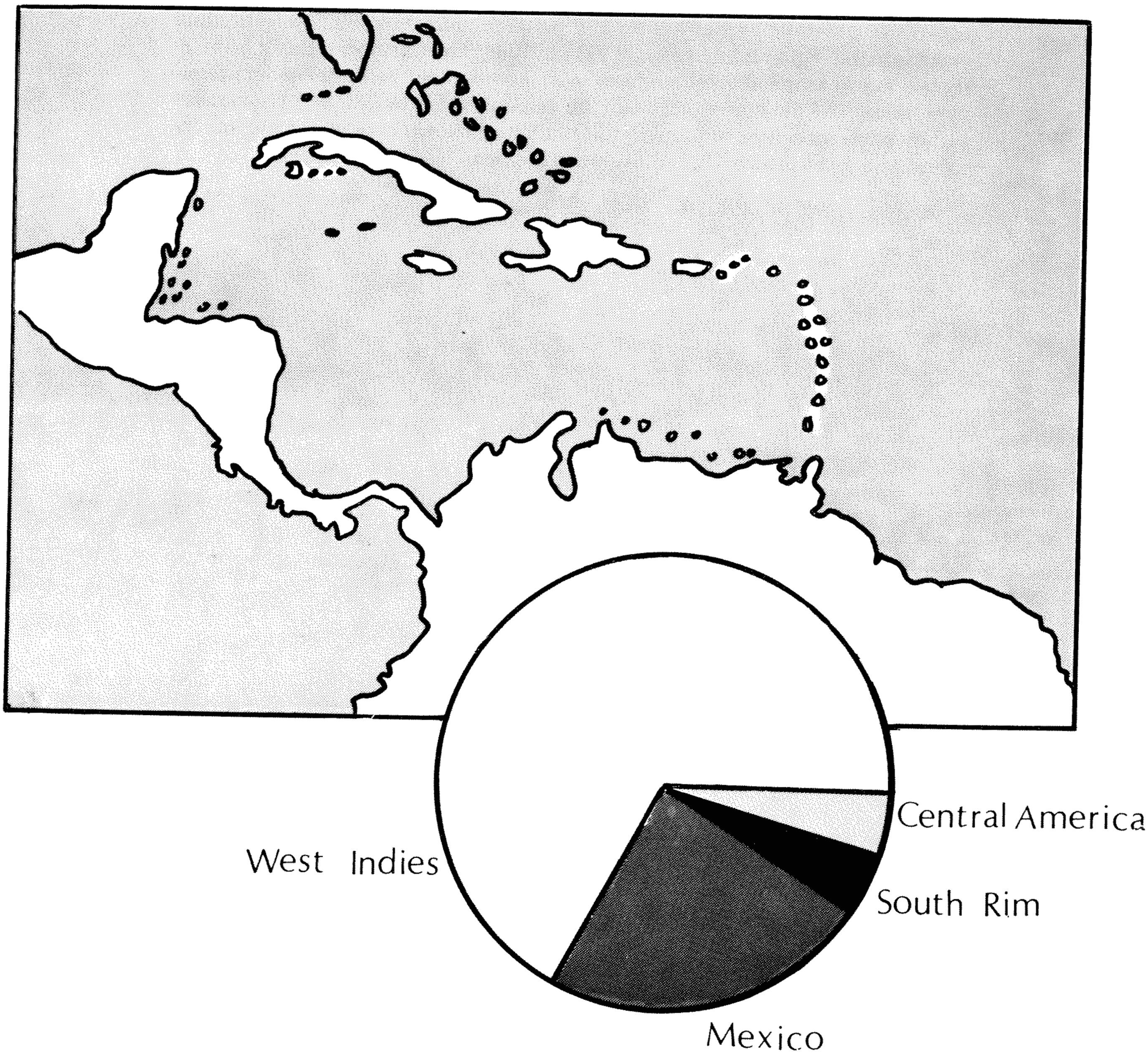

SUMMARY

The West Indies and the continental countries bordering the Caribbean Sea constitute a significant market for U.S. wood products. In 1983, wood product exports to the region totaled almost $157 million. The Caribbean Basin primarily is a market for softwood products, with pine lumber being the most prominent item. The flow of exports to the region is dominated by (1) overseas shipments from southern ports to the West Indies and (2) overland shipments from the Southwestern United States to Mexico.

CONTENTS

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INTRODUCTION

As the U.S. wood products industry becomes more cognizant of marketing overseas, specific export markets are being scrutinized for potential development. One region attracting interest is the Caribbean Basin. Publicity generated by the recent "Caribbean Basin Initiative" has drawn attention to the area's potential for trade and development.

Despite the advantage of proximity, the Caribbean Basin has been overlooked relative to export markets such as Japan and Western Europe. Because most of the countries in the Caribbean Basin are small island nations, they do not frequently appear among the leading importers of U.S. wood products individually. Collectively, however, they constitute an important market. The West Indies, for instance, always has been a major buyer of southern pine lumber.

This report analyzes trends in U.S. wood exports to markets in the Caribbean Basin. Data on U.S. wood exports are from Bureau of the Census (U.S. Department of Commerce) computer tapes for 1967–83. Background information on wood production and trade in the Caribbean Basin was obtained from the "Yearbook of Forest Products" (Food and Agriculture Organization 1983).

THE CARIBBEAN BASIN

The Caribbean Basin includes the Caribbean island nations and the continental countries bordering the Caribbean Sea. For this report, the area is divided into four subregions: Mexico, Central America, the South Rim (the five South American countries bordering the Caribbean Sea), and the West Indies. Mexico is treated separately, because it dwarfs the other countries in size and population. Also, it is the only Caribbean nation with direct overland access to the United States, which influences the origin of U.S. exports to that country.

The Basin is an extremely diverse region consisting of a large number of countries that range widely in size, population, customs, and economic complexity. Reflecting its colonial history, the region is fragmented by four languages: English, French, Spanish, and Dutch. Its cultures also reflect the influence of Africa and the indigenous Indians. In a sense, the only common element that ties the countries together is the Caribbean Sea, which at the same time, isolates the countries and contributes to their differences.

