FOREIGN AGRICULTURE ECONOMICS

The Agriculture and Trade of Costa Rica

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SUMMARY AND OUTLOOK

Costa Rica's agriculture is the source of one-third of the country's gross national product. It supplies 95 percent of all exports and provides employment for more than half of the labor force.

Costa Rica's most valuable resource is its 4.5 million acres of land in farms, accounting for over one-third of the country's land area. Less than one-third of all the land is publicly owned; this limits the government's efforts to increase the amount of farmland.

For almost a decade--with the exception of 1960--the total output of Costa Rica's farms has not kept pace with its population growth rate, one of the highest in the world. In 1960, sugar, banana, coffee, and milk production were up sharply and total agricultural output matched population growth.

In March 1963, Costa Rica's Irazu volcano, dormant for more than half a century, began erupting and since has caused heavy damage to agricultural production on the Central Plateau. Most seriously affected have been coffee, vegetable, and sugar crops and pastureland.

At present consumption levels, the output of the basic foods is about sufficient to meet domestic needs. Coffee production has declined over the past 4 years and banana exportable production is well below the average for the 1950-54 period. However, sugar production has almost quadrupled, and sugar and beef exports are up, thus keeping the trend in agricultural exports moving upward.

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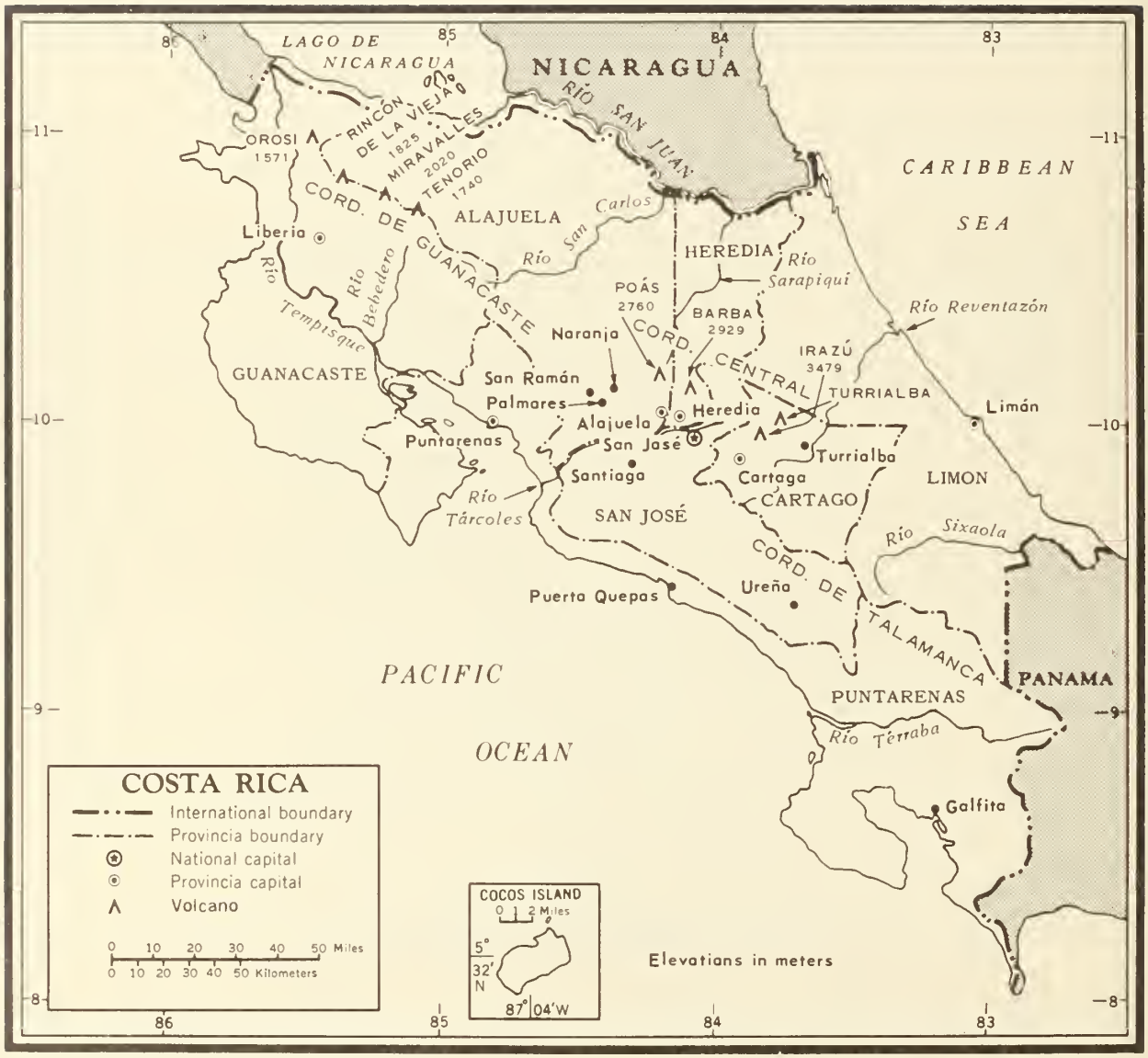

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Costa Rica's exports and imports of all commodities have increased steadily over the past 12 years. Through 1962, agricultural exports also followed an upward trend, but agricultural imports declined slightly since 1956-60.

In 1951-55, the United States took 65 percent of Costa Rica's exports; takings dropped to 53 percent in 1956-60. In 1962 the United States accounted for 58 percent of the country's total exports.

U. S. participation in Costa Rica's expanding import trade declined steadily between 1951-55 and 1962. In 1951-55, the United States supplied 61 percent of the total imports. In 1956-60, the share dropped to 51 percent; in 1962, to 46 percent. However, on the basis of preliminary data, the United States regained some of this loss in 1963 and supplied 48.5 percent of all imports.

Between 1956-60 and 1962, the U. S. share in Costa Rica's agricultural imports declined slightly, from 48 percent to 46 percent. Commodity trade by country is not available for the full 1951-55 period, but in 1955 the United States supplied 61 percent of Costa Rica's agricultural imports.

U. S. agricultural imports from Costa Rica have increased somewhat in recent years and consist largely of coffee, bananas, sugar, manufacturing beef, and cocoa beans.

U. S. agricultural exports to Costa Rica ranged in value from $4.9 million to $5.8 million in 1951-63 and consisted largely of wheat flour, other grain preparations, poultry feed, dairy products, vegetable oils, and leaf tobacco. The Central American Common Market, of which Costa Rica is a member, may offer increasing competition to U. S. agricultural exports such as vegetable oils and processed fruits and vegetables. Exports of U. S. dairy products and tobacco to Costa Rica probably will continue at about 1962 levels. Some increase in shipments of feed grains and other grain preparations may occur.

Consumption of wheat flour and other wheat products in Costa Rica is increasing; this trend is expected to continue in line with population growth and rising standards of living. The United States will likely share in this expanding wheat and flour market, thus maintaining its position as the supplier of 40-50 percent of Costa Rica's total agricultural imports.

INTRODUCTION

Role of Agriculture

Crop and livestock production far outrank commerce and industry in the economy of Costa Rica. Thirty-seven percent of the gross national product is derived from agriculture and the value of agricultural exports represents 95 percent of the value of all exports. In 1960, employment in agriculture, forestry, and fishing accounted for 53.3 percent of the working population.

Costa Rica's future well-being will depend heavily upon agricultural development, which in turn will depend largely upon increased investment and technological progress in agriculture.

Under the Alliance for Progress, primary reliance is placed upon internal measures, with foreign assistance in a supporting role. However, Costa Rica has been slow to undertake the requisite self-help measures, despite stepped-up foreign assistance, largely from the United States.

Agricultural development problems of Costa Rica are similar to those throughout most of Latin America. The central problem is the parallel development of human and agricultural resources. While Costa Rica's literacy rate and basic skill levels are much higher than the average for Latin America, considerable further progress is needed, especially in rural areas. Development of new lands and the improvement of lands presently in agricultural use offer considerable potential. Expanded and improved agricultural credit is needed. Improved farming practices, land tenure patterns, and marketing facilities are required.

Agricultural and Other Resources

Costa Rica is second to the smallest of the Central American Republics. It has a total area of about 19,700 square miles or 12,600,000 acres. According to the best estimates available, there are about 4.5 million acres of land in farms of which almost two-thirds are in crops and pasture. Most of the cultivated land is on the Central Plateau, in Guanacaste Province, around Puntarenas, in the banana zone around Quepos, in El General Valley, in the San Carlos Plains, and in certain other areas on the Atlantic coastal plain.

Climate and physiography have played an important part in the agricultural development of Costa Rica. Rainfall and temperature are profoundly affected by the continental divide, which runs at right angles to the moisture-laden northeast trade winds. These winds cool as they pass inland and lose their moisture in the form of heavy rainfall. On the Atlantic slopes of the Cordillera, rainfall is more abundant and more evenly distributed throughout the year than on the Pacific slopes. West of the Cordillera are distinct wet and dry seasons. The period of scarce rainfall is from January to April. Monthly and average rainfall at selected stations throughout the country varies considerably (table 1).

There are three temperature zones. These are the tierra caliente (hot land) below 2,600 feet; the tierra templada (temperate land) from 2,600 to 4,900 feet, and the tierra fria (cold land) above 4,900 feet. Average annual temperatures for the three zones are 70-80° F., 57-70° F., and 41-57° F., respectively. Temperatures may go as high as 100° F. in the tierra caliente and below 32° F. in the high mountains.

The outstanding feature of Costa Rica's geography is the mountain mass that extends from the northwest corner of the country southeasterly toward the Panamanian border. One section of this mountain chain is called the Cordillera de Guanacaste and divides the plains of northern Costa Rica from the rolling lands of Guanacaste Province. Four volcanoes, Orosi, Rincon de la Vieja, Miravalles, and Tenorio are in the Cordillera de Guanacaste.

About midway in the country, the mountain chain turns eastward to form the northern rim of the broad Central Plateau. This area is highly productive, due partly to rich volcanic soils. It is where the majority of Costa Rica's population lives. In this part of the mountain chain, the Cordillera Central, lie four other volcanos, Poas, Barba, Irazu, and Turrialba. Irazu, which recently became dangerously active, reaches an altitude of 11,300 feet.

