
Café Britt, S.A.

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Mr. Steve Aronson, CEO and founder of Café Britt, is faced with the decision of how to promote his company's growth and development through international markets, particularly U.S. specialty coffee markets. This case study refers to a highly innovative and creative company. Café Britt has developed new market segments within Costa Rica. It leveraged its international marketing effort by turning its coffee roasting plant into a major tourist attraction for the rising number of international tourists who visit Costa Rica each year. Traditionally, developing countries have exported a wide variety of agricultural commodities with little or no value added. Costa Rica's coffee is no exception. For almost 200 years, this country has exported green coffee beans. The export product is later roasted by multinational companies and retailed in international markets under different brands. Domestically, Costa Rica's coffee consumption reflects the consequences of an export-oriented industry. Only the lowest quality coffee was destined for domestic consumption, that is, produce that is not of export quality. As a result, Costa Ricans had not been able to learn to appreciate good coffee. They considered coffee containing "fillers," such as sugar or corn, to be good. Given local market characteristics, in 1983 Café Britt foresaw the opportunity to develop a new, high-quality roasted coffee market niche. Its brand quickly gained unquestioned recognition in the domestic market. In 1993 Mr. Aronson was considering what to do about the limited scope for growth afforded by the domestic market's size and potential. Mr. Aronson is also president of other companies that process and export green coffee beans. These other companies exported U.S.\$ 22 million annually. Mr. Aronson felt that given his local success with Café Britt, the growth and development potential of his new company could be a key element for the group's growth. In particular, he realized that he could obtain higher prices and margins per ton if he could sell his own packaged brand of roasted coffee in international

markets. This management case traces the company's local development since its inception. It also discusses its recent incursion into managing tourism within its facilities. In addition, the case provides information about the company's production and supply capacity, international markets for green coffee beans and roasted coffee, and the recent development of specialty coffees in the United States. Toward the end of the case study, Mr. Aronson considers three specific alternatives to market his product in the United States: sell direct by mail to tourists who visit his facilities in Costa Rica; sell to wholesalers; and contract with a large mail-order company to sell his coffee. The case contains sufficient information for a qualitative and quantitative analysis of all the alternatives, as well as an assessment of other options. © 1997 Elsevier Science Inc. J BUSN RES 1997. 38.23-33

One afternoon in October 1993, Steve Aronson, owner and president of Café Britt, S.A., was sitting in his office in Heredia, Costa Rica, savoring a cup of his Café Britt coffee while trying to decide on a marketing strategy for selling Café Britt in the U.S. market for specialty coffee.

Aronson, like other Costa Rican coffee producers, had, for years, been selling only green (unroasted) coffee to the U.S. market. Now, he wanted to increase his sales by exporting a high-quality value-added product to this market rather than just the raw material. His Café Britt brand coffee had created the specialty market segment in the Costa Rican domestic coffee market when it was introduced in 1983 as the first high-quality coffee available to the Costa Rican consumer. In 1993, Café Britt held more than 60% of the Costa Rican specialty coffee market.

Mr. Aronson was confident that Café Britt would have no

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problem competing in the U.S. specialty market on the basis of quality. The dilemma facing Aronson and Café Britt, however, was how successfully to penetrate the market to obtain long-term sustainable growth. The company had already suffered several failures in attempting to gain access to markets in Europe and North America, probably because of inadequate marketing and promotion plans.

Retailers of roasted specialty coffee in the United States included regular supermarkets (a relatively new channel for specialty coffee in 1993), retailers specializing in coffee (e.g., the Starbucks chain), and gourmet food stores. Café Britt was already exporting roasted Café Britt brand coffee to a medium-size wholesaler of gourmet food products, named Gourmet Specialties, that supplied retailers on the West Coast of the United States. He hoped that a high-quality roast such as Café Britt could achieve significant consumer sales in the United States, but he was uncertain, as a small Costa Rican coffee producer, how best to proceed. Aronson thought that one cost-effective way for Café Britt to penetrate the U.S. retail coffee market might be to offer fresh-roasted gourmet coffee straight from Costa Rica through direct mail of the product to customers throughout the United States. He was therefore thinking about expanding Café Britt's operations to include a division that would market Café Britt brand coffee directly to a list of potential customers whose names and addresses had been obtained when they took a tour of Café Britt while visiting Costa Rica. Mr. Aronson was also considering a contract with MBI, a major U.S. mail order house, to market Café Britt gourmet coffee to customers throughout the United States and Canada.

The Global Coffee Industry

Approximately one third of the world's population drinks coffee. In 1992, the European Community (EC) consumed nearly one half of the world's coffee, and the United States and Canada consumed approximately a third. These ratios had changed little since the 1980s. The worldwide coffee market was valued at \$5.3 billion in 1992-93.

The world coffee supply is produced by 60 tropical countries from around the world. Traditionally, about 98% of the coffee exported from these producing countries is unroasted, or "green bean," coffee. Importing countries benefit from the added value of roasting, decaffeinating, and grinding as well as the increase in distribution and marketing margins.

Multinational companies dominate the world market for (unroasted) green coffee. In 1992, 50% of the world's green coffee was controlled by seven large firms: Nestle, Philip-Morris, Kraft-General Foods, Procter & Gamble, Jacobs Suchard, Sara Lee Douwe Eghberts, and Aldi-Einkauf. At the same time, half of the world's processed coffee (roasted in whole beans, ground, instant, etc.) was sold to final retail consumers by five of these companies: Nestle (~16%), Philip-Morris (~15%), Procter & Gamble (~6%), Jacobs Suchard (~6%), and Sara Lee Douwe Eghberts (~6%).

From the time coffee was introduced to the American continent for cultivation in the 18th century, the growth in demand in the countries of the North had consistently outpaced the growth in supply from the countries of the South. Demand growth in both the United States and Canada, however, began to fall off in the 1970s in response to growing competition in the beverage market from soft drinks and a collateral concern about the possibly detrimental health effects of coffee consumption due to its high concentration of caffeine. By the 1980s the world coffee market was flat, with growth in consumption equal to the rate of population growth. Although growth of coffee consumption had averaged 2.1% per year from 1970 to 1990, it had slipped to 1% by 1991 and was projected to remain at that level into the next century. The only segment of the world coffee market that was truly growing was the emerging specialty coffee market that had sprung up on the West Coast of the United States in the 1970s.