The Basin has a total population of more than 167 million, scattered in some 30 countries and territories (table 1). Populations are growing, but per capita incomes are generally low. Many of the island economies are based largely upon a single industry, e.g., sugarcane or tourism, and were heavily impacted by oil price increases during the 1970's, which drained foreign exchange and severely limited economic growth. Although Mexico, Venezuela, and Trinidad benefited from oil exports, these countries also have been adversely affected by the more recent worldwide economic slowdown and falling oil prices.

Forests

The forests of the region are as diverse as the people and the economies. Because of steep topography and small size, most Caribbean islands support a wide variety of forest types that cover only small areas (Lugo and others 1981). Continental forests vary in composition from stands that are mostly pine in Central America to lush tropical rain forests in the South Rim that include hundreds of species. Despite the

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This research was funded in part by cooperative agreement No. 19-351 between Virginia Polytechnic Institute and State University and the USDA Forest Service, Southern Forest Experiment Station, New Orleans, Louisiana.

Table 1.—*Area, population, and gross national product of the Caribbean Basin, by region and country* [1]

Subregion/ country	Area	Population		Gross national product	
		Total	Growth	Total	Per capita
	Thou. sq. mi.	*Thousands*	*Percent*	*Billion U.S. $*	*U.S. $*
Mexico	761.6	69,400	2.7	162.0	2,335
Central America	197.1	24,323	......	27.7	1,140
Belize	8.9	154	1.9	.2	1,300
Costa Rica	19.7	2,624	2.8	5.0	1,905
El Salvador	8.3	4,685	3.0	3.1	660
Guatemala	42.0	7,714	3.1	9.9	1,285
Honduras	43.3	4,276	3.6	2.8	655
Nicaragua	45.7	2,812	3.3	2.3	820
Panama	29.2	2,058	2.3	4.4	2,140
West Indies	91.3	30,655	......	49.0	1,600
Bahamas	4.4	223	2.0	1.1	4,935
Barbados	.2	251	.3	1.0	3,985
Cayman Isles	.1	20	[2]	[2]	[2]
Cuba	44.2	9,858	1.2	10.0	1,015
Dominican Republic	18.8	6,248	2.4	6.7	1,070
East Caribbean[3]	2.3	1,196	1.3	3.3	2,760
Haiti	10.7	5,690	1.7	1.8	315
Jamaica	4.4	2,335	1.5	2.7	1,155
Netherland Ant.	.4	247	1.5	1.3	5,265
Puerto Rico	3.4	3,260	2.6	12.7	3,895
Trinidad/Tobago	2.0	1,211	1.3	8.4	6,935
Turks & Caicos Is.	.2	8	[2]	[2]	[2]
Virgin Isles - Brit.	.1	13	[2]	[2]	[2]
Virgin Isles - U.S.	.1	95	4.4	.6	6,315
South Rim	964.7	42,816	......	105.2	2,455
Colombia	439.7	27,030	2.1	33.9	1,255
French Guiana	34.7	73	3.6	.2	2,740
Guyana	83.0	833	.7	.6	720
Suriname	55.2	363	– .5	1.1	3,030
Venezuela	352.1	14,517	2.9	69.4	4,780
Caribbean Basin	2,014.7	167,194	......	343.9	2,055

[1]Population totals are U.S. State Department estimates for mid 1983. Population growth rates are average annual growth for 1972–82. GNP figures are for the latest year available, generally 1982 or 1983.

[2]Not available.

[3]The Eastern Caribbean includes the French West Indies (Guadeloupe and Martinique) and the other small islands of the Leeward and Windward Islands (Anquilla, Antiqua, Dominica, Grenada, Montserrat, St. Christopher-Nevis, St. Lucia, and St. Vincent and the Grenadines).

Sources: U.S. Department of State 1982–84, 1984.

many species that inhabit most areas of the region, however, relatively few are used commercially (Longwood 1962).

Forest areas have been reduced by population growth and associated agricultural and energy needs. Generally, the higher the population density, the lower the percentage of land area that is forested. Countries in the South Rim are the most extensively forested, and the West Indies are the least forested (table 2).

Mexico.—Mexico's forests have been heavily exploited for fuel and timber. Of the 44 million forested hectares, about two-thirds are in temperate-coniferous forests at higher elevations in the various mountain ranges, mostly in the northern States of Chihuahua and Durango (Caballero and others 1977). The remaining tropical forests are largely confined to the southeastern lowland and coastal plains.

Central America.—More than half the area of Central America is forested. Extensive tropical rain

Table 2.—*Forest areas of the Caribbean Basin*

Subregion	Total area	Percent forested
	Million hectares	
Mexico	202	22
Central America	50	56
South Rim	243	65
West Indies	24	18
Total	519	*45

*Weighted average.

Source: Lugo and others 1981, Caballero and others 1977.

forests along the eastern coast include the majority of the valuable woods, although species such as mahogany and Spanish cedar have been heavily cut. Pine stands in the mountainous interior of Honduras, Nicaragua, and Guatemala contain most of the remaining valuable softwood timber.

South Rim.—The South Rim contains some of the finest tropical hardwood forests in Latin America. Sparsely populated Guyana, Suriname, and French Guiana are mostly forested, but much of the area is inaccessible and timber exploitation is inhibited by the absence of a suitable transportation system. In more densely populated Colombia and Venezuela, substantial areas are being deforested annually for fuelwood and shifting agriculture. Venezuela, however, has implemented a softwood plantation program to reduce future import needs and to offset some of the forest loss.

West Indies.—The forests of the West Indies have been depleted through years of uncontrolled exploitation for charcoal, fuelwood, and clearing for agriculture. The two largest countries, the Dominican Republic and Cuba, still have sizeable forested areas but currently import substantial volumes of forest products. As a result of water problems that developed following deforestation in neighboring Haiti, timber cutting in the Dominican Republic has been restricted for the protection of watersheds. Jamaica and Trinidad-Tobago have active forestry programs, but their forest resources will not supply a substantial portion of domestic demand, at least for the foreseeable future. Forested areas also exist on most of the small islands, but they have little importance for commercial wood products.