To the south of the Central Plateau are more mountains, some of great height, that extend in an unbroken mass toward the Panamaian border. This section is known as the Cordillera de

Table 1.--Costa Rica: Monthly and yearly average rainfall, selected stations

Month	Atenas	Cartago	Golfito	Corredor	Grecia	La Cruz
January	0.4	1.0	6.0	6.6	0.2	1.5
February	0	.4	1.3	2.0	.1	.4
March	.6	.4	5.1	5.7	.5	0
April	2.3	1.4	8.9	10.2	1.4	0
May	10.5	7.7	16.6	23.9	7.9	2.8
June	8.5	8.2	15.3	24.1	9.2	10.0
July	9.8	5.2	13.7	18.5	5.6	7.8
August	9.8	6.0	22.1	25.9	7.7	6.9
September	11.0	7.0	17.7	29.4	8.5	7.0
October	8.5	12.1	23.7	27.1	6.7	12.6
November	4.8	8.5	20.8	23.5	3.5	3.9
December	1.5	5.0	9.5	6.3	1.3	4.2
Annual	67.7	62.9	160.7	203.2	52.5	57.1

Month	Liberia	Limon	Quepos	Siquirres	Tres Rios	Villa Quesada
January	0	10.4	3.4	8.6	0.4	10.8
February	0	6.8	.4	5.4	.4	7.0
March	0	6.7	1.4	5.9	.3	3.4
April	0	11.5	8.2	7.1	1.5	2.5
May	9.1	12.7	15.3	9.4	15.8	16.1
June	9.8	17.6	16.5	14.0	20.0	17.3
July	4.2	19.5	16.6	15.7	10.3	22.2
August	7.4	9.4	16.8	8.7	15.4	19.7
September	18.7	5.9	16.4	6.5	23.8	17.3
October	19.1	14.8	26.7	11.2	21.7	16.3
November	8.7	13.9	13.8	19.6	18.2	23.2
December	.6	23.4	5.9	17.4	7.1	19.8
Annual	77.6	152.6	141.4	129.5	134.9	175.6

Source: National Meteorological and Seismological Service of the National Geographic Institute of Costa Rica.

Talamanca. Lying southwest of this range is a broad valley, El General, which is drained by a river with several names, among them El General and Rio Grande de Terraba.

Costa Rica's rivers are numerous and swift. With the exception of the San Juan, which forms part of the border with Nicaragua, all have their source in the Cordilleras. The San Juan is the largest river in the country and the only one navigable for sizable boats. The San Carlos and Sarapiqui drain the northeastern part of the country and empty into the San Juan. Some others are the Reventazon, which drains the southeastern basin of the Central Plateau; Sixaola, which crosses the southeastern part of the country; the Tempisque and Bebedero in Guanacaste; the Terraba in the southwest; and the Tarcoles, which drains the northwestern basin of the Central Plateau and enters the Gulf of Nicoya south of Puntarenas.

Costa Rica has extensive forest resources. Estimates of the area in forests range as high as three-fourths of the national territory. The forests are mostly of broad leafed species; there are few conifers. Many of the species have no known uses, and some of the richest stands of usable trees are in areas far from overland transportation.

The mineral potential of the country is not fully known, and mining activities have never been extensive. Known mineral resources include gold, kieselguhr (used as an abrasive and in the manufacture of high explosives), and calcium carbonate.

FACTORS AFFECTING AGRICULTURAL PRODUCTION AND TRADE

Demand

Population.--Costa Rica's rapidly expanding population is creating spiraling needs for food and fiber products that the country is hard put to supply at present production levels.

At the beginning of 1951, Costa Rica's population was 812,000 and by 1956 it exceeded 1 million. As of mid-1963, population was estimated at 1.3 million. The rate of increase is now over 4 percent annually, one of the highest in the world, resulting in increased pressure on resources. This rate of gain is almost totally due to internal growth, since immigration and emigration are usually almost in balance.

Nearly three-fourths of the people live in the Central Plateau, an area covering about 10 percent of the country's total area. In 1959, population density in the Central Plateau was 111 per square mile; for the rest of the country it was only 31 per square mile. Four of the largest cities are in the Central Plateau. These are San Jose, the capital, with a metropolitan population of 320,500; Heredia, with a population of 19,725; Cartago, with 19,677; and Alajuela, with 20.642. In contrast with the density of population in the Central Plateau, there are other areas of relatively sparse population. Among these are the plains of San Carlos toward the Nicaraguan border, and the Atlantic and Pacific lowlands.

Preliminary 1963 census data indicate that two-thirds of the population live in rural areas (table 2). This represents very little decrease in the proportion of people living in rural areas since 1950, a very unusual stability, generally without parallel in Latin America and in developing countries.

The rate of literacy is 80 percent, one of the highest in Latin America, and Costa Ricans take immense pride in the fact that their teachers far outnumber their soldiers--a distinction also claimed by some Central American neighbors.

Income.--Per capita income in 1962 was estimated at $315, the second highest in Central America. It has increased at an average annual rate of about 1.8 percent since 1958 (table 3). There is a large middle class in Costa Rica, with less of the extremes of wealth and poverty than exist in most other Latin American countries. This comparatively large and well educated middle class has contributed to stability and helped maintain an atmosphere of freedom from political violence.

According to United Nations sources, the origin of the gross domestic product in 1958 was as follows: Agriculture, forestry, and fishing, 36.4 percent; industry, 12.1 percent; government and other services, 28.2 percent. In 1962, the percentages were 33.4, 14.0, and 29.6, respectively. The remainder of the gross domestic product is derived from construction, transportation and communications, commerce, and housing.

Table 2.--Costa Rica: Urban and rural population by Province, 1950 and 1963

Province	Urban		Rural		Total	
	1950	1963	1950	1963	1950	1963
	Number					
San Jose	149,631	269,900	132,191	217,758	281,822	487,658
Alajuela	28,968	44,065	119,882	196,607	148,850	240,672
Cartago	24,477	39,406	76,248	116,027	100,725	155,433
Heredia	17,229	29,203	34,531	55,860	51,760	85,063
Guanacaste	11,972	21,359	76,218	121,196	88,190	142,555
Puntarenas	24,373	34,038	63,795	122,470	88,168	156,508
Limon	11,636	22,572	29,724	45,813	41,360	68,385
Total	268,286	460,543	532,589	875,731	800,875	1,336,274

Sources: Ministerio de Economia y Hacienda, Direccion General de Estadistica y Censos-Censo de Poblacion de Costa Rica, 22 de Mayo de 1950. Censo Nacional de Poblacion, 1 de Abril, 1963. Direccion General de Estadistica y Censos, Ministerio de Economia y Hacienda, 14 de Aug. 1964.

Table 3.--Costa Rica: National and per capita income, 1958-62

Year	Population	National income 1/	Per capita income
	Thousand	Million dollars	Dollars
1958	1,090	320.4	294
1959	1,130	331.4	293
1960	1,175	351.7	299
1961	1,220	367.5	301
1962	1,270	400.1	315
1963	1,319	2/ N.A.	2/ N.A.

1/ Converted at $1 = 6.65 colones.
2/ Not available.

Source: International Financial Statistics - International Monetary Fund, June 1964. Population estimates from U. S. Agency for International Development.

Most of the country's industry is centered in and around San Jose. Industrial growth has been small but steady over the past few years. Local industry originally was limited almost entirely to the processing of agricultural products, such as coffee and cocoa, for export. However, Costa Rican industry now produces a variety of consumer goods both for the domestic market and for the growing Central American Common Market. In addition to processed agricultural products, industrial output now includes such commodities as shoes, textiles and clothing, wood and metal furniture, soap, matches, candles, pharmaceuticals, cosmetics, rope, construction material, plastic products, fertilizers and insecticides, refrigerators, and paint.

Increased electric power generating capacity is an indication of greater industrial potential. Information from Costa Rica's Central Bank and its National Light and Power Company shows that the index of industrial power consumption reached 230.5 in 1962 (1955 = 100). This includes electric power used in coffee processing plants and sugar mills, both of which have greatly increased their output in recent years.

An estimated 15 percent of the labor force is working in some kind of manufacturing enterprise, compared with 13 percent in 1950. This includes work not classified as industrial in more highly developed countries.

Consumption.--Costa Rica's food consumption, in terms of calories, averaged 2,520 calories per person per day in 1959-61. This is in excess of the USDA reference minimum daily nutritional standard of 2,450 calories. But it represents a drop of 70 calories from Costa Rican consumption levels in 1956-58. Declines in per capita consumption of pulses, fruit and vegetables, fats and oils, meat and fish, and eggs more than offset gains in cereals, sugar, and milk and cheese. While total food supplies actually increased, gains were not enough to offset rapid population growth.

Cereals, sugar, and fruit and vegetables supply around two-thirds of the calories. Pulses, meat and other animal products, and vegetable oils make up the remainder. Domestic output of the basic foods (corn, rice, and beans) is about sufficient for local needs at the present level of consumption, barring unfavorable weather or natural disasters.

In 1959-61, sugar accounted for 469 calories per day out of total daily consumption of 2,520. This was exceeded only by Colombia and Cuba among the Latin American countries. Costa Ricans like their coffee sirupy, and the many bake shops and candy stores, even in the smaller towns, are further evidence of their liking for sugar.

The chief imported food items are wheat and flour, lard, processed milk, and minor quantities of canned fruit and vegetable preparations. Costa Rica does not produce wheat; this grain, together with flour, is the country's most important agricultural import.

Per capita consumption of wheat products is increasing due largely to the greater consumption among skilled industrial workers whose wages are significantly higher than those among unskilled agricultural worker and other laborers.

Progressively higher tariffs have virtually eliminated lard imports, but consumption of domestically produced vegetable fats and oils has been increasing, thus reducing the demand for lard.