In 1989, world supply finally surpassed demand, and the International Coffee Agreement (ICA) of 1983 collapsed. The ICA, in effect since 1962, was created at the behest of consuming countries of the North to ensure a steady supply and price of coffee by placing quotas on producing countries and guaranteeing a minimum purchase price from consumers. Once supply surpassed demand, consuming countries no longer had any use for a mechanism that artificially created higher-than-free-market prices for coffee.

World prices for coffee began to drop, and producing countries responded by immediately pushing their reserves onto the market (further increasing supply) so that they could get the highest price possible before prices fell further. Because newly planted coffee trees take two to three years to come into production, world production and exports continued to grow until the 1991-92 season when they reached their historic maximum of 104 million 60-kg (132-lb) bags of green coffee produced. Table 1 details world and Costa Rican coffee production, price, and earnings figures from 1986 to 1992. Approximately 75% of this coffee was exported. Between 1988 and 1991 the world price for coffee declined by 38%.

Production then dropped dramatically (over 11 million 60-kg bags) between the 1991-92 and 1992-93 seasons as prices continued to fall. By 1993 coffee prices were lower than they had been in 25 years. The 71 million bags of coffee exported by producing countries in the 1992-93 season garnered only \$5.3 billion (U.S.) on the world market. This was down dramatically from \$9.2 billion (U.S.) earned by a volume of exports only 500,000 bags higher in the 1988-89 season.

The low prices of the early 1990s forced coffee producers to look for alternatives to obtain higher prices for their export production. Recently, some 40 major producing countries created an Association of Coffee Producing Countries, set up to withhold from export 20% of their production (net of domestic consumption) beginning October 1993 until green coffee prices reach \$1.98 per kilogram. The group hopes to force importing countries to use up their existing inventories (about 21 million bags, or 3.5 months of consumption) and

Table 1. World Coffee Production and Exports, Domestic Use, and Costa Rican Coffee Exports, 1986-1992

	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92
World market						
Production ^a	81,232	103,285	94,363	97,286	100,487	104,315
Exports ^a	73,316	63,031	71,710	81,172	74,314	77,802
Export value (U.S.\$ millions)	10,656	8,882	9,222	6,673	6,609	5,684
Export value/bag (U.S.\$)	145	141	129	82	89	73
Exports/production	90.3%	61.0%	76.0%	83.4%	74.0%	84.6%
Domestic market						
Export volume	2,488	1,954	2,157	2,377	2,410	2,275
Export value/bag (U.S.\$)	164	158	146	102	112	92
Domestic volume ^a	289	283	309	267	304	257
Domestic value/bag (U.S.\$)	35	35	46	45	60	56
Domestic value/export	11.6%	14.5%	14.3%	11.2%	12.6%	11.3%
Domestic value/export	21.1%	22.2%	31.5%	44.3%	53.1%	60.5%

^aIn thousands of 60-kg bags.

then pay higher prices for new coffee imports. Longer-term price effects are uncertain given the difficulty in monitoring a retention scheme and the exclusion of larger producers.

The U.S. Coffee Market

In 1992 the U.S. market for coffee was the largest of any single country in the world, despite the fact that the U.S. and world coffee markets were flat, per capita consumption had decreased significantly between 1960 and 1990, and total imports had declined from 23 million to 18 million bags over the same period. At the same time, the specialty coffee segment in the United States experienced substantial growth, especially flavored, single-country-of-origin, and organic coffees. There were three segments in the U.S. market: institutional, specialty, and mass. The mass market was supplied by a few large producers. Three companies controlled 68% of the U.S. market sales in 1991: General Foods with 33%, Procter & Gamble (Folger's) with 18%, and Nestle, with 17%.

Per capita daily consumption in the United States fell from 2.6 cups in 1970 to 1.8 in 1986. From 1987 to 1992, the daily average had remained at 1.7 cups per person. Daily per capita consumption of instant coffee had shown an average annual decrease of 7.3% in the 1980s, and regular and decaffeinated coffee showed slight average increases of 0.2% and 0.6%, respectively. Consumption rates declined with younger age. This trend was attributed to the growth of the soft-drink segment, increasing consumer awareness of the harmful effects of caffeine on health, and a decrease in the practice of eating breakfast as a formal meal.

The Specialty Coffee Market in the United States

In contrast to the stagnation in the regular coffee market (mass and institutional), consumption in the specialty market was growing. The specialty market had an average growth rate of

11% to 13% between 1982 and 1992. According to 1991 estimates of the National Coffee Association, the specialty coffee market in the United States was predicted to capture 30% of the total market by 1994 (compared to 17% in 1988). Interest in specialty coffees was growing among consumers during this period. Industry experts speculated that the specialty segment could also attract new consumers that had not been regular coffee drinkers. Table 2 shows the development of retail sales of specialty coffees.

The specialty coffee industry in the United States developed during the 1980s as small retail stores ("coffee shops" and "coffee bars") became popular. These stores processed and sold coffee to consumers sensitive to coffee quality. The stores sold coffee by country of origin and also often offered pastries or packaged coffee to go, depending on consumer preferences. Some of the best-selling coffees came from Kenya, Colombia, Costa Rica, Guatemala, Jamaica, Australia, and India. The specialty coffee retail industry was initially individually owned. By 1992, however, the largest retailer was the Starbucks retail chain that controlled close to 25% of the market through vertical integration of its production and distribution process in 253 stores located throughout the United States.

Table 2. Total Retail Sales of Specialty Coffees in the United States

Year	Sales (U.S.\$ millions)	Annual Growth (%)
1983	210	
1984	270	29
1985	340	26
1986	420	24
1987	500	19
1988	600	20
1989	675	13
1990	750	11
1991	825	10
1992	1,000	12

At the same time, many independent stores continued, but no other chain came close to Starbucks in size.