Wood Production and Trade

The 1981 timber harvest in the Basin exceeded 3.6 billion cubic feet, or roughly one-fourth of the U.S. annual harvest. However, most of the Caribbean timber harvest was used for fuel—5 of every 6 cubic feet of harvested timber (table 3). Of the four subregions, only in Mexico did the harvest for industrial products exceed that for fuelwood. Furthermore, removals for

Table 3.—*Timber harvest in the Caribbean Basin, 1981*

Subregion	Fuelwood & charcoal	Industrial roundwood	Total
		Million cubic feet	
Mexico	212.8	224.1	436.9
Central America	865.4	134.0	999.4
South Rim	1,749.7	149.8	1,899.5
West Indies	280.0	29.9	309.9
Total	3,107.9	537.8	3,645.7

Source: FAO 1983.

fuelwood and charcoal have increased faster than for industrial products, 2.6 percent compared to 1.9 percent since 1967.

The pattern of heavy fuelwood use reflects rapidly growing populations and low per capita incomes, with forest use being dominated by shifting agriculture and energy needs. Construction practices and market structure are also factors in the low industrial roundwood harvest. Concrete is the preferred housing construction material in the Caribbean Basin. Economically, many of the small island nations do not have a population large enough to consume manufactured products in sufficient quantities to support domestic production. Even in the larger countries having sizeable populations and forest resources, lack of financing has been an obstacle to capital-intensive manufacturing, such as pulp and paper production.

Seventy percent of the 1981 industrial roundwood harvest was sawlogs and veneer logs, used primarily for the production of lumber and wood panels; most of the remainder, largely in Mexico, was used for pulp and paper production. Only a small amount of roundwood enters trade, mainly hardwood log exports from French Guiana, Guyana, and Suriname.

Sawnwood—lumber and crossties—is the principal wood product in the Caribbean Basin (table 4). Mex-

Table 4.—*Production of sawnwood and wood panels in the Caribbean Basin, 1981*

Commodity	Mexico	Central America	South Rim	West Indies	Total
			Million cubic feet		
Sawnwood					
Softwood	51.1	28.2	1.1	.7	81.1
Hardwood	2.8	31.4	50.7	4.8	89.7
Crossties	14.2	.8	1.5	.9	17.4
Total, sawn	68.1	60.4	53.3	6.4	188.2
Wood panels					
Plywood	10.5	2.3	3.0	.1	15.9
Particleboard	11.8	1.1	2.9	.3	16.1
Other	1.4	1.3	1.4	.5	4.6
Total, panels	23.7	4.7	7.3	.9	36.6

Source: FAO 1983.

ico, Honduras, and Nicaragua are the major softwood lumber producers, while Costa Rica, Nicaragua, and countries in the South Rim dominate hardwood lumber production. Although hardwood lumber production in Mexico is small, crosstie output is substantial. Mexico also accounts for about two-thirds of the region's production of wood panel products.

Both softwood and hardwood lumber production have declined since 1977, after increasing slightly during the prior decade (fig. 1). The softwood decline has been more severe as production has fallen in each of the three major producing countries, where the most accessible pine stands have been harvested. Also, economic and political conditions have impacted production and, more importantly, trade.

The Basin is a net importer of softwood lumber, and its deficit has widened (fig. 2). The West Indies is the major importer, but rapid growth in Mexico and Venezuela in the late 1970's also spurred imports. During the same period, shipments from the region's exporters—Honduras and Nicaragua—were falling, creating a growing market for outside suppliers. Exports from Honduras have dropped since nationalization of its forest products industry in 1974, and political unrest has disrupted the flow of lumber from Nicaragua.

Since hardwood resources are more dispersed than softwood, the hardwood lumber trade is much smaller; however, imports have been exceeding exports by a growing margin since 1976. The South Rim is the leading hardwood exporter, followed by Central America. The West Indies is the dominant importer.

The Basin also is a net importer of panel products (fig. 3). Imports have grown despite an overall expansion in regional production. Most of the increase in panel production occurred in Mexico, where it is used internally, while increasing consumption in the rest of the region is being met by imports. Costa Rica and Suriname are the main panel exporters, and Mexico and the West Indies account for most of the panel imports.

U.S. WOOD EXPORTS

U.S. exports of wood products—roundwood, lumber, wood-based panels, and miscellaneous manufactured products—to the Caribbean Basin were valued at $157 million in 1983. Shipments to the region climbed from $26 million in 1967 to $211 million in 1981, before declining in 1982 and 1983 as a result of foreign debt problems in Mexico and Venezuela.

The value of shipments by product and country of destination for 1983 is detailed in table 5. Lumber was the most important export item, accounting for $86 million, or 56 percent of the total. Lumber also has accounted for the largest portion of the increase in wood exports to the Caribbean Basin since 1967 (fig. 4).

Almost one-third of all wood exports to the Caribbean Basin consist of miscellaneous manufactured wood articles. The importance of this group reflects modest demands for a large variety of secondary products, which add up to a significant portion of the total value.