Production and Trade

Land use and tenure.--Land tenure in Costa Rica is characterized by a large and increasing number of smaller holdings and a few large, fairly productive farms. The agricultural census of

1955 reported a total of 47,286 fincas (farms) compared with 43,086 in the 1950 census (table 4). A finca is defined for census purposes as an area of land of 1 manzana (1.705 acres) or more devoted totally or in part to agricultural production, the tillage of which is carried out, managed, or directly administered by only one person, or with the help of others. The finca may consist of one or more parcels of owned or leased land, not necessarily adjoining, but situated within the same canton or neighboring cantons, which together form part of the same technical and economic unit. Between 1950 and 1955, the total area in farms increased from 4,419,000 to 4,515,000 acres.

Table 4.--Costa Rica: Number and area of farms, according to size of farms, 1950 and 1955

Size of farms	Farms				Area			
	1950		1955		1950		1955	
Acres	No.	Pct.	No.	Pct.	1,000 acres	Pct.	1,000 acres	Pct.
1.7 - 16.9	18,976	44.1	20,995	44.4	129	2.9	142	3.1
17.0 - 51.0	10,469	24.2	11,279	23.9	306	6.9	334	7.4
51.1 - 298.2	11,705	27.1	12,880	27.2	1,251	28.3	1,404	31.1
298.3 - 852.3	1,363	3.2	1,521	3.2	633	14.3	717	15.9
852.4 - 5,967.3	524	1.3	561	1.2	926	21.0	972	21.5
5,967.4 and over	49	.1	50	.1	1,174	26.6	946	21.0
Total	43,086	100.0	47,286	100.0	4,419	100.0	4,515	100.0

Source: Censo Agropecuario, 1950 and 1955, Ministerio de Economia y Hacienda, Direccion General de Estadistica y Censos.

The following tabulation shows the distribution of land in farms according to use, as reported in the 1955 agricultural census:

	Thousand acres	Percent
Land under cultivation	686	15
Permanent crops	379	8
Permanent pastures	1,762	39
Forest land	1,650	37
Other lands	38	1
Total	4,515	100

At the time of the census, the land under cultivation included fallow lands; that in permanent crops included land used for tree crops such as coffee and cocoa, and sugarcane. Pastureland included improved pastures, and land in forests also included some that was grazed. The remaining land in farms was marshy, arid, and rocky or occupied by buildings and roads.

Most of the farmland in Costa Rica is owner operated (table 5). Approximately 5 percent is used under mixed forms of tenure such as owner-renter or owner-sharecropper. The census indicated that less than 1 percent of the farmland was occupied by squatters, but the unauthorized use of both private and public land by squatters is becoming a problem.

Farms ranging in size from 1.7 to 16.9 acres numbered 20,995 and made up 44.4 percent of the total of 47,286 farms in 1955, representing 142,000 acres of farmland, and only 3.1 percent of the land in farms. This represented an increase in numbers, land, and average farm size in this group, since in 1950 there were 18,976 farms in this size group with a total of 129,000 acres.

Table 5.--Costa Rica: Type of tenancy, area of land, and size of farms under each form of tenure, 1955

Size of farms	Under a single form of tenure							Under mixed tenure		
	Farmer-owner	Renter	Share-cropping	Free	Unauthorized	Settlers	Other	Farmer-owner and renter	Farmer-owner and share-cropping	Other
Acres	Acres									
1.7-2.4	4,211	220	172	304	84	7	49	111	75	133
2.5-8.4	33,369	1,400	1,265	2,425	806	95	812	3,884	3,350	4,181
8.5-16.9	57,735	1,386	814	1,698	1,673	360	1,396	7,463	5,934	6,871
17.0-25.4	68,174	1,113	368	607	2,551	668	2,056	6,208	5,350	5,616
25.5-33.9	52,384	547	206	353	1,504	145	1,685	4,852	3,253	5,064
34.0-51.0	133,597	766	90	218	4,034	1,124	5,120	9,333	6,699	10,274
51.1-85.1	290,288	1,490	---	946	8,210	305	12,779	14,625	10,765	18,078
85.2-170.3	497,783	766	408	624	6,438	2,182	14,673	18,298	12,811	25,036
170.4-247.1	303,415	631	---	170	2,515	367	6,249	9,057	3,255	13,763
247.2-298.2	112,281	---	---	---	547	290	2,655	3,149	3,226	5,598
298.3-426.1	225,439	341	---	---	---	---	4,320	6,254	2,315	6,182
426.2-485.8	77,813	---	---	---	---	---	853	890	---	2,626
485.9-852.3	358,067	1,784	---	---	---	---	3,168	9,884	1,920	15,048
852.4-1,704.8	368,440	3,850	---	---	---	---	853	10,566	3,044	13,592
1,704.9-2,438.0	173,206	---	---	---	---	---	---	4,159	---	3,584
2,438.1-2,557.3	27,234	---	---	---	---	---	2,523	---	---	2,507
2,557.4-5,967.3	337,123	---	---	---	---	---	---	10,530	---	11,335
5,967.4 and over	894,905	---	---	---	---	---	---	35,641	---	15,493
Total	4,015,464	14,294	3,323	7,345	28,362	5,543	59,191	154,904	61,997	164,981

Source: Censo Agropecuario, 1955. Ministerio de Economia y Hacienda. Direccion General de Estadistica y Censos.

On the other hand, the number of larger farms increased, but the area included and average farm size in this group declined. There were 611 farms of over 852.3 acres each which encompassed 1,918,000 acres, compared with 573 farms this size in 1950, totaling 2,100,000 acres of land. The 611 large farms in 1955 accounted for only 1.3 percent of all farms but took up 42.5 percent of all land in farms.

In this period, the average farm size decreased from 103 to 95 acres or almost 8 percent, reflecting a growing rural population. The trend to smaller farms has likely continued, although results from the 1963 agricultural census are not yet available.

Labor supply.--The labor supply, of economically active persons 10 years of age and over, numbered around 410,000 in 1960. Estimates of the percentage distribution of the labor force according to economic activity in 1960 are as follows: Agriculture, forestry, and fishing, 53.3; manufacturing, 11.9; construction, 4.4; commerce, 8.2; transportation and communications, 3.6; services, 15.6; and all other, 3.0. Provisional statistics from the 1963 census indicated a labor force slightly smaller than this, but the percentage distribution according to economic activity was approximately the same, except for some slight reduction in agriculture.

The productivity of labor generally is low, especially in the output of farm products for home consumption. Improvement in the efficiency of labor and management and in the quality of education could result in substantial increases in output in all sectors of the economy. Realizing this, Costa Rica is emphasizing training for both the labor force and for management personnel. Vocational training (in agriculture, home economics, carpentry, mechanics, etc.) is part of the country's educational program. Secondary school students may select one of three specialized courses for their last 2 years. One of these courses is for vocational and commercial training. An alternative to vocational training is an apprenticeship program for young employed persons. Employers are expected to give preference to applicants who have had vocational or apprenticeship training.

No recent statistics on unemployment are available. At the time of the 1950 census, about 4 percent of the labor force was not employed. Unemployment is becoming a problem, especially in the capital and other urban areas. However, there is a critical shortage of skilled workers and seasonal farm labor. This seasonal shortage usually lasts from about mid-November to January or February, primarily due to labor requirements for the coffee harvest.

The coffee harvest usually provides temporary employment for many unskilled workers. Public works projects also absorb some of the surplus unskilled laborers. But jobs for the unskilled are in short supply because of increasing population pressure, which is also contributing to the increasing unauthorized use of private and public lands by landless squatters. At the same time, the cost of living index for workers' families has risen steadily and in the last quarter of 1963 reached 126.8 (1952 = 100).

Credit.--The principal source of agricultural credit is the National Bank (Banco Nacional de Costa Rica), part of the country's national banking system. Other sources of credit are the other government-owned banks (Bank of Costa Rica, The Anglo Costarricense Bank and the Agricultural Credit Bank of Cartago), the Coffee Office, the banana companies, autonomous and private institutions, and private individuals. Each of the banks is an independent institution, but their major operating policies are determined by the Central Bank.

The National Bank is a long-established agency empowered to provide credit for low and medium income farms. It is reported to have lost only 0.3 percent of its loans through default in

20 years of rural credit operations. Before the Institute of Land and Colonies was established, the National Bank was designated to carry out Costa Rican rural resettlement.

The National Bank makes agricultural loans available on short, intermediate and long term bases. Short term loans usually are made for any productive purpose which can be completed within a year, which is the maximum term for such a loan. Credit for annual expenditures for producing and processing coffee, for improving new banana plantations, and for fattening cattle are examples of short term loans.

Intermediate term loans generally have a maximum length of 5 years. They are made for importing breeding livestock, for buying mobile farm equipment, for planting perennial crops, or for constructing farm buildings.

Long term loans (over 5 years) have a maximum length of 23 years and 6 months. They are available for a number of purposes including planting of perennial crops, buying young cattle for breeding, and constructing farm buildings and irrigation and drainage systems. Loans for the maximum length of time are made for the purchase of farm real estate.

The importance of the small, independent farmer both as the source of much of his country's food supply and for his contribution to the economic stability of the country is recognized. Special agencies known as Rural Agricultural Credit Boards, operated by the National Bank, help meet the credit needs of these numerous small farmers. The first 4 of these Boards were established in 1937; the number has increased to around 50. These agencies are designed to bring adequate, relatively low-cost credit to small borrowers.

Transportation and Marketing.--Although Costa Rica depends in large measure upon its highway system for the movement of people and goods, much of the country is still inaccessible by overland transportation. The highways alone carry 80 percent of total passenger traffic and 70 percent of the freight. Under a steadily increasing flow of traffic, the roads have begun to deteriorate and the road system suffers from inadequate maintenance.

The country has 11,930 miles of highways, roads, and trails. This includes the 410-mile section of the Inter American Highway. Of the total mileage, little more than 700 miles of roads are of concrete or asphalt construction. There are about 1,430 miles of gravel all-weather roads and 9,780 miles of dirt roads.

There are three rail lines in Costa Rica, of which two are common carriers. The third is maintained by the Compania Bananera, a subsidiary of the United Fruit Company. The total length of all railroads is 799 miles.

The British-owned Northern Railway, the main line of which is 103 miles in length, operates between San Jose and Puerto Limon on the Caribbean. There is also a branch line from San Jose to Alajuela, and there are other branch lines out from Limon. The Pacific Electric Railway, an autonomous government institution, operates 73 miles of track between San Jose and the port of Puntarenas on the Pacific. It also operates one short branch line, which extends from San Jose to Alajuela.