Coffee sales shifted from supermarkets to retail stores, coffee bars, and mail order during the 1980s. In 1979, 80% of sales were concentrated in supermarkets, and retail stores, coffee bars, and mail order accounted for 20%. In 1989, the supermarket share had decreased to 72%, whereas the share of the other retail channels rose to 28%.

Retailers (coffee shops, coffee bars, and supermarkets) purchased roasted or unroasted whole beans from wholesalers. The retailers then roasted the beans, if they were still green, and sold roasted coffee in whole beans or ground to the final consumers.

Specialty coffees were pure or blended high-quality coffees available in light, dark, decaffeinated, flavored, and espresso roasts. They were grown under the most favorable conditions and were processed according to the highest quality standards. They were marketed by location of origin, as products supporting poor Third World cooperative producers ("Fair Trade" coffees), and as ecofriendly and/or organic. The increasing demand for these types of coffee was the only reason why total coffee consumption remained stable, as the market demand for regular coffee was declining.

As demand continued to dwindle in the remainder of the world coffee market through 1993, numerous producers were trying to figure out how to gain access to this specialty market. Producers needed to have a gourmet-caliber product (hard bean or better), with a rich aroma and low acidity. Then producers needed to find a way to distribute, differentiate, and market their coffee to consumers.

Retail markups of specialty coffees were high. A coffee bar could buy a kilogram of unground coffee from \$4.50 to \$6.50 from wholesalers and sell the same coffee at \$18 to \$22 per kilogram. Coffee types varied widely in price. For example, a kilogram of coffee could be sold at retail for as little as \$13 or as much as \$44 or \$110 per kilogram in the case of exclusive coffees such as the Hawaiian Kona or the Jamaican Blue Mountain.

The specialty coffee segment included consumers that preferred to drink coffee at home. This kind of customer sometimes used direct mail to obtain their coffee. Mail-order companies handled private coffee brands, with prices per kilogram ranging from \$15 to \$18. Some of the gourmet brands sold through direct mail were Brasilia, Nabob, San Marino, Santa Fe, SBC, Peet's, and Medaglia D'Oro. Mail-order companies paid the coffee companies between \$6 to \$7 per kilogram, for a minimum order of 10 tons.

Analyzing the current possibilities of penetrating the U.S. market, Pablo Vargas, financial manager of Café Britt, noted:

Fine coffee retailing is highly competitive because these are very specialized and differentiated market niches that demand a different marketing system. . . . The mail order companies handle the distribution and selling in the U.S.

market, and we could reach an agreement with them on the kind of marketing we want in order to differentiate the product and target it to the desired segment.

In 1992, five Costa Rican companies (Britt, Rey, Transcafe, H y H, Dorado, La Minita) created gourmet "brand names" to compete in the export specialty market. This involved significant marketing investment to create distribution channels and inform the consumer about the specific advantages of a particular brand.

Coffee Production

Coffee originally came from the central-eastern region of Africa, but it was in Arabia that it was first developed as a product during the 15th and 16th centuries. Later it extended to the Middle East and Europe, where it was consumed in the so-called "coffee houses." It was introduced by the English into the Western Hemisphere via Virginia.

A coffee tree begins producing coffee cherries in either its second or third year. By its fifth year, it has reached its maximum productivity. From then on, the tree's productivity will cycle between high productivity for one or two seasons and then low productivity for the following one or two seasons. Although coffee trees can continue being productive until they are approximately 35 years old, their economic production level usually begins to decline rapidly after they are 30. Over the years coffee trees have become more productive and capable of producing higher quality coffee because of the introduction of Green Revolution technologies (e.g., more disease-resistant species, chemical pesticides, herbicides, and fertilizers).

The International Coffee Organization (ICO) had classified the coffee grown in the more than 60 coffee-exporting countries worldwide into four groups according to quality: the mild Colombian coffees (arabica), other mild coffees (arabica), Brazilian and other arabica coffees, and robusta coffees. The arabica type was of higher quality. It was aromatic, with a mild taste and consistent acidity. Arabica beans required great care during growth and were produced throughout the Americas and Asia. Robusta had a milder aroma, and its taste did not have a consistent acidity. It was a hearty plant that did not require great care and was raised primarily in Africa.

Coffee quality decreases between the time it is picked and roasted. Roasted coffee has a shiny appearance, a uniform color, and no blemished, deformed, or rough beans. Experience has shown that these characteristics yield a satisfactory brewed coffee. The quality of green coffee is determined on the basis of characteristics such as size, weight, appearance, bean uniformity, and color. Dense, aromatic, unblemished beans with a uniform blue-grayish green color rank as high-quality coffee (Table 3).

The highest quality coffee in the world (greatest bean density) is grown in volcanic soil at moderately high altitudes. Volcanic soil is acidic and porous, both positive conditions

Table 3. Coffee Quality

1. Contaminating tastes in brewed coffee
"Wood" taste. Particular of old preserved coffees in storage.
"Common" taste. Bad infusion caused by inadequate acidity.
"Sour" taste. Generally found in coffees with a rough appearance.
"Cloudy" coffee. Caused by defective drying in contact with grass or soil.
"Rancid" coffee. Caused by drying irregularities, drying equipment jams, sun drying in thick layers, or temporary storage of wet coffee during drying.
"Berry" taste. Fermentation of pulp caused by delayed drying, excessive heating, or excessively ripe cherries.
"Greenish or green" taste. Taste similar to hay. Common in early-harvest beans.
"Herblike" taste. Excessively "green."
"Strong" coffee. Excessive taste, unpleasant at times. Amber and parchment beans yield this taste.
"Dirty" coffee. Caused by inadequate processing, storage, or transportation.
"Impure" coffee. Unacceptable infusion caused by rotten pulp. Advanced stages yield a sour or berrylike taste. Invariably caused by defective processing or use of contaminated water.
2. Roasted coffee classification
Fine roast. Shiny, uniform, without dull beans.
Good to fine Roast. Shiny, uniform, no dull beans.
Good roast. Between shiny and dull, rather uniform, some dull beans. No other defects such as ears or crushed beans.
Good to regular. Dull, slightly unequal, stained, some dull beans and other defects.
Regular to mediocre. Opaque and unequal, several dull beans, and many crushed beans.
Mediocre. Multiple defects.