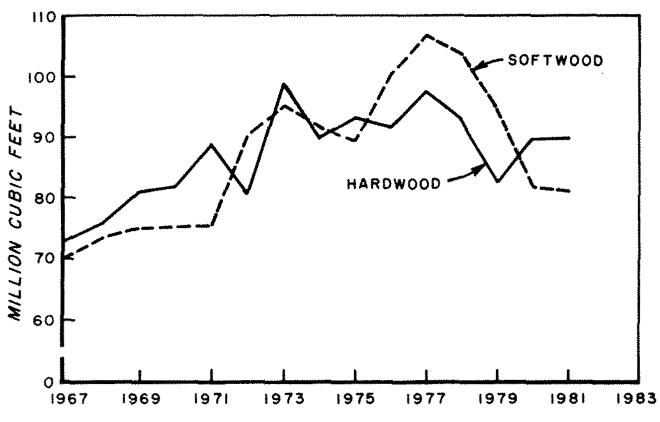

Figure 1.—*Lumber production in the Caribbean Basin, 1967–81.*

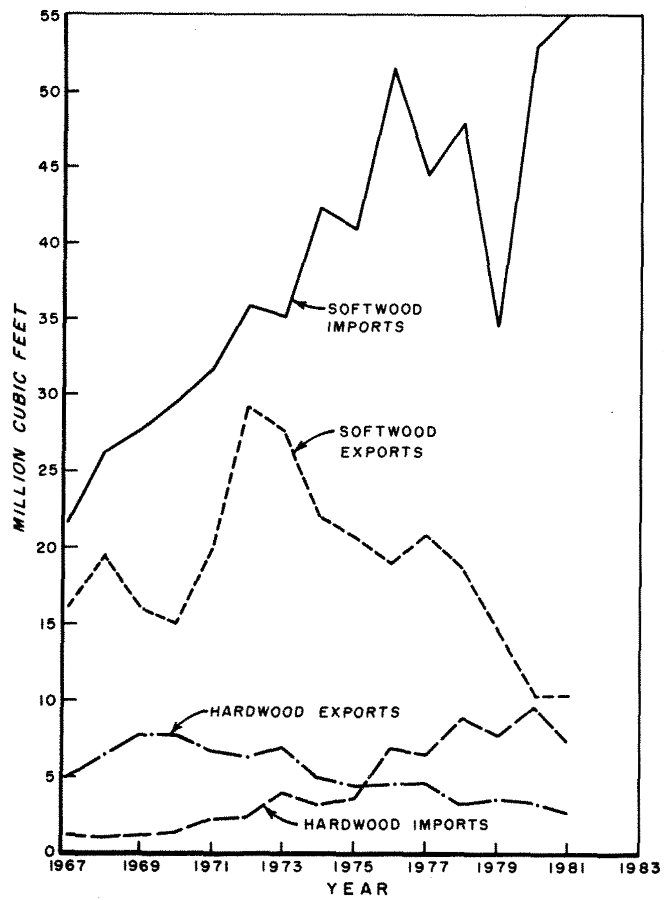

Figure 2.—***Lumber trade in the Caribbean Basin, 1967–81.***

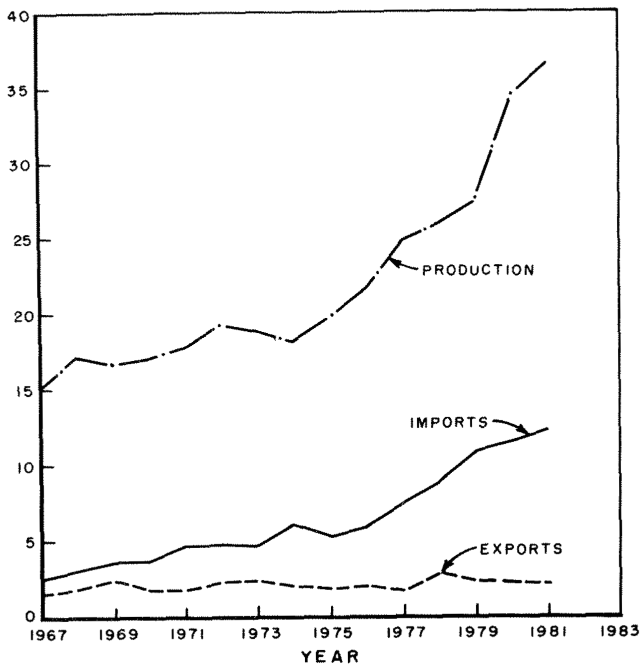

Figure 3.—*Panel production and trade in the Caribbean Basin, 1967–81.*

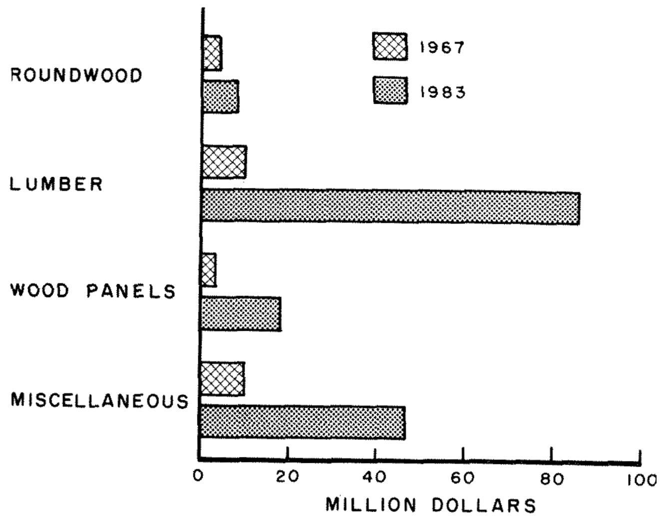

Figure 4.—*Wood exports to the Caribbean Basin by product group, 1967 and 1983.*

Currently, the West Indies is the largest of the four regional markets (fig. 5). Exports to Mexico, the primary market before 1982, declined sharply in 1982 and 1983, reflecting its economic problems. The West Indies was the only Caribbean Basin market that continued to grow during 1981-83.

As a practical matter, the pattern of U.S. exports to the Caribbean Basin can be described as (1) overland shipments from the Southwest to Mexico and (2) overseas shipments from southern ports to other Caribbean markets (table 6). In 1983, 91 percent of wood exports to Mexico were overland shipments from southwestern customs districts, and Mexico also accounted for 92 percent of all western U.S. wood exports to the Caribbean Basin. In contrast, southern ports provide 90 percent of the exports to the West Indies, the South Rim, and Central America. Also, exports from Puerto Rico are largely southern in origin.[1]

Roundwood

Logs.—The U.S. exports only a modest amount of logs to the Caribbean Basin. In 1983, log exports amounted to only 2.5 million board feet, valued at $1.5 million. This was a sharp decline from the 1980 peak of 9.1 million board feet, but still above the 1.5 million board feet exported in 1967. The decline since 1980 has been due to a sharp reduction in softwood log exports, although hardwood log exports also declined.

Softwoods have averaged 64 percent of total log exports since 1980. Walnut and oak logs, used in the manufacture of furniture and millwork, are the principal hardwood species exported.

Mexico and the South Rim are the most important log markets, each absorbing one-third of total U.S. log exports to the Caribbean Basin in 1981-83. The West Indies is third in importance, followed by Central America. Venezuela is the principal South Rim market.

Poles.—The Caribbean Basin is more important as a market for poles than it is for logs. U.S. pole exports to the Basin in 1983 were valued at $4.3 million. Utility poles made up 85 percent of the value of pole shipments; the remainder was short poles and posts less than 15 feet in length.

About 60,000 utility poles are exported to the Caribbean Basin annually. The level of pole exports has not changed appreciably since 1967, although it has fluctuated widely from year to year (fig. 6).