The fruit company rail lines (about 329 miles) also act as common carriers. But their main function is to furnish transportation to port for the products of company-operated plantations in the Quepos and Golfito areas.

Several international air carriers serve Costa Rica and nine domestically owned and registered companies provide air transportation within the country. Of the 116 commercial airports listed by the Directorate General for Civil Aeronautics in 1958, only 34 were fully operational and only 4 had hard-surfaced runways. The rest were merely flight strips. El Coco International Airport, about 12 miles northwest of San Jose, has been improved, making it suitable for the operation of jet aircraft.

There are a number of agricultural cooperatives in Costa Rica, including coffee, sugar, milk, poultry and egg, and tobacco producer cooperatives.

The agricultural and industrial cooperative Victoria was one of the earliest producer cooperatives in Costa Rica. It was organized among small landowners in a rich agricultural area. The cooperative operated Hacienda Victoria which had belonged to Germans, and was expropriated during World War II. One of the cooperative's chief purposes is to afford the small farmers of the region a stable market for their sugar and other products.

Another pioneer cooperative is the Tobacco Producers' Cooperative, formed to establish cooperative marketing for tobacco.

All phases of the sugar industry are closely regulated. The Sugarcane Board (Junta de la Proteccion a la Agricultura de la Cana) is the official sales agency. The National Production Council (Consejo Nacional de Produccion) handles exports.

Coffee exports are handled by specialized Costa Rican export firms. Cocoa and banana exports are handled by U. S. producing companies. Local agents of foreign importing firms arrange for exports of other products. Food and minor crops are sold largely in local markets. The largest of these is in San Jose. A chain of supermarkets, recently established, sells mostly goods of Costa Rican origin. In a few more years, the management expects that 95 percent of its mechandise will be of Central American origin.

The National Production Council carries out classification and grading of various crops, provides marketing facilities, and administers marketing controls.

Production Practices.--Throughout the country, methods of cultivation in general are simple, particularly for crops for domestic use. The farmers use such hand tools as the hoe, shovel, and machete. Many of the farms are too small and on too rough a terrain to make mechanization practical. Furthermore, the product of these farms is not sufficient to finance machinery purchases.

In Guanacaste and in certain other sections of the Pacific lowlands where holdings are larger and where there is more flat land, mechanization is fairly common. The 1955 census showed 784 farms using mechanical power, 6,927 using animal power, 653 using a combination of both, and 38,922 using neither.

According to the 1955 census, 5,917 out of the total of 47,286 farms were reported as using fertilizer, of which the greater part apparently was used by coffee growers. Most fertilizer now used in the country is applied by the banana, coffee, and rice growers who use complete formula fertilizers. With the discovery that trace elements are important in the utilization of fertilizer by coffee plants, the application of these elements along with fertilizer became standard practice

in Costa Rica and other countries. The use of trace elements on coffee plantations has increased yields. Coffee pulp is also put back on the land as fertilizer. Pineapple and vegetable growers use commercial fertilizers, which are also applied to pastures in the dairy cattle areas. Use in sugarcane production is increasing.

Through the efforts of STICA. (Servicio Tecnico Interamericano de Cooperacion Agricola) the joint U. S.–Costa Rican service for agriculture (now disbanded) the use of commercial fertilizers has increased in recent years. In 1955, fertilizer imports amounted to 24,542 metric tons. In 1962, imports had increased to 62,139 tons.

Most mixed fertilizers are imported from Germany and nitrate is imported from Chile. A fertilizer processing and mixing plant at Puntarenas began operating in December 1963. Its daily capacity is 150 tons of ammonium nitrate and 400 tons of compound fertilizer.

Fruit and vegetable growers are the main users of fungicides. (Vegetable production is fairly important in the Central Plateau and has been started in Guanacaste Province.) Insecticides and herbicides are used chiefly by cotton and rice farmers. Copper sprays are used by coffee growers to control "ojo de gallo", a disease of coffee trees.

Irrigation has been in use for centuries in Costa Rica. However, as usually practiced--except on banana plantations--it is inefficient and wasteful. The STICA program emphasized the importance of proper planning of irrigation systems. Under STICA guidance, such systems suitable to the needs of rice were put into operation, and the sugarcane planters of Guanacaste are becoming increasingly interested in irrigation for their crops. Bananas have been irrigated in the Pacific Coastal area for some time. Only 2 percent of all farms were reported as using some type of irrigation in 1955.

Government policies.--The expansion of agricultural production and improvement of cattle herds are the most important aims of government agricultural policy. Carrying out agricultural policy is the job of the National Production Council, originally established under provisions of two laws--Number 26 in November 1943 and Number 110 in July 1944. The Council was made responsible for estimating production of staple food commodities and arranging for their importation when necessary to avoid shortages or speculation. Upon the recommendation of the Council, the Central Bank authorizes the purchase or importation of seeds, fertilizers, insecticides, fungicides, agricultural implements or machinery, and other items essential to the promotion of national agricultural output. Also upon recommendation of the Council, the Bank authorizes the exportation of corn, rice, or beans when there is a surplus of these commodities.

The Council maintains support prices on rice, beans, corn, sorghum, and sesame at generally above world market prices and operates storage facilities such as silos, granaries, or refrigerated warehouses for agricultural and industrial products to regulate supplies and maintain prices at reasonable levels.

The Central American Common Market trade agreements are now the basis for Costa Rican trade policy. On September 1, 1963, a new tariff schedule reflecting the provisions of these agreements became effective. The agreements or treaties provide for a common external tariff for member countries, while goods originating in member countries can pass duty-free between the countries.

The tariff rates under the new schedule apply to countries outside the Common Market area, and are lower on the average than the previous rates. The new tariff eliminates surcharges of 15 percent of the c.i.f. value on semiluxury items and 30 percent on luxury items. Certain minor charges remain on a small number of items.

Import licenses are not required, but special requirements are in force for certain foodstuffs and pharmaceuticals. There are no quantitative restrictions, except for quotas on certain items in intra Central American trade. These quotas will be progressively reduced until free trade between the Central American Common Market countries is achieved. Duties are double on goods from countries whose balance of trade during the preceding year was unfavorable to Costa Rica by more than 50 percent. This does not apply to the other Central American Countries or to Panama.

Export licenses issued by the Central Bank are required for all Costa Rican exports. Certain export commodities, such as purebred dairy cows and fresh beef which are subjected to special regulations, require export licenses from other government agencies as well. In addition, there are surcharges on currency conversions of exchange earnings from some export commodities.

AGRICULTURAL DEVELOPMENT

Agrarian Reform

It is traditional in Costa Rica that any citizen may settle freely on public land. As a result of conditions in Costa Rica's colonial period, much of the country's land has, until comparatively recent years, been available to all takers. And it is a commonly held misconception that Costa Rica still has virtually unlimited public lands. In early 1959, figures were published showing that almost two-thirds of the national territory was public land. But a closer look by the Instituto Geografico de Costa Rica toward the end of that same year revealed that less than 20 percent of the country is still available for agricultural development.

Although the extent of public lands has been estimated with a reasonable degree of accuracy, the exact location of these areas is somewhat less widely known and their boundaries are unmarked. Also, a number of holdings within the public domain have been taken over by squatters. Until 1939 this was legal, the only requirement being that the settler live on the land for at least 10 years and cultivate a portion of it.

After 1939, procedures for acquiring land were tightened up, in theory. A series of laws from 1939 to 1959 had the intent of establishing and protecting property boundaries. They spelled out steps that should be taken to gain a legal title to land, and set limits on the amount of land each person could claim. These laws lacked clarity and did little to prevent abuse of the land or to encourage industrious settlers who otherwise might have been successful as colonists.

In October 1961, an important step toward agrarian reform was taken when a decree establishing a Law of Lands and Colonies was signed. The Law provided authority for the State to: (1) Determine ownership of land needing improvement to increase productivity; (2) raise the living standards of small farmers and villagers, which would in turn improve socio-economic conditions throughout the country; (3) assure the proper use and conservation of the country's natural resources; (4) avoid concentration of land in the hands of those who would exploit it, against the best interests of the country; (5) study the feasibility of forming cooperatives to aid the small farmer and to support their formation; and (6) discourage the formation of small fragmented farms.

The Law was to be administered by the Department of Rural Credit, Land Tenure, and Colonization of the National Bank. One year later, a law was signed creating an Institute of Lands and Colonies (ITCO) and transferring to the Institute the duties formerly assigned to the National Bank. In addition, certain portions of the 1961 legislation were revised.

Costa Rica is faced with a number of problems in implementing its agrarian reform program. A major problem is the unequal distribution of land, with a very large number of farms averaging barely 0.4 acre each. Another is the concentration of population in the Central Plateau where most of these tiny farms are located. Still another is the rapidly increasing population, creating new squatter families every day. The number of these families increased from about 3,000 in 1950 to an estimated 20,000 in 1963.

By the end of 1963, ITCO had presented titles to around 750 parcels of land occupied by some 4,500 persons. Each man was given the land he had actually put into production over the years; grants ranged from 7.4 to 49.4 acres in size. ITCO plans to settle 1,000 families each year and is working on legalizing the tenure of families living on land to which they do not hold title.

Irazu volcano began erupting in March 1963. It has jeopardized the livelihood of 500 families in the vicinity. A proposal has been made to relocate these families on undeveloped properties in several parts of the country. Seventy-five of the families are to be settled near Turrialba on land cleared of forest. The others are to be settled near San Vito de Java in the southwest part of the country. The proposal included the use of agricultural commodities from the United States under the Food for Peace Program to help the settlers get their new farms into production.

San Vito de Java is the site of the Italian-Costa Rican colony, founded late in 1952 when 14 immigrant families arrived from Italy. Today, it is an impressive coffee-growing community of 3,000 inhabitants. This colony has spearheaded the opening of underdeveloped regions. It has had its share of failures as well as successes; these can be a source of guidance in planning new colonies.

Participation in the Central American Common Market

Although Costa Rica participated with the other Central American countries in basic preparations for economic integration and signed most of the first multilateral agreements, it was the last country to come into the Central American Common Market, on September 23, 1963. The General Treaty of Central American Economic Integration became fully effective among all five of the countries early in 1964 when Nicaragua and El Salvador ratified Costa Rica's adherence to the General Treaty.