Source: A. E. Haarer, *Modern Coffee Production*.

for coffee trees. Coffee usually is grown at altitudes below 1,600 m (5,200 ft). Altitudes higher than 1,600 m can produce very dense and aromatic coffee beans, but it increases the coffee trees' susceptibility to frosts. A frost can destroy an entire coffee plantation for 2 to 3 years. High-quality coffee needs a generous amount of sun and rain.

Coffee Production in Costa Rica

Coffee was first brought to Costa Rica from Africa and planted in 1791. The Costa Rican climate, altitude, and soil were perfect for growing high-quality coffee. By 1820 Costa Rica was exporting two *quintales* (1 *quintal* equals about 45.5 kg) of coffee to Panama per year. After the country gained independence from Spain, the government of Costa Rica gave six hectares (one hectare equals 2.47 acres) of land to every adult male citizen and encouraged them to plant coffee, the sale of which would generate foreign exchange for the country's economic development.

In 1832 Costa Rica began exporting coffee to Chile, which then reexported it to London. In 1845 the country began exporting its coffee directly to London. 1933 marked the birth of the Coffee Defense Institute. The Coffee Office was created by the government in 1948. Its first initiative was to mandate

Table 4. Costa Rican Coffee Production and Export Totals by Year

Season	Total Production (millions of 60-kg bags)	Total Exports (millions of 60-kg bags)	Exported (%)
1989-90	2,453	2,198	89.6
1990-91	2,565	2,270	88.5
1991-92	2,530	2,365	93.5
1992-93	2,620	2,225	84.9
Totals	10,168	9,058	89.1

the planting of the Arabica species of coffee throughout Costa Rica. Production of the highly caffeinated and acidic Robusta species was outlawed. Arabica was generally thought to be the highest quality type of coffee available. Because Costa Rica is small, it decided to grow only the best coffee so as to generate the greatest income from this crop. In 1985 the Coffee Office changed its name to the Coffee Institute, which became commonly known by its acronym, ICAFE.

Since its inception in 1948, ICAFE has exercised tight control over the production and marketing of Costa Rican coffee. It controlled the relations between producers, processors, and exporters. Each year it examined the costs incurred in each stage of production from the farm, to milling, to exportation. Given the world price for green coffee, ICAFE would then fix the export tax level, the minimum price producers could receive, and the maximum margins that exporters and processors could take.

The government of Costa Rica promoted coffee vigorously throughout the country's history. It created banks, railroads, highways, research stations, and so on solely to promote increased coffee production and its foreign exchange earning power. By the mid-1980s, Costa Rica was the most productive coffee producer in the world, obtaining 1,518 kg of milled, high-quality arabica beans per hectare per year. In 1993, the coffee industry had 106,000 hectares planted (23% of the cultivated land in the country), employed 10% of the labor force, provided 10% of total fiscal revenues, and absorbed 8% of bank credit. In addition, coffee export activities played a key role in generating foreign exchange (Table 4).

In Costa Rica, the best coffee (designated "Strictly Hard Bean") is grown at altitudes between 1,200 m (3,900 ft) and 1,600 m (5,200 ft) and gets about 2,500 mm (98") of rain over 155 days at an average temperature of 19°C (66°F). Table 5 shows the classifications and growing conditions of all coffees produced in Costa Rica.

Thirty-five percent of Costa Rican coffee was high altitude or strictly hard bean. The Tarrazu, region from Costa Rica was able to compete with big names such as Jamaica Blue Mountain, Hawaii Kona, Antigua Guatemala, or Kenya AA Superstar in the high-end specialty market.

Costa Rican coffee is generally considered by coffee experts to be one of the highest quality coffees in the world. The climate, soil, and altitude conditions in Costa Rica make it

Table 5. Classifications of Costa Rican Coffee

Coffee Class	Altitude (m)	Rainfall (mm/year)	Rain Days (per year)	Average Temperature (°C)
Strictly hard bean	1200-1600	2,500	155	19
Good hard bean	1000-1200	2,250	160	21
Hard bean	800-1200	2,500	158	22
Medium hard bean	600-1100	3,500	185	22
High grown Atlantic	900-1200	2,750	210	20
Medium grown Atlantic	600-800	2,900	245	22
Low grown Atlantic	300-600	4,000	245	24
Pacific	300-1000	2,250	145	24

possible for the country to produce a high-grade bean. As seen in Table 5, there are eight classifications of coffee bean produced by Costa Rican farmers. The top three hard bean categories make up the highest quality of coffees in the world, but even the other five classifications of Costa Rican coffee production are generally high enough quality to distinguish them from medium-grade coffees on the world market. All Costa Rican coffee is arabica bean, which is generally thought by coffee experts to have the best taste of all three commercially produced coffee species. Costa Rican coffee is sold on the world market in the category of "Washed Milds" or "Other Milds." Costa Rica's 1992-93 harvest yield accounted for approximately 5% of the entire "Other Mild Coffees" group production.

In the 1990s, two trends were restructuring the Costa Rican coffee industry. First, as a result of low international prices, the local industry was increasingly moving toward vertical integration. Shrinking profit margins had put pressure on coffee processing plants either to close or enter into alliances with exporters. Processing plants also bought out roasting companies. Many exporters formed strategic alliances with foreign companies or sold their operations to them. Second, internal trade was being deregulated, which increased competition among local enterprises and forced them to become more efficient.

For decades, coffee was second only to bananas in generating foreign exchange earnings for Costa Rica. In 1985, coffee reached the peak of its importance to the country's economy, accounting for 34% of foreign exchange earnings. The economic, political, and social stability of Costa Rica, combined with international interest in its natural resources, motivated the Costa Rican government to begin promoting international tourism in the late 1980s. By 1991, coffee's contribution to Costa Rica's foreign exchange earnings had shrunk to 16%, and tourism had replaced coffee as the country's second most important source of foreign currency. Total foreign exchange earned from coffee for the 1991-92 season was \$209 million (U.S.). Table 6 shows yearly earnings from the 1987-88 season to the 1991-92 season.