Most poles are imported by government-owned utilities. With few exceptions, electric power and telephone service in the Caribbean Basin are distributed by lines strung overhead on poles. Pole exports to the Basin reflect the expansion of power and telephone distribution systems and the replacement of old poles. Outside of those countries having pine resources, few local trees are of sufficient height, form, and durability to be used as utility poles.

[1]Although Puerto Rico is within the Caribbean Basin, it also is a possession of the United States. Shipments to Puerto Rico from the United States are not counted as U.S. exports; however, shipments from Puerto Rico to other countries are included in U.S. export statistics. For a description of U.S. shipments of wood products to Puerto Rico, see Wisdom and others (1983).

Table 5.—*Value of U.S. wood exports to the Caribbean Basin, 1983*

Subregion and country	Roundwood	Lumber	Panels	Misc.	Total
	Thousand dollars				
Mexico	884	21,909	3,344	12,199	38,336
Central America					
Panama	683	1,523	224	485	2,924
Belize	....	....	158	731	889
El Salvador	141	....	24	527	692
Honduras	1	7	64	440	512
Guatemala	....	....	24	200	224
Costa Rica	67	....	4	149	220
Nicaragua	....	8	......	65	73
Total	892	1,547	498	2,597	5,534
West Indies					
Bahamas	291	6,186	2,693	11,715	20,885
Bermuda[1]	78	926	202	1,506	2,712
Jamaica	1,379	8,726	1,117	2,073	13,295
Cayman Isles	30	1,437	780	2,189	4,436
Haiti	700	2,608	457	1,060	4,825
Dom. Republic	225	14,534	2,049	1,208	18,016
LW, WW Isles	180	4,220	1,024	1,713	7,137
Barbados	588	3,560	288	470	4,906
Trinidad & Tobago	315	12,775	3,821	4,161	21,072
Neth. Antilles	142	5,135	1,079	1,594	7,950
French W. Indies	....	472	42	183	697
Total	3,928	60,579	13,552	27,872	105,931
South Rim					
Colombia	....	1,604	75	2,220	3,899
Venezuela	15	551	59	1,922	2,558
French Guiana	....	4	1	167	171
Guyana	....	3	2	158	163
Suriname	2	....	......	48	49
Total	17	2,162	137	4,526	6,842
Caribbean Basin	5,721	86,197	17,531	47,194	156,643

[1]Although not located in the Caribbean Basin, Bermuda traditionally is grouped with the West Indies in trade statistics.

Mexico, Central America, and the West Indies have exchanged positions of relative importance several times since 1967, with no discernable trend in any market. Based upon the average for the years 1981-83, the largest individual markets are Panama, Mexico, Jamaica, Dominican Republic, Haiti, and Venezuela. Shipments to the major markets are highly unstable.

About 900,000 short poles are exported to the Caribbean Basin annually (table 7). Mexico is the largest buyer, followed by Guatemala.

Other.—Small and irregular quantities of pulpwood, wood chips, and other rough wood are exported to the Caribbean Basin. Mexico is normally the main market for these products, although two shiploads of wood chips were exported to Venezuela in the late 1970's (Granskog 1982).

Lumber

Softwood exports dominate U.S. lumber shipments to the Caribbean Basin. Of the $86 million in lumber exports in 1983, 83 percent was softwood lumber; the remainder was equally divided between hardwood lumber and crosstie shipments.

Softwood.—Softwood lumber is the most important U.S. wood export to the Caribbean Basin, typically accounting for almost one-half the value of all wood product shipments. Pine lumber is preferred—three-fourths of the softwood shipments have been southern pine and ponderosa and other western pines. Douglas-fir and redwood are most notable among the remaining softwood exports.

Trends and markets for softwood lumber exports to the Basin are best illustrated by grouping the ship-