Costa Rica is particularly interested in the supply and price stabilization program for basic agricultural commodities, a regional survey of the quantity, value and ownership of land for tax assessment purposes, and the benefits of the integrated industries program.

The country participated in the first meeting of the Coordinating Commission for Marketing and Price Stabilization, held in Guatemala in February 1964. The Costa Rican delegation reported that the Country's National Production Council had been able to maintain stable consumer prices for corn, rice, beans, and sorghum in Costa Rica despite the abnormal situation caused by the volcanic eruptions. The delegation also reported the adoption of a new policy whereby the private sector is to be encouraged by wider marketing margins to participate more in rice marketing. This would help to relieve the strain on National Production Council's financial and storage facilities.

Although industrial output is still largely geared to the domestic market, Costa Rica plans to establish industries oriented toward the Common Market, with a total population of 12.5 million forecast for 1965. The Central Bank has authorized a $3 million line of credit to finance the exportation of industrial products, mainly to other Central American Common Market countries.

Trade among the Common Market members increased 32 percent in 1963 over 1962. Food products, beverages and tobacco, and fats and oils made up 37 percent of Common Market trade in 1963.

In volume of trade, Costa Rica and Nicaragua are the smallest trading partners in intra-regional commerce. Exports from Costa Rica to other Common Market countries in 1962 totaled $1.7 million, of which $0.7 million was of agricultural products. Of these, the following were valued at over $50,000: Cereals, sugar products, and edible vegetable fats. El Salvador was the chief market.

Imports into Costa Rica from the Common Market totaled $3.3 million of which $1.8 million was of agricultural products. Items with a value of more than $50,000 were: Beans, animal feed, beverages, oilseeds, and cottonseed oil. El Salvador and Guatemala supplied most of the processed agricultural products, Nicaragua most of the live animals and beans.

Costa Rica's participation in Common Market trade should increase with the further advance of economic integration. Agricultural exports to the Common Market which may be expected to increase are: Purebred dairy cattle, dairy products, fresh vegetables, confectioneries, and edible vegetable fats. Imports from the area into Costa Rica are likely to consist largely of processed fruit and vegetables, slaughter cattle from time to time, and crude cottonseed oil.

Other Agricultural Development

A comprehensive, long-range development plan is being prepared. Meanwhile, measures for agricultural improvement and development in compliance with the precepts of the Alliance for Progress have been undertaken. Negotiations are underway for a loan for making a cadastral survey upon which to base an assessment of real property for tax purposes. U. S. Agency for International Development loans, totaling $10 million, have been made to Costa Rican agencies to supply credit to small farmers for improving their operations.

Recently, the tax system has come under close scrutiny and better income tax assessment and collection procedures are in force. However, any real improvement in government income from this source will take some time. The Ministry of Public Works in early 1959 revealed a comprehensive plan for improving, repairing, and extending the highway network. The plan, known as the Plan Vial, covered a 7-year period and called for the construction of 12 new roads at an initial cost of $11.2 million, and improvements to and maintenance of existing highways at a cost of $38.6 million. This plan was later revised to meet requirements of the International Bank for Reconstruction and Development (IBRD), and was extended to cover 8 years.

The IBRD and the International Development Association recently made loans of $5.5 million each to Costa Rica for improving its highway system under the Plan Vial. These loans will be used to construct or reconstruct about 420 miles of national highways and to help finance the importation of highway construction equipment. Highways to be constructed or serviced include two in the San Jose area and one into a rich agricultural region. Until mid-1963, Costa Rica had

been unable to make available the necessary local funds to take advantage of the foreign credit, and the road program had reached an impasse. However, an Agency for International Development loan, authorized in mid-1963 to help finance local costs, is expected to stimulate activity on these projects.

AGRICULTURAL PRODUCTION AND TRADE PATTERNS

Production

Costa Rica produces a wide range of tropical crops, and livestock (table 6). Agricultural output generally divides into two rather distinct categories: Export commodities and domestic use commodities. While total output has increased, export crops generally have made the greater gains.

Export commodities.--Most of Costa Rica's foreign exchange is derived from exports of agricultural commodities. For many years, the principal export crops have been coffee, bananas, and cocoa beans. During World War II, the production of abaca for the U. S. Government became an important agricultural enterprise, but very little abaca is produced at the present time. Live cattle and beef have replaced abaca as the fourth agricultural export in terms of value. Sugar is gaining rapidly in importance as an export, mainly because of larger quotas from the United States.

An estimated 156,000 acres of coffee trees are in production. The 1950 census showed the area in production at 121,000 acres; the 1955 census showed 139,000 acres. There has been little effort in recent years to increase coffee acreage. However, there has been more intensive replacement of dead or unproductive trees. The number of trees per acre has increased from about 635 to 1,100 in some areas.

Table 6.--Costa Rica: Estimated production of principal crops and livestock products, average 1950-54, 1955-59 and annual 1960-63 1/

Product	1950-54 average	1955-59 average	1960	1961	1962	1963
	1,000 metric tons					
Coffee	26	44	70	68	61	60
Bananas 2/	357	277	273	230	292	295
Cocoa beans	6.5	9.4	11.1	12.3	11.5	11.5
Centrifugal sugar, raw	30	40	67	69	88	96
Corn 3/	65	71	76	76	82	83
Beans	11	16	14	19	21	22
Rice	39	42	56	62	60	59
Tobacco	1.0	1.0	.8	1.0	1.4	1.4
Cotton 4/	.2	.9	1.1	1.1	5/ 1.5	5/ 1.6
Beef	27	35	33	30	5/ 30	5/ 32
Milk	134	128	160	163	165	159

1/ Years refer to crop years beginning with year shown, except for bananas, beans, tobacco, beef, and milk. Data for these commodities are on a calendar year basis. 2/ Exports. 3/ ERS estimates. 4/ Cotton Production in Central America. U. S. Dept. of Agr. For. Agr. Serv. FAS-M-154. November 1963. 5/ Data supplied by U. S. Embassy in Costa Rica.

Source: Foreign Crops and Markets Summary tables, except as noted.

Most of Costa Rica's coffee is produced on the Central Plateau in the region around San Jose. Other producing areas are San Vito de Java in the south near the Panama border, San Isidro del General on the Pacific slope of the Cordillera de Talamanca, and the San Carlos region on the northern slope of the Cordillera Central.

Through the efforts of the Ministry of Agriculture, STICA, and the National Production Council, average yields of coffee have increased from around 445 pounds per acre in 1950 to around 775 pounds per acre. This increase has been achieved through more intensive planting, the use of higher yielding varieties, the application of trace elements and fertilizer, and other improved cultural practices. Total output for the 1963 crop was estimated at 60,000 metric tons. This crop was damaged by ashfalls from Irazu Volcano, and by insect infestation. The 1963 crop was down 14 percent from the record 1960 crop of 70,000 tons, but was well above 1950-54 average production of 26,000 tons.

Costa Rica's first soluble coffee plant went into production early in 1960. The plant's annual processing capacity is around 5,520 metric tons of coffee beans. Its extraction rate is reported to be 1 pound of soluble product from 3.6 pounds of green coffee. Total domestic consumption of green coffee is estimated at 7,680 metric tons.

Costa Rica is a member of the International Coffee Agreement. The Coffee Office (Oficina del Cafe), representing both government and industry, licenses coffee exports in accordance with quotas established by the Agreement.

Costa Rica has been producing bananas for export since 1881. The first plantings were made along the rail line between Puerto Limon and the Reventazon river near the Caribbean coast. Production reached a peak in 1908 but then waned during the 1920's and 1930's. By the late 1930's, exports had almost ceased, due to increasing inroads of Panama disease.

In 1935, the Compania Bananera de Costa Rica, which had been the chief exporter from the Caribbean coast, became interested in initiating banana culture under irrigation on the Pacific coast of Costa Rica. The first plantings were made at several points along the coast near the present port of Quepos. Later, the plantings extended into the valleys of the Terraba, Esquinas, and Coto rivers.

Until banana plantations were re-established on the Caribbean coast in 1957 by another fruit company, these Pacific coast areas furnished all of Costa Rica's banana exports. The banana diseases--Panama, sigatoka, and moko--are prevalent in the Pacific area. The area is also subject to devastating windstorms which frequently destroy huge quantities of banana plants and bananas ready for harvest.

The company operating in the Pacific zone has released figures showing that it owns 132,000 acres of land and leases 21,300 acres. Of this total of 153,300 acres, approximately 28,000 are in banana production and 30,000 are held in reserve. The remainder is watershed, pasture and timberland.

The Caribbean coast operation includes about 4,500 acres owned by the company. In addition, the company has contracted to buy the output of about 450 acres owned by independent producers. Rich soils and good climatic conditions, including the absence of strong winds, are favorable factors for banana production on the Caribbean coast. However, sigatoka disease and insects are present. Panama disease is not a problem due to the high degree of resistance to this disease of the Giant Cavendish banana, planted exclusively in this area.

The estimated exportable production of both companies for 1963 totaled 295,000 metric tons compared with 1950-54 average exports of 357,000 tons. Exportable production in 1964 is expected to top 1963 by about 36 percent.

Cocoa beans are the third ranking source of foreign exchange for Costa Rica. Commercial production is largely centered in the Province of Limon near the Caribbean coast, although experimental plantings have been made in various other sections of the country. The 1955 agricultural census showed that of a total of 3,146 farms producing cocoa beans, 2,115 farms were in Limon. There were 48,700 acres planted to cocoa trees of which 42,800 were in Limon.

More recent estimates place the number of cocoa growers in Limon at 2,500 and area in production at nearly 50,000 acres. The Compania Bananera also has cocoa plantings near Quepos on the Pacific side. In 1960, exports from this area amounted to 6 percent of total cocoa bean exports.

Total production of cocoa beans in 1963 was estimated at 11,500 metric compared with 9,400 tons in the 1955-59 average period and 6,500 tons in 1950-54. Efforts are being made to increase cocoa production by providing more credit, technical assistance to growers in combatting black pod rot, and by providing better grading practices.