In the 1992-93 growing season, Costa Rica exported 2.2 million 60-kg bags of green (unroasted) coffee, almost 3% of

total world coffee exports. (See Table 1 for Costa Rican coffee production for the 1986-87 through 1991-92 seasons.) Traditionally, more than 95% of the coffee exported from Costa Rica was unroasted. However, because the only part of the world coffee market that was growing was the gourmet/specialty niche, Costa Rica expected to be roasting a higher percentage of the coffee it exported in the coming years.

In 1993, Costa Rica's coffee was processed into dry green beans by just over 100 mills. There were seven major roasters that roasted any coffee that was not exported green. These roasters supplied the domestic market, specific gourmet/specialty export markets, or both.

Environmental Problems of Coffee Production

Most coffee in Costa Rica was grown in mixed agricultural systems rather than monocultures because ownership of coffee farms was dispersed among small producers. In spite of this fact, coffee was still the third most chemically treated crop in the world (behind tobacco and cotton). Chemical use was encouraged by ICAFE as a technological innovation that helped reduce labor costs. Green Revolution technologies such as this were so successful at raising yields that the majority of farmers stopped looking for alternative technological innovations. A common coffee farmer might apply as many as 15 different types of chemicals to his crop in order to fight insects;

Table 6. Total Costa Rican Export Earnings from Coffee by Year

Year	Roasted Exports (V in \$)	Green Exports (millions of 60-kg bags)	Green Exports (V in \$)
1986-87	12,346	2,488	408,000,000
1987-88	27,422	1,954	309,000,000
1988-89	104,807	2,157	317,000,000
1989-90	182,307	2,377	242,000,000
1990-91	164,398	2,410	271,000,000
1991-92	1,245,201	2,275	209,000,000

control molds, rusts, and fungi; kill competing vegetation; and fertilize the coffee.

A significant portion of Costa Rican coffee was also planted in large monocultures that required even greater amounts of chemicals. Monoculture means that only one species is present in a given area. Without natural biodiversity to balance the ecosystem and protect it, monoculture agricultural systems are increasingly vulnerable to pests, diseases, and depletion of soil nutrients.

Coffee monocultures that became popular in the 1970s used a planting configuration known as "full sun," or "hedge-row," coffee. Traditionally, coffee had been grown under shade, but by optimizing the use of Green Revolution chemical technologies producers found that they could expose their coffee trees to full sun and increase their yields per hectare by a factor of 3. Without shade trees to take up space, coffee trees were packed together in much denser planting arrangements than traditional shade planting, and then the plants were bathed in chemical fertilizers, pesticides, nematicides, and herbicides. Today "full-sun" planting is the "traditional" way to grow coffee.

Although yields were lower in a shade planting configuration, the shade trees paid dividends in other ways. They could provide other crops (e.g., bananas, oranges, macadamia nuts) that would reduce the farmer's vulnerability to coffee price fluctuations. Shade trees also fixed nitrogen (an important nutrient for coffee trees) into the soil, prevented soil erosion, protected the leaves from sunburn, and provided biodiversity that protected the coffee trees from pests and disease. Thus, coffee grown under shade required a much lower level of agrochemical intervention.

The traditional coffee monocultures of the 1990s employ large amounts of chemical pesticides, nematicides, herbicides, and fertilizers in order to shield the crops from damage and to maintain favorable growing conditions. Under tropical rains, the chemicals applied to traditional coffee farms wash into watersheds polluting streams, and kill fish, plants, and other creatures. They also contaminate local drinking water supplies used by the human population. Furthermore, because coffee is a hand-picked crop, many workers are inevitably exposed to high concentrations of chemicals for long periods.

In addition, although the government of Costa Rica has long since outlawed the use of chemicals banned for use in the United States and the European Community, many coffee producers openly disobey this law. The deadly herbicide Paraquat that had been outlawed by the United States in the 1970s was still in common use in Costa Rica in 1993. Its use was so prevalent, in fact, that ICAFE included it in the list of five commonly used chemical herbicides that contributed to the average producer's basic cost structure.

Coffee processing also creates environmental problems. Eighty percent of the weight of every coffee cherry is removed through a wet milling process. The fruit pulp, and the cellulose *muselich* are removed in order to obtain two green coffee beans encased in cellulose "parchment." This "parchment" is

then removed before the green beans are roasted. Nearly 3 m³ of solid waste is generated for every 60-kg bag of green coffee produced. Traditionally these solid wastes and their accompanying waste water end up being released directly into adjacent rivers. This is the single largest source of water contamination in Costa Rica; it has been estimated by the EC Action Commission for the Support of Economic and Social Development in Central America that 60% of all river water contamination in Central America is caused by waste released from coffee milling.

The organic material produced by coffee milling fouls streams by significantly increasing the amount of particulate matter in the water. The phosphorous and nitrogen contained in this particulate matter spurs the reproduction of algae and bacteria that can consume them. The population explosion of these creatures caused by this process ends up choking off other life in the river by depriving it of limited oxygen supplies. In addition, because of the presence of fermented coffee wastes in rivers and the large amount of oxygen necessary to oxidize them, the rivers end up becoming highly acidic. High rates of fish kills are common just downstream from a wet mill coffee processor.

In addition to water pollution caused by milling, the coffee roasting process is responsible for producing airborne pollution. In the roasting process, green coffee beans are roasted for at least 15 minutes at temperatures over 260°C (500°F). This process makes the beans emit their internal oil, producing the characteristic deep brown/black color of the roasted beans. At the same time, roasting creates a black smoke of carbon dioxide, water, coffee oils, and particulate coffee matter that is often released directly into the air unless catalytic converters are used to reprocess these emissions.

