

Kenyan Coffee: the vanishing delicacy

"All I know is that we're paying good money for good coffee, and the farmers are abandoning their farms. It makes no sense."

Jerry Baldwin, Peet's Coffee and Tea

"Coffee is very hard work, pruning the bushes, spraying them, and you have to hire people to help you harvest. It is not worth it at these prices."

Joseph Wahome, Nyeri, Kenya

Coffee in Kenya.

Kenya sits on the equator on Africa's east coast along the Indian Ocean. Its central plateau is cut by the Great Rift Valley. The land to the north is desert, while to the east lies a fertile coastal belt. The total land area is 218,907 sq. miles and has a population of 28.8 million.

The climate is mostly equatorial, but influenced by monsoons and the Indian Ocean tradewinds. The long rainy season is from March to May and a shorter rainy season arrives between October and December. The dry season stretches from January to March.

Coffee cultivation in Kenya began in about 1900 when the Fathers of the Congregation of the Holy Spirit brought Arabica coffee trees from Ethiopia to be planted near Nairobi. From this initial plantation of about 250 hectares, the industry has grown considerably and an estimated 160,000 hectares are now devoted to coffee. The main harvest occurs between December to July, but harvesting can be observed year-round on Kenyan plantations.

The Arabica Tree.

The tree measures between 3 and 5 meters high and can grow to about 10 meters in height. However, during cultivation the tree is pruned to around 2 meters in height to permit regular flowering and easier harvesting. Depending on the variety of the tree, the trunk is between 8 and 10 centimeters in diameter. The roots of the tree reach 1.50 meters in length. The leaves of the tree vary in color depending upon the stage they are in: a yellow-copper when first budding, clearer green when young, and a dark green when mature. After four years, a tree reaches adult age and is then able to produce flowers, which then produce the berries. The flowers are white, bloom in groups of 8 to 15 bunches, and emit a light fragrance, reminiscent of jasmine. The flower remains only long enough to be pollinated and begin gestation, which lasts close to 7 months and produces a fruit called a cherry. At 25 the tree becomes old, and is usually replaced in the

coffee plantations shortly thereafter. If not uprooted, the tree may live to be 100, albeit less productive than when young. Numerous varieties exist within the species Arabica due to mutations caused by ecological differences in the regions where the trees are grown.

The coffee plant cannot stand frost but does not die from an occasional cold night. Its water needs are suited to locations with average annual rainfall of 160 centimeters . Coffee plantations are normally situated in the altitude range of 300-2000 meters around the Equator.

The Coffee Harvest in Kenya.

Each cherry is picked when ripe, in seven harvests, and the beans are extracted using the damp method. The beans, with their protective skin (the parchment), are proposed each week at public auctions, in batches of 6 to 7 tons on average. Each batch is tasted and graded: its quality is indicated by precise symbols (AA, AB, C...) based on the size of the green coffee beans, from the smallest to the biggest. This ritual is organized by the Coffee Board of Kenya at the Nairobi Coffee Exchange. After depulping and drying, the coffee is treated in three factories in Nairobi, where it is de-skinned, sorted, graded and tasted before being offered for auction.

All coffee produced in Kenya is marketed on behalf of the planters by the Coffee Board of Kenya through an organized and open weekly auction in Nairobi. After tourism and tea, coffee is the most important foreign money earner for Kenya today.

Descriptions of Kenyan coffee

According to Rashid Moledina & Co. of Mombasa, Kenya: Kenya AA: Grown along the foothills of Mount Kenya with perfect climate, altitude, deep red volcanic soil, production and processing methods and strict standards enable us to pick and select some of the most prized lots from the weekly auctions and offer them to you in an intact form as an individual parcel of between 30 – 100 bag lot. These coffees have the absolute perfect balance of body and acidity with that extra richness and intense black-currant flavor, and are often rated Class 1 or 2 out of the 10 different classification ratings set by the Coffee Board of Kenya. During the last few years, we have been very aggressive in selfishly buying the very best lots available at record-breaking prices. We definitely do not believe in raising the prices of coffee artificially but with the same token will not give up our quest for buying the absolute best for our most discriminating buyers such as Allegro Coffee Co., Boulder, Co and Peet's Coffee & Tea, Emeryville, CA.

Starbucks ad, online, 3 August 2001 “Our Kenya drinkers may be the most devout of coffee loyalists. Medium-bodied Kenya has layers of flavor for you to encounter. At first sip, you'll detect an essence of black currant or blackberry - next, you'll note sweet, tropical fruit flavors. The coffee reflects the African sun in its bright and refreshing acidity. “ 1 lb./0.45 kg \$10.75

Dan Cox, president of Coffee Enterprises of the United States: "Kenyan coffee has always been the model of consistently high-quality coffee. It's the difference between buying a Chevy and buying a BMW."