The sugar economy of Costa Rica is based on small producers. This is in contrast to sugar production in Nicaragua or Panama, where several large sugar enterprises dominate the industry. There are an estimated 27,000 small cane producers. There are more than 2,000 small mills (trapiches) which produce crude brown sugar for home consumption and 33 larger mills (ingenios) producing centrifugal raw sugar. The sugar industry also affords employment for thousands of coffee workers in the off-season.

Sugarcane is produced in all the Provinces, but the largest areas are in Alajuela, Cartago, and San Jose. Some expansion of area at lower elevations has taken place as the result of a switch from coffee to sugarcane. The Ministry of Agriculture is encouraging the expansion of cane acreage for export sugar at these lower elevations in the North Pacific zone and other zones in the belief that production costs can be lowered in these areas. Production from the Central Plateau, where costs are higher, would be for home consumption.

Area for the 1963 crop of both centrifugal and noncentrifugal sugar was estimated at 128,000 acres, compared with the 1950-54 average of 52,000 acres. Centrifugal sugar production has increased steadily since 1950. Output in 1963 was 96,000 metric tons compared with 30,000 tons in 1950-54. The 1963 crop was down from an earlier estimate of 109,000 tons, due partly to dry weather and partly to darkness induced by ash clouds from Irazu Volcano.

The increase in sugar output may be attributed to expanded acreage, in line with Costa Rica's agricultural diversification policies; to better production practices, including the use of better cane varieties and increased use of irrigation and fertilizer; to the replacement of older milling equipment with more efficient modern machinery; and to the stimulus of increased demand for sugar both at home and abroad.

Costa Rica's quotas for export to the United States in 1964 total 65,922 metric tons compared with 26,309 tons in 1962--before larger quotas were authorized. Costa Rican domestic consumption in 1964 is estimated at 47,628 metric tons, an increase of 6 percent over 1963.

The cattle industry and the production of beef for export are becoming increasingly important to the Costa Rican economy. Cattle numbers are estimated at around 1.1 million head; 60 percent are beef cattle. The beef breeds are mostly Brahman crossed with native cattle. There are some Santa Gertrudis crosses. Charolais cattle have recently been introduced. In 1955 the cattle population was estimated at 705,172 head; almost 40 percent were in Guanacaste Province.

Before World War II, Costa Rica imported slaughter cattle from Nicaragua to supply domestic demand for meat. But in mid-1954, cattle exports were authorized and in 1955, exports amounted to 7,653 head. Exports reached 20,456 head in 1958, but with the opening of a modern slaughter plant in the latter part of 1958, imports again became necessary to supplement the local supply of slaughter cattle for the plant. In 1959, 29,413 head were imported, but imports declined again in 1962 to only 351.

Estimated cattle slaughter was 122,000 head in 1962 compared with 76,621 in 1950-54 and 103,203 in 1955-59.

A new slaughter plant is being built near Alajuela and should be in operation by late 1964. Eventually, this plant will be producing beef for export, but the plant at present has no storage or refrigeration facilities and is expected to produce beef for domestic consumption only.

Domestic Use Commodities.--Costa Rica produces a variety of other farm commodities, most of which are consumed domestically. Among these are corn, rice, beans, potatoes, African palm oil, cotton, tobacco, and dairy products. To these should be added sugar, which, although it has become an important export, is also consumed in immense quantities by the Costa Rican people.

Two corn crops are produced. One is harvested from January to April and accounts for about one-third of the total crop. The other, harvested July through December, is sometimes damaged by heavy rains during the latter part of the rainy season.

The Costa Rican grain trade estimates that roughly two-thirds of the corn supply is consumed as food. The remainder goes into nonfood use, export, or stocks. The carryover usually is not large, since the feed industry can absorb any surplus in excess of human needs.

Estimated production of corn increased from 65,000 tons in the 1950-54 period to 82,000 tons in 1963. Domestic consumption also increased, and imports of 992 tons were made during the first 6 months of 1963. Ashfalls from Irazu Volcano have damaged the 1964 crop in the Cartago area and additional imports are likely.

Two rice crops account for 85 percent of the harvest. The early crop is harvested in August, September, and early October and accounts for about 30 percent of the total crop. The harvest of the main crop begins in the early part of the dry season (December) and averages 55 percent of the crop. A third small harvest is made in February and March and accounts for the remaining 15 percent.

The chief production areas are Guanacaste Province, the Sarapiqui region of Heredia Province, the area around Parrita and Quepos in Puntanenas Province, and a small area near the Panama border on the Pacific side. Rice production increased from 39,000 metric tons in 1950-54 to 62,000 tons in 1961. However, 1962 production was down to 60,000 tons because of decreased acreage, late planting, and reduced yields. Again in 1963, there was a sharp drop, due to dry weather. But stocks were believed to be sufficient for domestic needs until the 1964 harvest.

Rice is not an absolute necessity in the diet of the lower income group and its consumption varies with income. To make rice more widely available, the retail price is fixed as low as possible and the government authorizes imports at the slightest indication of scarcity. Crops used as substitutes for rice and other grains in the diet are bananas, plantains, yuca, and white potatoes.

Beans are produced almost totally by farmers on small hillside plots, with no large scale commercial production. Output usually falls short of domestic needs and Costa Rica is a net importer. Red and black beans are the types preferred by Costa Rican consumers.

Estimated 1963 bean production was 22,000 metric tons, double the output in 1950-54. Through the joint efforts of the National Production Council, the Ministry of Agriculture, and the University of Costa Rica, a high quality seed adapted to local conditions has been developed and is available to farmers. Improved production practices, increased acreage, and guaranteed prices have helped boost output.

Potatoes are produced in the higher elevations of the Central Plateau and are an important food crop in the areas where produced. No recent official estimates of production are available. In the 1955 census, 3,720 acres of potatoes were reported of which 3,405 were in Cartago Province. Production totaled 8,931 metric tons; Cartage produced 8,702 tons. Current production is unofficially estimated at 10,000 tons.

The first commercial planting of African oil palm in Costa Rica was made by the Compania Bananera in the Quepos area around 1949-51. Some 7,100 acres of former banana lands were planted over the 3-year period. Area in palms has increased to an estimated 15,000 in 1964, of which 11,500 will likely be harvested.

Oil is obtained from the pericarp, or fleshy part of the fruit, and also from the kernel or seed. Pericarp oil is used to produce vegetable oil, shortening, and margarine. The kernel oil is exported.

Pericarp oil production for 1963 was approximately 8,200 metric tons. But 1964 output is expected to be down to around 7,500 tons due to dry weather early in the year. Production of kernel oil for the 2 years is estimated at 1,100 and 900 tons, respectively.

Cotton production in Costa Rica has increased in the last decade but cotton is still a relatively minor crop. The 1963 outturn was estimated at 1,600 metric tons of lint cotton compared with 1,500 tons in 1962 and only 200 tons in the 1950-54 average period.

There are two textile mills in the country which produce cotton material used for sugar sacks, clothing, and bed spreads and sheets. These two mills utilize about 1,000 tons of locally produced cotton.

Tobacco leaf production is also relatively minor and is concentrated in several small areas of the Central Plateau. Centers of production of sun-cured tobacco are Puriscal in San Jose Province, Palmares, San Ramon, Naranjo, and Atenas in Alajuela. Flue-cured tobacco is also produced around Palmares, and San Isidro del General in southern San Jose Province produces both sun-cured and flue-cured tobacco. Burley is produced in certain areas of Alajuela, and in Puriscal.

The country's two cigarette companies contract with growers for their crops. The contracts stipulate conditions of sale and the maximum amounts to be purchased. Cigars are produced and consumed in rural areas. An estimated 230 tons of tobacco are used in this home industry; this tobacco is not included in the quotas of the cigarette companies.

Production of all types of tobacco was around 1,400 tons in both 1962 and 1963, an increase of 40 percent over 1950-54. To increase output and improve the quality of their tobacco, the growers are using disease and pest control measures from the time of seedbed preparation through planting and cultivation.

The almost continuous eruptions of Irazu Volcano reportedly have destroyed a large part of the 1964 harvest in the Puriscal district, but the official tobacco agency has not estimated this loss.

Milk production is an important phase of the livestock industry. Milk accounts for an important part of the country's total agricultural output.

Although cattle for milk production are raised in all parts of the country, most dairy farms are located in the Central Plateau and the surrounding mountains. The more moderate temperatures and the much lower incidence of cattle ticks and other insects and diseases make the area well suited to dairy farming. Imported dairy cattle adapt readily to the area.

The first imports of improved dairy breeds into Costa Rica were made in the early part of this century. Imports continued through the years and today the offspring of these cattle have largely replaced the criollo cattle in the Central Plateau and highlands. The preferred breeds in the Central Plateau are Jersey, Guernsey, and Holstein. Dairy herds in the lowlands are mostly native cattle crossed with imported dairy types.

The 1955 census reported 200,823 dairy-type cattle in the country; 187,000 were cows. Purebred dairy animals represented only 2.5 percent of all cattle and 9 percent of the dairy cattle. Of the purebred animals, 44 percent were in Cartago Province.

During 1963, volcanic ash covered large pasture areas, drastically reducing the amount of feed available to dairy herds. Many of the older and less productive cows were slaughtered and some herds were removed to areas outside the Central Plateau. Estimated milk production in 1963 was 159,000 metric tons, down 4 percent from 1962.

A large dairy plant in San Jose supplies the local market with pasteurized milk, nonfat dry milk, cheese, butter, and ice cream. This plant gets its supply of raw milk from the milk producers' cooperative, which has a membership of around 220. Members sell their milk to the plant under a quota system. The plant also purchases milk in excess of quota from producers at a price lower than that paid for quota milk. This milk is processed into nonfat dry milk and purchased by the National Production Council for use in the school lunch program sponsored by the Ministry of Health.