Organic Coffee

Organic coffee agriculture involved a return to centuries-old growing methods. Café Britt was the only coffee company in Costa Rica that produced and sold an organic coffee certified by the Organic Crop Improvement Association (OCIA). The OCIA was the most prestigious organic certifier in the Americas. The "green seal" given by OCIA was a certificate from an independent third party guaranteeing that the product was manufactured without chemicals, under efficient conditions that minimized negative environmental impact, and that it was an environment-safe product.

Café Britt provided assistance to independent organic coffee growers in San José, Heredia, and Alajuela on farms of 120 hectares that yielded 4,000 fanegas (a hundredweight, or about 45.5 kg) of coffee berries. Coffee was grown under crop management techniques, including the use of fertilizers and pest controls that contained no chemical or synthetic substances. The objective was to promote ecological and socially healthy agricultural practices as a long-term alternative that would produce noncontaminating health foods. In 1993, approximately 2.5% of Café Britt gourmet production was or-

ganic. It was available to the public only on the Café Britt coffee tour.

According to some studies by the Organic Crop Improvement Association (OCIA), the market for organic coffee in developed countries experienced rapid growth during the late 1980s and early 1990s. Organic coffee inventories were sold faster than supply could be produced because of growing demand in foreign markets. Still, in 1992, the organic coffee market had no more than 0.5% of the U.S. market. The most important brands were Café Altura from Mexico and Café Tierra from Guatemala.

Café Britt

The Café Britt brand was founded in 1983 to produce a high-quality roasted coffee for the domestic Costa Rican market. According to Mr. Aronson, "our company was created to satisfy a domestic market niche that was being disregarded by local companies."

In 1993, Café Britt, S.A., had three subsidiaries headquartered in Heredia: Café Gourmet, S.A., the roaster, grinder, and packer of the Café Britt brand established in 1983; Café Britt Exportaciones, S.A., an exporter for roasted coffee; and Gourmet Travel Agency S.A., the company that runs the Café Britt coffee tour attraction. The existing twin Probat batch roasters of Café Britt had a capacity of 1,600 kg per hour. This is five to six times current capacity usage, and five to ten times the capacity ratings of the other existing grinding and packaging equipment.

Aronson also managed a second exporting company, Granex International, Ltd., that exported green coffee and the two coffee mills that supplied year-round quality green coffee for Café Britt, Belalcazar, S.A., and Tres Volcanes, S.A., allowing Britt coffee to maintain a uniform taste and flavor. These companies were also responsible for the exports and/or trading of some 10% of all Costa Rica green coffee produced, approximately 225,000 60-kg bags, which at current market prices represents over \$22 million of annual revenue and throughput. In addition, Aronson served as an advisor to ICAFE's Board of Directors.

Traditionally, most Costa Rican coffee had been exported, leaving only a small quantity for domestic consumption. There were five grades given to coffee by millers based on appearance and density of the beans. The top three grades were generally exported, and the Costa Rican consumer ended up with coffee from the bottom two grades and remnants of the third grade. As a result, ground coffee that was sold in Costa Rican supermarkets had 12% sugar mixed into the grind to improve the taste. The domestic marketing system required that the beans to be used for the domestic market be delivered to ICAFE so they could be dyed and made unexportable. This was the way, therefore, that domestic consumers came to expect and enjoy their coffee. Costa Ricans believed that good coffee "stained like ink" and was sweet.

Table 7. Domestic Retail Sales by Café Britt, 1992-93

Channel	Volume (kg)	Sales (%)
Coffee tour	105,000	26.3
Airport	21,000	5.3
Supermarkets	210,000	52.6
Hotels and restaurants	63,000	15.8
Total	399,000	100.0

Costa Rica, with a total population of 3.1 million, had the highest per capita domestic consumption among coffee-exporting countries (7.35 kg/year) in 1991 according to ICO). Eighty-five percent of the domestic market was for blended coffee (12% sugar), 12% bought low-grade pure coffee, and only 5% of the population consumed high-quality pure coffee.

Mr. Aronson pointed out that

Costa Rican coffee is paradoxical. On one hand, it is said to be "the golden bean," one of the best in the world. On the other, the overwhelming majority of what is produced and sold locally is of low quality.

According to Mr. Aronson, when tourists came to Costa Rica in the early 1980s, they wanted to taste the delicious coffee for which the country was known, only to be surprised at the quality of the coffee they were served. One of his early objectives was to inform the management of fine hotels about gourmet coffee, the quality of Café Britt, and the importance of such a product in developing a visitor's image of both the hotel and the country.

Back in 1983, Café Britt's initial goal was to become known by supplying their gourmet Café Britt brand to best hotels in San Jose, and to other businesses that served the country's tourists. By 1993, Café Britt supplied the domestic Costa Rican market with 400 metric tons of its gourmet roasted coffee through the following channels: coffee tour, airport, supermarkets, hotels, and restaurants. Domestic sales accounted for approximately 90% of total sales of Café Britt brand roasted coffee. Table 7 illustrates volumes and percentages of domestic consumption by distribution channel.

Café Britt initially tried to distribute its own coffee but found this strategy untenable because of the manpower requirements of servicing and collecting accounts receivable in highly dispersed retail markets (there were no dominant supermarket chains). The company soon found a Costa Rican distributor to handle Café Britt sales to supermarkets while Café Britt maintained control over distribution and servicing of tourist hotels.

The Café Britt brand was distributed domestically through supermarkets and food stores, tourist shops, hotels, and restaurants. In 1993, the average domestic retail price for Café Britt was \$4.63 per kg. Prices of competing "gourmet" brands, such as Café Rey and Café Irazú, were as much as 45% lower. Café Britt was sold directly to tourists at the popular Café Britt "Coffee Tour," the airport, souvenir stores, and on cruise

Table 8. Café Britt Domestic Product Line, 1993

Product	Weight (g)	Presentation
Light roasted	250 and 500	Ground and whole bean
Dark roasted	250 and 500	Ground and whole bean
Roasted espresso	250	ground
Decaffeinated	250	ground

ships docked in the Costa Rican harbors of Limón and Puntarenas. As shown in Table 8, the company produced four main products for the domestic market.