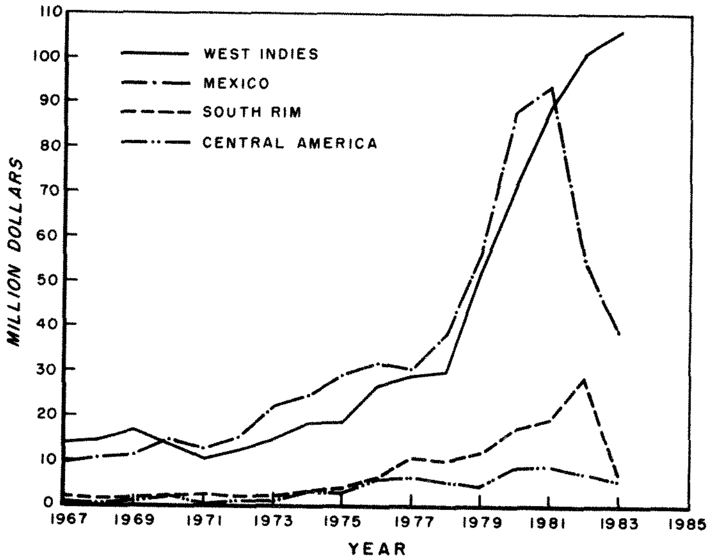

Figure 5.—*Exports to the Caribbean Basin, by market, 1967–83.*

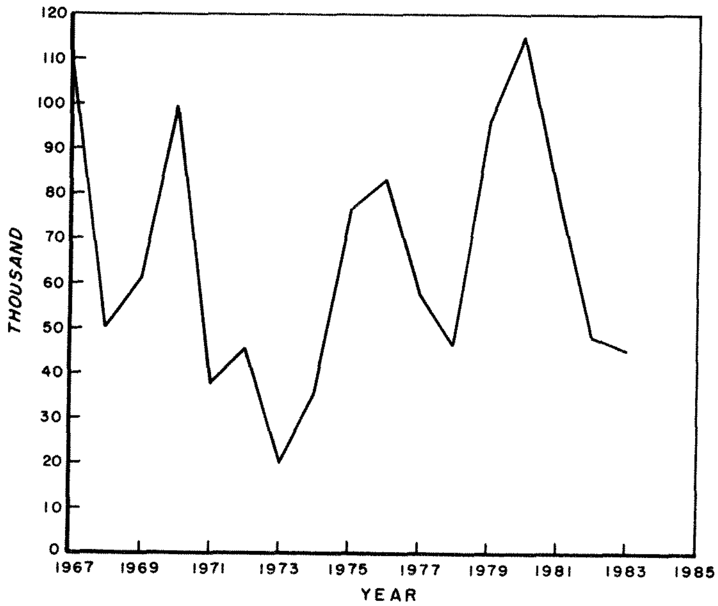

Figure 6.—*Utility pole exports to the Caribbean Basin, 1967–83.*

ments into two categories—southern pine and other softwood (figs. 7 and 8). Most southern pine is shipped to the West Indies, while the majority of the other softwood is exported to Mexico. These two markets were largely responsible for the rapid increase in exports of both softwood groups in 1978-81, when total shipments surged from 130 million to 353 million board feet. However, Venezuela also became a significant buyer of southern pine in 1980-82. The sharp decline of other softwood shipments in 1982 and 1983 stemmed from economic problems in Mexico; the smaller drop in southern pine exports in 1983 was caused by import restrictions in Venezuela, as shipments to the West Indies continued to increase. As a result, southern pine's share of the softwood lumber exports increased from 28 percent in 1967 to 60 percent in 1983.

Traditionally, the Caribbean Basin markets have purchased dressed lumber. In 1967, 95 percent of all southern pine and 74 percent of all other softwood shipped to the Caribbean Basin was dressed lumber. In recent years, however, rough lumber has been increasing its share of the market, to 40 percent of the southern pine and 38 percent of the other softwood lumber exported in 1983.

Hardwood.—U.S. exports of hardwood lumber to

Table 6.—*The value of U.S. wood exports to the Caribbean Basin, by customs district, 1967 and 1983*

Customs district	1967	1983
	---- *Thousand dollars* ----	
South		
Charleston, SC	62	3,249
Savannah, GA	455	14,759
Miami, FL	7,731	44,864
Tampa, FL	2,132	4,129
Mobile, AL	2,320	37,075
New Orleans, LA	1,226	1,555
Other South	126	1,069
Total, South	14,052	106,700
West		
Laredo, TX	2,583	4,039
El Paso, TX	1,078	9,998
Nogales, AZ	844	2,259
San Diego, CA	4,236	18,636
Other West	936	6,626
Total, West	9,677	41,558
Puerto Rico	24	5,933
Other	2,200	2,451

Table 7.—*Short pole exports to the Caribbean Basin, average for 1981–83*

Market	Number of poles
Mexico	394,067
Guatemala	141,700
Honduras	86,000
Bahamas	70,624
Dominican Republic	53,378
Haiti	29,518
Netherlands Antilles	26,096
Venezuela	24,866
Trinidad & Tobago	22,700
Other	54,026
Total	902,975

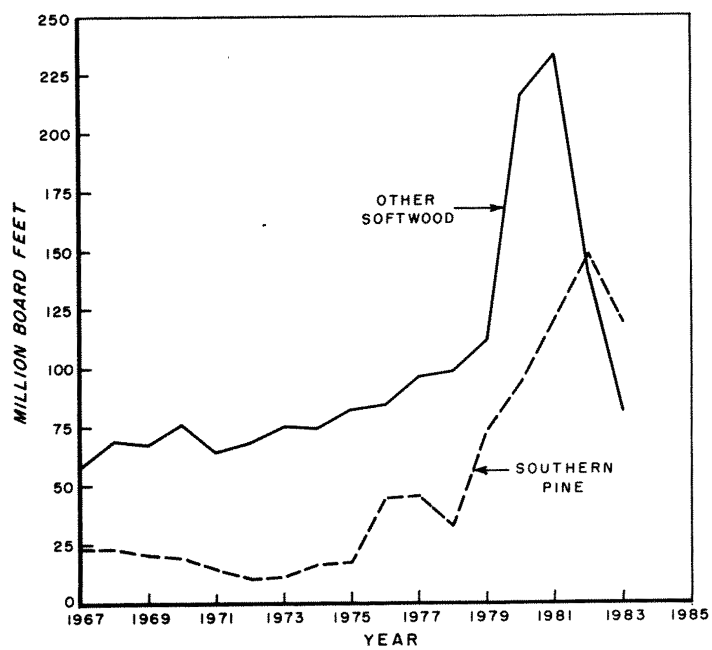

Figure 7.—*Softwood lumber exports to the Caribbean Basin, 1967–83.*

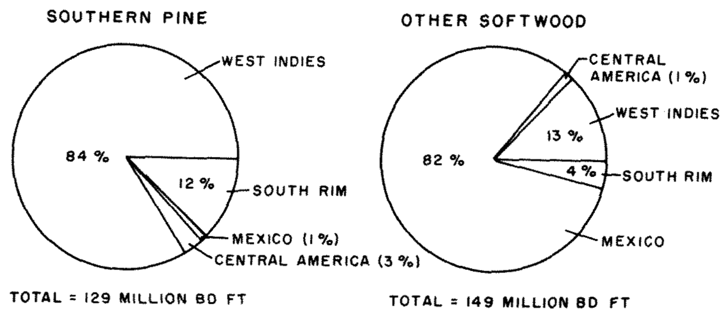

Figure 8.—*Softwood lumber markets in the Caribbean Basin, average for 1981–83.*

the Caribbean Basin have averaged about 15 million board feet since 1980. Although modest, this level of shipment is roughly three times the volume exported in 1967. Mexico absorbs about three-quarters of the hardwood lumber and has accounted for most of the growth in hardwood lumber exports to the region; the remainder largely goes to the West Indies.

Unlike other foreign markets, where shipments of oak dominate U.S. hardwood lumber exports, most shipments to the Caribbean are in the "other hardwood" category. Although oaks make up the largest volume that is identified by species, they usually account for only 10 to 15 percent of total shipments.

Treated.—Treated lumber has been identified in the export classification system since 1978. Census data indicate that shipments to the Caribbean Basin reached a high of 7.1 million board feet in 1980 before declining to about 2 million board feet in 1982-83. However, market reports prepared by the Southern Forest Products Association for the Caribbean generally indicate a significant proportion of southern pine shipments—perhaps 20 to 30 percent—is treated lumber (SFPA 1981, 1982a, 1982b). If so, export statistics do not fully reflect the actual level of treated lumber shipments to the Caribbean area. In any case, the West Indies appears to absorb the bulk of the volume.