Trade

The trend in Costa Rica's total imports over the past 12 years has been almost steadily upward, the result of a growing demand for capital goods. Imports ranged from $73.1 million for 1951-55 to $113.3 million in 1962 (table 7). Exports have fluctuated considerably but increased

Table 7.--Costa Rica: Value of agricultural and total imports, from the world and from the United States 1951-62

Tariff Group	Commodity	1951-55		1956-60		1961		1962		1963	
		Total	U.S. 1/	Total	U.S.	Total	U.S.	Total	U.S.	Total	U.S.
		Million dollars									
	Food:										
00	Live animals	0.2	---	2.1	0.2	1.0	0.3	0.3	0.3	---	---
01	Meat	.1	---	.1	.1	.1	.1	.1	.1	---	---
02	Dairy products, eggs, and honey	1.2	---	1.8	.4	1.3	.3	.7	.2	---	---
03	Fish 2/	.4	---	.4	.2	.5	.3	.4	.2	---	---
04	Cereals	4.4	---	5.5	3.4	5.1	3.1	5.5	2.9	---	---
041-01-00	Wheat	(.6)	---	(.5)	(.4)	(.5)	(.5)	(.2)	(.2)	---	---
046-01-01	Wheat flour	(3.0)	---	(3.4)	(2.0)	(3.6)	(1.8)	(4.3)	(2.1)	---	---
05	Fruits, vegetables and preparations	.6	---	1.0	.8	.8	.6	.8	.5	---	---
06	Sugar	.1	---	.4	.1	.2	.1	.2	.1	---	---
07	Coffee, cocoa, tea, and spices	.1	---	.1	.1	.2	.1	.2	.1	---	---
08	Animal feed	.3	---	1.2	.9	1.1	.8	1.2	.8	---	---
09	Misc. food preparations	1.6	---	1.6	.8	.7	.6	.2	.1	---	---
11	Beverages	.4	---	.6	3/	.6	3/	1.0	3/	---	---
	Agricultural raw materials:										
121	Unmanufactured tobacco	.1	---	.2	.2	.1	.1	.1	.1	---	---
21	Hides and skins	3/	---	3/	3/	3/	0	3/	3/	---	---
22	Oilseeds	3/	---	.1	3/	3/	3/	.1	3/	---	---
231-00-00	Natural rubber	3/	---	3/	3/	3/	3/	3/	3/	---	---
261-265	Natural fibers	3/	---	.1	3/	.2	3/	3/	3/	---	---
29	Crude animal and vegetable material, n.e.s.	.1	---	.1	.1	.2	3/	.2	.1	---	---
4	Oils and fats	.4	---	.6	.3	1.2	.2	1.7	.3	---	---
	Total agricultural	9.6	---	15.5	7.4	12.8	6.3	12.3	5.6	---	---
	Total imports	73.1	44.6	101.3	51.7	107.2	49.9	113.3	52.6	123.7	60.0

1/ Data not available by country for full 5-year period. 2/ Not included in agricultural total.
3/ Less than $50,000.

Note: Figures in parentheses show value of most important items in group and are included in group totals.

Source: Anuario Estadistico and Comercio Exterior de Costa Rica, Ministerio de Economia y Hacienda, Direccion General de Estadistica y Censos. Compendio Estadistico Centro Americano - Naciones Unidas, Aug. 1959.

from $76.5 million to $93.0 million for the same period (table 8). The trade balance has been unfavorable since 1954. Preliminary and unofficial data indicated a continuing unfavorable trade balance for 1963, with imports totaling $123.7 million and exports $94.9 million.

Exports.--Costa Rica's exports traditionally have been almost exclusively composed of agricultural products. From 93 to 96 percent of foreign exchange earnings come from the sale of farm products abroad. Coffee, bananas, cocoa beans, live cattle and beef, and raw sugar are the chief items. In 1962, the value of these products represented 98 percent of the agricultural total. Coffee is the leading export, with bananas in second place. In the early 1950's, banana exports exceeded coffee by $5 million but in 1955, coffee again regained first place and in 1962 it accounted for 54 percent of agricultural and 52 percent of all exports.

The position of coffee in export trade did not change appreciably between the 1956-60 average period and 1962. However, the value of coffee exports increased from 41 percent of agricultural exports and 40 percent of total exports in 1951-55 to 54 percent and 51 percent, respectively, in 1956-60.

The United States became the chief market for Costa Rican coffee during World War II when England, Germany, and other European markets had to eliminate imports. In 1951, Germany still purchased less than 5 percent, on both quantity and value basis, of Costa Rica's total coffee exports. By 1953, however, Germany had moved into second place as a market. This was the second postwar year in which U.S. participation declined. In 1955, Germany became the largest market for Costa Rican coffee and has maintained that position since.

Higher prices paid by European importers caused the shift in coffee trade, which has continued. There is a marked preference in Germany for Costa Rican coffee because of the better appearance of the green bean to the German consumer who does his own roasting. German and other West European importers are interested only in top quality coffee beans, hence pay premium prices for Costa Rica's highest grade of coffee. Other European purchasers are the Netherlands, Belgium, Italy, Switzerland, Sweden, France, and the United Kingdom.

Banana exports in 1962 totaled $26.9 million or 30 percent of agricultural exports. Shipments to markets other than the United States amounted to less than $30,000. In 1956-60, banana exports totaled $24.8 million or 32 percent of agricultural exports, and in 1951-55 they accounted for 42 percent of the agricultural total.

Cocoa has maintained its place as the third ranking agricultural export in terms of value, despite the rather striking gains made by live cattle and meat exports. Cocoa bean exports were valued at $4.9 million in 1962, a decline of 6 percent from the 1956-60 average but 2 percent above the 1951-55 average.

Costa Rica is actively promoting its livestock industry with special emphasis on beef cattle, in line with its policies for diversification of farm output. There are several meatpacking firms, some owned by U. S. citizens, which slaughter cattle and ship beef, mostly to the United States.

The value of live animals (mostly cattle) and meat (mostly frozen beef) exported in 1962 reached $4.2 million compared with $3.0 million in 1956-60 and $0.4 million in 1951-55. Before 1959, exports were mostly of live cattle, but the opening of a modern meatpacking plant in the second half of 1958 resulted in increased exports of frozen beef. Exports of manufacturing beef totaled 3,778 metric tons valued at $2.7 million in 1962. There were 5,532 tons shipped through November 1963. Exports in 1964 are expected to exceed 6,000 tons. Only 7 tons were exported in 1955.

Table 8.--Costa Rica: Value of agricultural and total exports, to the world and to the United States 1951-62

Tariff Group	Commodity	1951-55		1956-60		1961		1962		1963	
		Total	U.S. 1/	Total	U.S.	Total	U.S.	Total	U.S.	Total	U.S.
		Million dollars									
	Food:										
00	Live animals	0.3	---	1.3	3/	1.9	0	1.4	0	---	---
01	Meat	.1	---	1.7	1.5	2.8	2.8	2.8	2.7	---	---
02	Dairy products, eggs, and honey	.1	---	.1	3/	.1	0	.1	3/	---	---
03	Fish 2/	.2	---	.4	.4	1.3	1.3	.9	.9	---	---
04	Cereals	.3	---	.2	0	3/	0	.1	3/	---	---
05	Fruits, vegetables, and preparations	35.3	---	24.9	20.8	20.9	20.6	27.0	26.9	---	---
051-03-01	Bananas	(35.0)	---	(24.8)	(20.8)	(20.8)	(20.5)	(26.9)	(26.9)	---	---
06	Sugar	.5	---	.6	.4	3.3	3.1	3.0	2.8	---	---
061-01-01	Raw sugar	(.2)	---	(.5)	(.4)	(1.5)	(1.5)	(2.3)	(2.3)	---	---
07	Coffee, cocoa, tea, and spices	35.3	---	47.1	16.3	48.2	19.5	53.6	19.4	---	---
071-01-03	Raw coffee	(30.5)	---	(41.8)	(13.0)	(43.3)	(16.7)	(48.4)	(16.6)	---	---
072-01-00	Cocoa beans	(4.8)	---	(5.2)	(3.2)	(4.8)	(2.7)	(4.9)	(2.8)	---	---
08	Animal feed	3/	---	3/	0	3/	0	3/	0	---	---
09	Misc. food preparations	3/	---	.1	3/	.1	0	.1	0	---	---
	Agricultural raw materials:										
121	Unmanufactured tobacco	3/	---	3/	0	3/	0	3/	3/	---	---
21	Hides and skins	3/	---	3/	3/	3/	3/	3/	3/	---	---
22	Oilseeds	3/	---	3/	0	3/	0	3/	0	---	---
231-00-00	Natural rubber	.1	---	.1	.1	.1	.1	.1	.1	---	---
261-265	Natural fibers	1.9	---	1.1	.8	.4	0	.1	3/	---	---
29	Crude animal and vegetable material, n.e.s.	.2	---	.3	.1	.5	.2	.6	.2	---	---
4	Oils and fats	3/	---	.1	.1	3/	3/	3/	0	---	---
	Total agricultural	74.1	---	77.6	40.1	78.3	46.3	88.9	52.1	---	---
	Total exports	76.5	49.9	81.8	43.6	84.2	48.3	93.0	54.3	94.9	---

1/ Data not available by country for full 5-year period. 2/ Not included in agricultural total.
3/ Less than $50,000.

Note: Figures in parentheses show value of most important items in group and are included in group totals.

Source: Anuario Estadistico and Comercio Exterior de Costa Rica, Ministerio de Economia y Hacienda, Direccion General de Estadistica y Censos. Compendio Estadistico Centro Americano - Naciones Unidas, Aug. 1959.

The value of sugar among agricultural exports increased from only $500,000 or 0.6 percent of the total in 1956-60 to $2.3 million or 2.5 percent in 1962, when raw and refined sugar ranked fourth in value of agricultural exports. Preliminary data for 1963 indicate that sugar exports reached $5.1 million--equal to the value of beef exports.

Other agricultural exports contributing to the total consist of dairy products, eggs, honey, rice, corn, cereal products, a variety of fruits and vegetables, animal feed, miscellaneous food products, raw tobacco, hides and skins, natural rubber, vegetable fibers, a variety of inedible animal and vegetable products, and animal and vegetable fats and oils. All of these commodities represented only 2 percent of the agricultural total in 1962 compared with 3 percent in 1956-60 and 5 percent in 1951-55.

Imports.--Farm commodities make up a relatively small part of growing total imports. In 1951-55, they accounted for 13 percent of the total import value and in 1956-60, 15 percent. However, by 1961 the value of farm products imported had dropped to 12 percent and in 1962 it dropped again, to 11 percent, due both to increases in domestic production and to proportionately larger increases in nonagricultural imports.