These varieties were also available in export packages equipped with a special valve to better preserve the coffee's taste. In 1993, the average price for these export packages was \$7 per kilogram. There was also a tourist presentation of 250- to 500-g bags and a small box with four 250-g units ("Britt Pack").

As the years went by, Café Britt organized their marketing operations into three functional areas: retail stores (through traditional domestic supermarkets), institutional (products were packaged for other companies), and tourism or nontraditional marketing (the coffee tour and coffee products sold to tourists). Café Britt also hired more qualified personnel to educate potential customers about gourmet coffee. The financial results for the Café Britt subsidiary producing the gourmet Café Britt brand, Café Gourmet, S.A., during its first seven and a half years of using this marketing and distribution strategy are shown in Table 9.

In 1992, there were about 20 brands in the Costa Rican domestic coffee market. Café Rey and Café Dorado accounted for 60% and 20% of Costa Rican sales, respectively. Café Britt only had a 2% share of the total market, but had focused only

on the specialty coffee segment, where the company had a 60% market share. A 1991 study carried out by the Business Advisory Service on the domestic market revealed that 72% of the people interviewed were able to recognize the Britt brand, but only 5% actually ever drank Britt coffee.

Café Britt and the Export Market

Café Britt's experiences from 1983 to 1987 enabled the company to consider exporting their roasted gourmet coffee, based on: domestic recognition of the brand as a top quality coffee, excellent relations with producers and processing plants that ensured a reliable supply of high-quality raw materials (unprocessed coffee), and a stand at the Juan Santamaría International Airport that promoted Café Britt to arriving and departing tourists.

Thus, in 1987, Mr. Aronson decided to look into the opportunities that the international market offered for Gourmet coffee. Café Britt Exportaciones, S.A., was created with the purpose of processing and selling Café Britt for the international market. The next 4 years were spent attempting to open export market channels. The company set up distribution offices all over the United States, Canada, Chile, and Europe. At the end of 1991 and the beginning of 1992, three truckloads were exported to Spain (for participation in Sevilla's Expo), Chile, and the United States. Café Britt was sold in a few small gourmet food shops and fine restaurants in the United States and Canada but they couldn't obtain any big accounts that would enable them to achieve significant market penetration. Almost all of their distribution offices were then closed.

Actual exports were sold through Gourmet Specialties, a gourmet food distributor in California that supplies retailers

Table 9. Café Britt Subsidiary, Café Gourmet, S.A., Summarized Financial Statements (in thousands of colones)

	1986	1987	1988	1989	1990	1991	1992	1993 (May)
Balance sheet								
Current assets	1,137	3,155	4,439	7,493	25,051	31,177	46,778	52,496
Fixed assets	1,005	1,378	7,428	6,798	5,994	57,416	109,771	153,094
Other assets	528	2,520	2,926	547	669	880	7,694	2,068
Total assets	2,670	7,053	14,793	14,838	31,714	89,473	164,241	208,198
Current liabilities	2,700	7,029	9,786	12,043	27,022	6,662	81,344	51,757
Long-term liabilities								71,183
Net worth	-30	24	5,007	2,795	4,692	82,811	82,897	85,258
Total liabilities and net worth	2,670	7,053	14,793	14,838	31,714	89,473	164,241	208,198
Profit and loss statement								
Net sales	1,818	1,553	7,621	21,431	27,615	66,132	127,393	139,463
Cost of sales	935	950	4,371	14,054	14,101	37,082	68,978	71,787
Gross profit	883	603	3,250	7,377	13,514	29,050	58,415	67,676
Operating expenses (inc. financial cost)	1,008	620	3,438	7,384	10,694	28,395	57,059	60,006
Other expenses	0	1	0	0	1,586	2,333	1,458	4,476
Other income	56	4	179	107	605	2,130	358	1,056
Profit or loss	-69	-14	-9	100	1,839	452	256	4,250
Exchange rate	72	98	107	111	129	135	137	151

Table 10. Café Britt Subsidiary, Britt Exportaciones, S.A., Summarized Financial Statements (in thousands of colones)

	1990	1991	1992	1993 (May)
Balance sheet				
Current assets	54,045	109,856	77,562	64,256
Fixed assets	57,350	77,226	154,841	114,703
Other assets	2,498	0	5,634	8,329
Total assets	113,893	187,082	238,037	187,288
Current liabilities	66,575	57,427	26,351	41,452
Long-term liabilities	43,696	59,498	141,479	94,022
Net worth	3,622	70,157	70,207	51,814
Total liabilities and net worth	113,893	187,082	238,037	187,288
Profit and loss statement				
Sales	1,197	25,361	67,432	38,027
Cost of sales	2,115	15,899	42,544	24,992
Gross profit (loss)	(917)	9,462	24,888	13,035
Operating expenses	340	5,532	18,156	10,833
Other income	0	4,688	1,294	—
Other expenses (inc. financial cost)	0	17,695	7,954	1,505
Net loss	(1,258)	(9,077)	72	697

such as the Safeway food stores, and through two small Café Britt distribution offices in Boston and Montreal, which sold coffee primarily to fine restaurants and a small number of gourmet food shops. As a nontraditional exporter of roasted coffee, Britt enjoys three types of government support: export promotion certificates (CATs, with a market value of approximately 10.5% of the FOB export invoice), 100% income tax exemption in exports and import duty exemptions, and accelerated depreciation for machinery and equipment. These benefits expire in 1996. Table 10 shows the financial standing of Café Britt Exportaciones, S.A., for the last 3½ years.

Aronson also exported 3,500 metric tons of gourmet quality coffee as unroasted green beans, and 4,000 metric tons of regular quality green beans to large multinational food companies like Procter and Gamble (Folgers) through his other companies.

Using Tourism to Open Up Export Markets

In 1991, while continuing the search for a differentiation strategy that would open export markets, Mr. Aronson noticed that since the then-President of Costa Rica, Oscar Arias, had received the Nobel Peace Prize in 1987, international tourism to Costa Rica had been growing steadily. In addition, a large number of these tourists came from the big coffee-drinking countries, such as the United States and Germany, that had thriving specialty-coffee industries.