Crossties.—Crosstie exports to Caribbean markets have fluctuated widely, with shipments in recent years often exceeding the levels of hardwood lumber exported to the region. After a high of 29 million board feet in 1980, crosstie exports declined to 7 million feet in 1982 and then rose again to 18.6 million feet in 1983. Mexico is the largest market and has accounted for much of the fluctuation. Other markets are Panama, Venezuela, and, in the West Indies, the Dominican Republic and Jamaica—the only islands with railway systems. Colombia also became a significant market in 1983, due to construction of a railroad associated with the large Cerrejon Coal Project in that country.

Crosstie exports to the Caribbean are predominantly treated hardwood, although softwood ties have made up a majority of recent shipments to Mexico.

Wood Panels

The United States exported $18 million in wood panel products in 1983. Plywood accounted for 82 percent of the value; particleboard, 13 percent; and veneer, 5 percent.

Veneer.—Almost 15 million square feet of veneer was exported to the Caribbean Basin in 1983. Hardwoods amounted to 12 million square feet, or four-fifths of total veneer exports (fig. 9). Hardwoods traditionally have dominated, except during 1980-81 when softwood veneers—mostly reinforced or backed—led a surge of veneer shipments to Mexico. Exports to Mexico plummeted in 1982 and 1983, reflecting its foreign debt problems.

Plywood.—About 52 million square feet of plywood was exported to the Caribbean Basin in 1983. Both softwood and hardwood plywood exports have increased in recent years (fig. 10).

The West Indies absorbed three-fourths of the hardwood plywood and four-fifths of the softwood plywood exports in 1983. The Bahamas and Trinidad-Tobago were the largest markets in the West Indies, followed by the Dominican Republic, the Cayman Islands, and Jamaica. Central America and the South Rim account for only a minor portion of either hardwood or softwood plywood exports.

Shipments in the "other" category are primarily cellular panels, sandwich-type assemblies with plywood sheets bonded to both sides of a core material.

Particleboard.—Since 1979, particleboard exports have averaged about 21 million square feet, with an annual value of about $5 million (table 8). Mexico has absorbed the bulk of the particleboard shipments, although Venezuela in the South Rim also was a significant market in the late 1970's.

Miscellaneous Manufactured Products

A wide variety of miscellaneous articles of wood are exported to countries throughout the Caribbean Basin. Generally products of secondary manufacturing, these articles are grouped in the categories shown in table 9. Because there is no common measure of

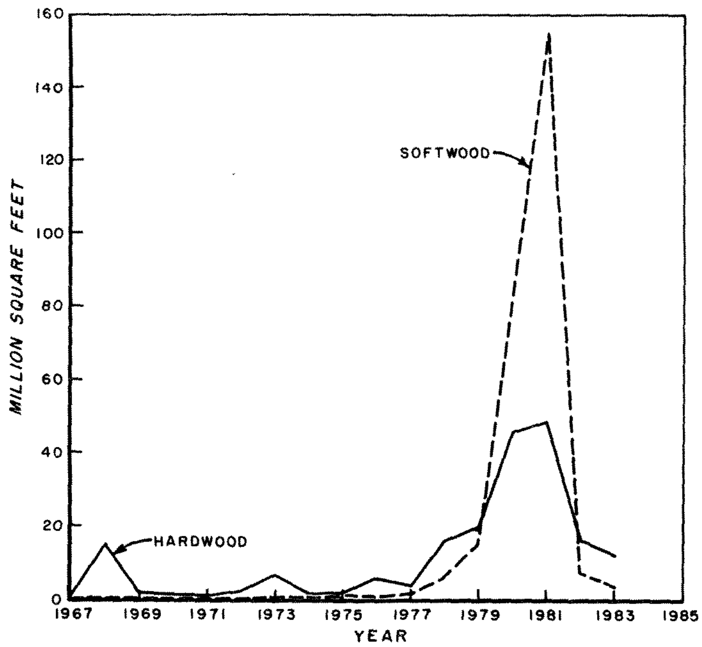

Figure 9.—*Veneer exports to the Caribbean Basin, by species, 1967–83.*

volume, they are shown in terms of value only; however, the deflated 1983 figures indicate whether or not real growth occurred.

Prefabricated wood structures gained the most and now make up one-fourth of the total value of miscellaneous wood exports. Cooperage, once a major item, declined in importance from 15 percent of the total in 1967 to only 2 percent in 1983. The composition of miscellaneous wood exports also became more diversified after 1967, as reflected in the increase in the "other" category from 40 percent in 1967 to 58 percent in 1983.

The West Indies and Mexico have been the most important markets for miscellaneous wood articles, accounting for 59 and 26 percent of total exports in 1983 (fig. 11). Although shipments to Central America and the South Rim have been smaller, products in this group are the most important wood export to these markets.

DISCUSSION

Despite recent declines in shipments to Mexico and Venezuela, U.S. wood product exports to the Caribbean Basin increased from $26 million in 1967 to $157 million in 1983. A large portion of the increase was due to rising exports of softwood lumber, as U.S. shippers benefited from declining exports from Central America to the West Indies over the past decade.

Future U.S. wood shipments to Caribbean markets will depend in large part on the rate of economic progress in the area, the actions of competing softwood suppliers, and whether exporting programs are designed to meet the unique characteristics of the market. Although per capita incomes are relatively low in the Basin countries, rapidly expanding populations are generating housing needs that support continuing imports necessitated by the lack of domestic softwood resources. Political instability in Central America has disrupted the flow of softwood lumber from that area, but Honduras—the largest competitor—is ex-

Table 8.—*U.S. particleboard exports to the Caribbean Basin, by market, 1967–83*

Year	Total	Mexico	Central America	West Indies	South Rim
			Thousand square feet		
1967	448	235	54	159	0
1968	544	391	12	141	0
1969	658	541	0	117	0
1970	521	388	0	123	10
1971	764	657	15	92	0
1972	1,078	661	5	412	0
1973	2,846	2,442	168	236	0
1974	13,148	12,583	251	310	4
1975	4,803	4,027	208	498	70
1976	11,894	8,588	163	1,253	1,890
1977	23,261	11,199	74	1,661	10,327
1978[1]	16,721	9,987	88	3,109	3,537
1979	31,485	21,015	620	4,422	5,428
1980	34,566	24,957	261	4,459	4,889
1981	28,115	22,844	356	4,679	236
1982	17,188	14,262	58	2,642	226
1983	5,901	3,002	192	2,679	28

[1]1978 data are estimates. Bureau of Census figures contain reporting errors, due to a change in the unit of measurement.