The most important agricultural imports in 1962 were wheat flour and wheat, dairy products, various fresh and preserved fruits and vegetables, animal feed, and vegetable fats and oils. Products imported whose value was $300,000 or less included live animals of all kinds, meat, sugar, coffee, cocoa, tea, spices, miscellaneous food products, raw tobacco, hides and skins, natural rubber, natural fibers, and other unspecified animal and vegetable products.

Of the farm product imports, wheat flour alone accounted for 35 percent in 1962, when the value of total agricultural imports was $12.3 million. Wheat and flour together were valued at $4.5 million, or 37 percent of the total. In 1956-60, wheat and flour were 25 percent of total agricultural imports of $15.5 million. This higher figure for 1956-60 reflected larger imports of live cattle, dairy products, fruits and vegetables, and miscellaneous food products than in 1962.

In the import category of dairy products, eggs, and honey, most were dairy products consisting of condensed and evaporated milk, powdered whole milk, cheese, and dietetic and infant foods. The value of imports of these products in 1962 was $0.7 million. Because of a milk shortage in 1964, the Dos Pinos dairy cooperative has placed orders for imports of 120,000 pounds of butter, 50,000 pounds of nonfat dry milk, and 125,000 pounds of dry whole milk to help meet local needs. The Ministry of Public Health has also requested 1.8 million pounds of nonfat dry milk to be used in its institutional feeding program.

The fruit and vegetable classification includes a wide variety of temperate zone fruits both fresh and canned, olives, nuts, potatoes, pulses, hops, onions, garlic, canned vegetables, vegetable soups, pickles, and other vegetable preparations. Imports in 1962 were valued at $0.8 million of which the United States supplied almost two-thirds. In 1962, the Central American Common Market supplied around 30 percent of these commodities; this percentage may be expected to increase as the canning industry expands in the Common Market area.

Imported feedstuffs consist largely of concentrates for dairy cattle and poultry. The United States supplied two-thirds of 1962 imports, El Salvador most of the rest. Imports amounted to $1.2 million in 1962 compared with $1.1 million in 1961, $1.2 million in 1956-60, and $0.3 million in 1951-55.

The value of supplemental grain feeding was demonstrated to dairy farmers who were forced to supply feed for their herds when volcanic ash covered the pastures. This disaster may well pave the way for expanded grain imports, at least for the short run. For the longer run, it may serve to stimulate national grain production. Generally improved livestock technology may also lead to an increase in the use of feed concentrates by beef and poultry producers in addition to dairymen.

The biggest items in the fats and oils category are cottonseed oil and palm oil, which are used by the oil processing plants in San Jose to produce edible vegetable oils and fats, and soap. The steady increase in imports reflects the growing importance of the edible vegetable fats and oils industry in Costa Rica.

Imports of products having a value of $300,000 or less in 1962 remained about the same or declined since the early 1950's. One exception was the import value of live cattle in the 1956-60 period and in 1961, when a substantial quantity of slaughter cattle was imported. These cattle came from Nicaragua and Honduras, which are surplus producers of slaughter cattle. Purebred dairy cattle imports may be necessary to restock herds that have been reduced because of the adverse effects of the Irazu eruptions.

U. S. AGRICULTURAL TRADE WITH COSTA RICA

Total U. S. imports from Costa Rica increased by 3 percent in 1963 over 1951-55, with imports of agricultural products showing approximately the same gain. U. S. exports to Costa Rica, consisting mainly of nonagricultural commodities, increased by 4 percent. Exports of U. S. farm products to Costa Rica also grew by 4 percent.

Imports

Around 1 percent of all U. S. imports of agricultural commodities comes from Costa Rica. Farm products made up 93 percent of total U. S. imports from Costa Rica in 1963. Agricultural imports consisted of coffee, bananas, cocoa beans, raw sugar and manufacturing beef, and were valued at $38.7 million (table 9). In 1951-55, such imports plus minor amounts of unspecified products were valued at $30.4 million but accounted for 98 percent of the total.

The value of coffee imports was down from $15.0 million in 1951-55 to $13.5 million in 1956-60, a period during which the price of coffee declined rather sharply from an alltime peak. In 1961 and 1962, the value of imports increased to $17.4 and $17.1 million, respectively, reflecting record and near-record Costa Rican coffee crops. Imports for 1963 were down to $12.8 million, due both to a lower crop and to the increasing importance of Germany as a Costa Rican market.

Costa Rica is an important source of U. S. banana imports, ranking after Ecuador and Honduras in 1963, when banana imports from Costa Rica were valued at $12.3 million. For the 1951-55 period, such imports amounted to $10.2 million.

Although the value of cocoa bean imports from Costa Rica has been trending downward since 1951-55, there was an increase of $0.6 million in 1963 over 1962, when imports amounted to $2.5 million. This increase reflected higher prices and the improved quality of the crop which made it more acceptable in U. S. market.

Imports of sugar have increased dramatically since 1951-55, when the value was only $0.1 million. A larger U. S. import quota resulted in imports valued at $5.5 million in 1963.

Table 9.--United States - Costa Rican trade: Domestic exports and imports for consumption, 1951-63

Trade	1951-55	1956-60	1961	1962	1963
	Million dollars				
U. S. exports to Costa Rica:					
Lard	1.2	0.4	0.4	1/	0.1
Wheat	.2	.3	.4	.2	1/
Wheat flour	1.3	1.6	1.8	1.7	1.9
Oatmeal	.1	.2	.2	.2	.2
Other grains and preparations	.2	.6	.5	.3	.7
Mixed poultry feed	.1	.6	.5	.6	.6
Dairy products	.5	.3	.2	.2	.5
Vegetable fats and oils	.3	.3	.2	.1	1/
Leaf tobacco	.1	.2	.1	.1	.1
Other agricultural products	1.3	1.3	1.3	1.4	1.4
Total agricultural products	5.3	5.8	5.6	4.8	5.5
Other products	31.9	37.4	36.6	44.6	47.7
Total exports	37.3	43.2	42.2	49.4	53.2
U. S. imports from Costa Rica:					
Coffee, raw	15.0	13.5	17.4	17.1	12.8
Bananas	10.2	8.7	10.8	12.2	12.3
Cocoa beans	3.5	3.4	2.8	2.5	3.1
Beef, fresh, chilled, and frozen	0	1.8	2.7	2.6	5.0
Sugar, cane	.1	.4	3.2	2.6	5.5
Other agricultural products	1.6	1.0	.6	.5	0
Total agricultural products	30.4	28.8	37.5	37.5	38.7
Other products	.7	1.2	2.6	2.4	2.9
Total imports	31.1	30.0	40.1	39.9	41.6

1/ Less than $50,000.

Sources: Report No. FT 410 - U. S. Exports of Foreign and Domestic Merchandise. Report No. FT 110 - U. S. Imports of Merchandise for Consumption, U. S. Dept. of Commerce, Bur. of the Census. Foreign Agricultural Trade of the United States. Econ. Res. Serv., U. S. Dept. of Agr. Several issues, 1957-63.

Costa Rica has tried to expand its beef cattle industry to supply the domestic demand for meat and also to provide an export product to help to lessen its dependence on coffee as a source of foreign exchange. There were no exports to the United States in 1951-55, because Costa Rica was not exporting beef in volume at that time. In 1963, the United States imported $5.5 million worth of manufacturing beef from Costa Rica.

Exports

In the past 12 years, Costa Rica has been a market for $5.0 million to $6.0 million worth of U. S. agricultural commodities annually. Products with the biggest price tag have been lard, wheat flour, wheat, oatmeal and other cereal products, vegetable oils, and leaf tobacco.

High import tariffs and the expanding local vegetable oil industry have about eliminated any Costa Rican imports of lard. U. S. exports of lard to Costa Rica declined from $1.2 million in 1951-55 to $0.1 million in 1963.

The United States is the chief supplier of wheat to the Costa Rican market. U. S. exports of wheat increased from $0.2 million in 1951-55 to $0.4 million in 1961, but they dropped in 1963 to less than $50,000.

Costa Rican consumption of wheat flour and other wheat products is increasing, especially in the more industrialized areas of the country, where per capita income is somewhat higher than in rural areas. U. S. exports of flour increased from $1.3 million in 1951-55 to $1.9 million in 1963.

Exports of oatmeal increased from $0.1 million in 1951-55 to $0.2 million in 1956-60 and have remained at that level. Exports of other grains increased from $0.2 million in 1951-55 to $0.7 million in 1963, while poultry feed exports increased from $0.1 million to $0.6 million. The gains in exports reflect increasing use of feedstuffs by Costa Rican livestock and poultry growers.

U. S. exports of dairy products in 1951-55 amounted to $0.5 million, but dropped to $0.3 million in 1956-60 and to $0.2 million in 1961 and 1962. This drop reflected increased Costa Rican dairy production and stepped-up competition from other sources of supply, chiefly the Netherlands and Denmark.

Tobacco exports to Costa Rica, consisting largely of blending types, have dropped to the 1951-55 level, when shipments amounted to $0.1 million. For the 1956-60 period, the value increased to $0.2 million.

Outlook

Since the small flour mill operated by the National Production Council has been closed for some time, wheat imports in the immediate future will probably continue at about the present level. The government has approved the construction of a new flour mill, but negotiations for starting construction are still incomplete.

Flour imports will likely increase in line with the population trend and the higher living standards that should come with more widespread industrialization. The United States should share in this increase and supply at least half of Costa Rica's flour imports. The use of oatmeal and other cereal food preparations, mixed poultry feed, and other feed grains may also increase slightly with the United States supplying the greater part of these products.

The availability of ever-increasing amounts of cottonseed and other raw materials in the Central American Common Market area has contributed to the decline in U. S. exports of vegetable fats and oils to less than $50,000 per year; in the near future, these exports may cease.

U. S. dairy product exports to Costa Rica consist largely of infant and dietetic foods with a milk base. The outlook is for continued exports at near 1963 levels.

For leaf tobacco and miscellaneous other farm products, the outlook is for continued U. S. exports, also at 1963 levels.

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