Aronson felt that few of these tourists knew it was Café Britt that they were enjoying at breakfast in their hotel. He explained,

Tourists mentally associate Costa Rica with the world's best coffee and we wanted them to associate that with the Britt

brand. Then when they return to their home, they will want to try and find Britt coffee in their gourmet and specialty coffee shops.

Café Britt needed a way to draw further attention to itself so these tourists would not only take the coffee home when they left but also would tell their friends about how wonderful Café Britt was. Mr. Aronson came up with the idea of a "Coffee Tour" for foreign tourists to Costa Rica as a means of penetrating the international market.

Everything started when I took some tourist-sector businessmen to my farm, where they was a processing plant and an abandoned coffee plantation. At that time, I showed them how the plantation could be transformed into a tourist attraction.

Mr. Aronson managed to convince them of the tour's potential and soon started tour operations on November 15, 1991. Tourist activities were initiated by the Gourmet Travel Agency. A bilingual (English-Spanish) tour was offered on the grounds of Britt's main production facilities, led by actors dressed in traditional Costa Rican coffee farming garments, and it included one of Café Britt's coffee farms and the company's production facilities. The tour also included a slide presentation on coffee history in Costa Rica and an opportunity for participants to taste and buy Café Britt coffee and other products. Tour facilities included modern rest rooms, lookout points with impressive panoramic views of the Central Valley volcanoes, ample parking space, transportation, and credit cards accepted as payment for the tour and the company's products. Mr. Aronson noted that

given the potential offered by the tourist market and the success achieved from the outset, the "Coffee Tour" represented a growing segment for Café Britt as well as one of

the most successful activities of the international market penetration process.

Rocío López, the employee in charge of the "Coffee Tour," commented,

It was difficult at first to convince national and international tourist operators about the project. However, in a short time, the activity was publicized in large magazines and the company was able to make contacts with international tour wholesalers. . . . Indeed, the Coffee Tour has played a key role in the development and promotion of Café Britt's image nationally and internationally.

The number of visitors to the tour each month increased from 127 to 700 between November 1991 and September 1992; an additional increase to 30,000 annual visitors was estimated for 1993. This represented more than 4% of all tourists traveling to Costa Rica in 1993.

Strategic Options for Increasing Exports of Roasted Coffee

As 1993 drew to a close, Steve Aronson saw three options for Café Britt to try to increase its exports of roasted coffee to North America beyond the volumes that Gourmet Specialties and the Café Britt distributors in Boston and Montreal could handle. Café Britt could use the mailing list of approximately 20,000 names it had compiled from visitors to its coffee tour and attempt to export coffee directly by mail to these potential customers. They could also try exporting to a wholesaler that would then take care of product distribution in North America. Finally, they could try exporting Café Britt coffee through a mail-order company that specialized in direct mail sales of all types of products.

Directly exporting Café Britt to customers from the coffee tour appeared to be an attractive alternative because it would allow Café Britt to obtain higher price for their product because they would be selling it directly to the final consumer rather than through a middle man. This strategy also avoided advertising expenses and point-of-sale competition. It also ensured a strong relationship with the final retail customer that could greatly enhance their brand loyalty. Café Britt estimated by that directly exporting their product to foreign customers, they could sell 1,000 kg of roasted coffee per month through this channel at a price of \$18 per kg. They estimated that they would incur monthly costs of \$7,740 from freight, insurance, and distribution expenses.

Unfortunately, Café Britt did not have a consumer data base set up to cross-reference names, addresses, and purchase histories. They only had a list of names and addresses entered into their records. Café Britt believed that market testing of this strategy was beyond their capabilities, and the logistics involved with dealing with every consumer individually might prove very costly. The company might also find itself unable to comply with import/export requirements or to satisfy con-

sumer service needs. In addition, Britt had no experience in this type of marketing.

Exporting Café Britt directly to a wholesaler was intriguing because this arrangement could offer the company a high sales volume because of the wholesaler's large base of retail customers. A wholesaler could also lower the distribution risks involved with exporting to a foreign country. Britt would have no advertising or promotional expenses. The company estimated that it could sell 7,500 kg of Café Britt to a wholesaler each month, at \$5 per kg. They estimated that their costs from this strategy would come from payments for freight, insurance, an importer, and wholesaler services, amounting to \$19,075 per month.

The negatives to exporting directly to a wholesaler were that it would mean a lower price for Café Britt's products (\$5 per kg), the wholesaler had little ability to follow up on sales, and this might lead to slow turnover at the point of final retail sale. Another drawback to this strategy was the fact that Britt was a small-volume producer, and the advantages of using wholesalers were usually proportional to the volume involved.

The final export strategy that Aronson was considering was to negotiate a contract with a U.S.-based mail order company to sell Café Britt through a direct mail catalog. Britt had already had some negotiations with MBI, a major U.S. mail-order house, in the summer and fall of 1993. MBI offered logistics experts, a consumer data base system that they could make available to Britt, experience conducting market tests, and excellent experience with marketing management and coordination. These attributes would allow Britt to do what it did best: focus on producing the highest quality coffee possible. Café Britt was expected to sell 12,000 kg of roasted coffee to MBI each month, at a price of \$7 per kg. The company estimated monthly costs for freight and insurance at \$12,600.

The major drawback with using MBI was not just the lower price (\$7 per kg) that Britt would receive from MBI, a price that was still higher than it would get if it went through a major wholesaler, but the need to prove to MBI that Café Britt had the necessary production capacity to supply a high volume of high-quality coffee, consistently, should the market tests prove successful. If the tests were successful, MBI had indicated that they would need a minimum of 500 tons of roasted Café Britt per year in order to offer the coffee in its full mailing to its 4 million catalog recipients. In 1993, Café Britt produced a total of 450 tons of Café Britt brand coffee per year for its domestic and export customers.

In 1993, Café Britt was not considering moving a major part of its production to organic coffee. They felt that this would be a difficult strategy to implement within their system of independent growers. More important, they thought that it would threaten their relationships with specialty retailers, an overwhelming majority of whose sales were nonorganic.

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