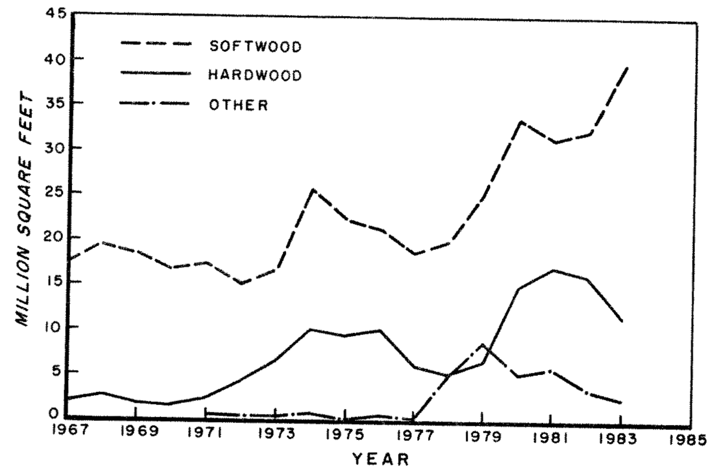

Figure 10.—*Plywood exports to the Caribbean Basin, by type, 1967–83.*

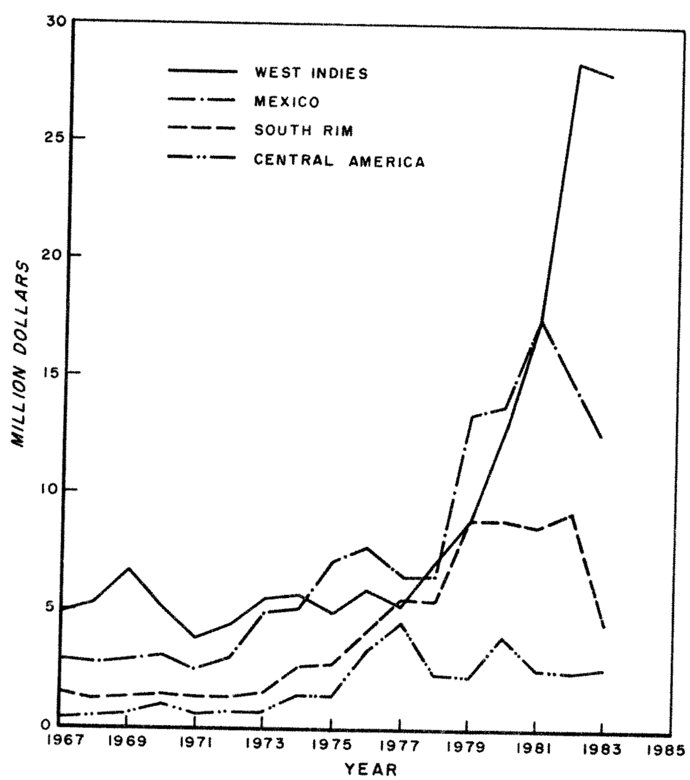

Figure 11.—*Miscellaneous exports to the Caribbean Basin, by market, 1967–83.*

Table 9.—*U.S. exports of miscellaneous manufactured wood articles to the Caribbean Basin, by type, 1967 and 1983*

Type	1967	1983	Deflated* 1983
	Thousand dollars		
Fuelwood & charcoal	264	977	322
Cooperage	1,544	833	275
Builder's woodwork	2,567	4,710	1,554
Prefab. wood structures	465	11,830	3,903
Decorative wood articles	326	466	154
Wood handles	711	1,192	393
Other	3,850	27,186	8,969
Total	9,727	47,194	15,570

*Deflated using Producer Price Indexes for Wood Products, 1967 = 100.

panding its sawmilling capacity. Also, Chile has been a recent supplier of Radiata pine lumber in the region. Thus, maintaining or expanding U.S. shipments will require aggressive and innovative marketing efforts.

A key to effective marketing in the Basin is an understanding of the economics of the region. Although the market is quite large when viewed as a whole, the individual economies are quite small and extremely diversified in terms of purchasing habits, traditions, and preferences. At any one time, some countries may be experiencing economic expansion while others are undergoing economic stress. As a result, the demand for a specific product may exhibit substantial fluctuation when viewed on a country-by-country basis. Exporters must be aware of this demand situation and continuously monitor the markets in individual countries.

Continuity of supply is an important factor in serving the Caribbean Basin. Though concrete is the preferred housing material, softwood lumber and plywood are used for scaffolding, concrete forms, and roof structures. Although wood comprises only a small portion of the total cost of housing, it is still an essential ingredient in construction. Lacking capital, building material suppliers typically maintain limited inventories; hence, they make small orders frequently. Because virtually all the wood used in construction in the West Indies must be obtained by ocean carrier, taking 2 to 6 weeks for delivery, failure to receive an order when scheduled may result in construction delays and thus be more costly than the extra cost of wood from a more dependable source. Under these circumstances, reliability of supply can be more important than price when choosing among suppliers.

Caribbean wood importers also typically place orders for a wide mix of products, reflecting the Basin's dependence upon imports for much of its needs. Wood exporters must be willing to supply a variety of wood products in different sizes, grades, and species. This is an obstacle for many U.S. softwood producers, who are used to manufacturing a few commodity items for domestic markets rather than specialty items for overseas markets. On the other hand, softwood suppliers from other countries are often organized for export marketing, i.e., the production from several manufacturers is combined to meet the more diverse foreign demand.

A strategy for effectively serving the Caribbean market may be a cooperative effort. One approach is to establish regional export trading companies, as authorized by the Export Trading Company (ETC) Act of 1982. The ETC Act allows small- and medium-size companies the option to jointly supply a wider range of products to overseas markets. Also, an ETC can provide foreign purchasers an image of stability that a small, lone exporter may not possess.

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U.S. exports of wood products to four Caribbean markets—Mexico, Central America, the South Rim (South American countries bordering the Caribbean Sea), and the West Indies—are described for the years 1967 through 1983.

Additional Keywords: Wood exports, foreign trade, forest products.

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