Current stress in the Kenyan coffee market (quoted from Tomlinson).

Farmers in Kenya's coffee-growing region of Nyeri, 65 miles north of Nairobi, have been losing money on coffee for the last three years. They can no longer afford to give their plants the care required for top-quality beans, instead choosing to plant red beans and corn between the 8-foot-high coffee bushes. Many have abandoned coffee entirely. "Coffee is very hard work, pruning the bushes, spraying them, and you have to hire people to help you harvest," said Joseph Wahome, 27, who is planting beans and potatoes among his 120 coffee bushes. "It is not worth it at these prices."

The third-generation coffee farmer used to take pride in growing 1,500 pounds of top quality beans a year, but the corruption he sees around him has dampened his spirits. Wahome is part of a cooperative of thousands of members and a dozen processing plants, which supplies farmers with fertilizers and anti-fungal sprays. Wahome takes his coffee berries to a nearby factory, where the fruit is stripped away and the seeds, or beans, are fermented. After being dried in the sun, the raw beans are shipped to millers for final processing.

The cooperative takes the pale green beans to an auction run by the Coffee Board of Kenya. A sample of each lot is graded, roasted and tasted by board officials and the exporters who bid every Tuesday in downtown Nairobi. When a lot number appears on the computerized board above the auctioneer, more than 80 exporters push buttons to make their bids. The product of six months of a farmer's life is sold in less than 45 seconds. In recent weeks, Kenyan AA coffee has fetched an average \$1.50 a pound at auction. Not long ago, exporters paid up to \$10. But after the board and the cooperative deduct taxes and fees, farmers get a penny a pound. The growers say the cooperative officials, who did not want to be interviewed, remain wealthy. "Every year they have a new car, and we go two years without being paid," said Wahome.

Nyeri farmers say that last year some of them went to a meeting of their Riko Cooperative to demand better accounting and were met by hired thugs backed up by police. They say the thugs then beat up the organizers, set their homes on fire or uprooted their coffee plants. No arrests were reported, and the farmers haven't tried to organize since. Phone calls to Riko's offices, as well as a visit there, failed to produce any official willing to be interviewed. But the spokesman for the Coffee Board of Kenya, charged with running Kenyan coffee's central auction system, was less reticent. "Corruption is the biggest problem," John Checkar Irungu said. The board deducts 20 percent of the auction price for taxes and milling charges, and the farmer ends up with 10 percent, he said. "The problem is not with the farmer, not with the Coffee Board, but with the bad management at the cooperative," Irungu said in an interview.

The Coffee Board, while having no direct control over the cooperatives, is looking for ways to pay farmers more directly to avoid "diversions" of payments, he said. But the proposed changes have met with stiff political resistance, he added

U.S. policy is in part to blame for the crisis in coffee-producing nations like Kenya, said John Talbot, a sociology professor and coffee expert at Colby College in Portland, Maine. Trade liberalization efforts by the Reagan administration forced the collapse in 1989 of the International Coffee Agreement, a pact between coffee producing and consuming nations that for decades kept prices relatively high or at least stable.

At the same time, the World Bank provided Vietnam with loans to plant huge amounts of low-quality coffee. The Southeast Asian nation went from a marginal player to surpass Colombia this past year as the world's second-largest producer, behind Brazil.

Those two nations have flooded the market with robusta beans, used in inexpensive blends and instant coffees. When the price of low-quality beans fell, so did that of arabica beans, used in higher-quality blends. The managing director of C. Dorman Ltd., the largest exporter of Kenyan AA coffee to the United States, said fierce competition among exporters and low prices have hurt. The exporter collects a 2 percent markup from the auction price.

"Of the major firms, 10 out of 20 have gone bankrupt or got out of the coffee business," said Jeremy Block, who sells his coffee through a New Jersey agent. After the exporter buys the beans, they are loaded onto ships in the Kenyan port of Mombasa for a monthlong journey to U.S. ports.

Roasters pay \$1.65 a pound, which includes agent fees and transportation and warehouse costs. Though his clients include Starbucks and Nestle, Block's agent said he made only 2 to 3 cents a pound. The roasters spend a dollar a pound to roast the beans, which lose 20 percent of their weight in the process. Adding in warehousing, packaging and insurance costs, the roaster sells the coffee to retailers for \$4 to \$6 a pound. Thanks to the specialty coffee craze, retailers double or triple that price.

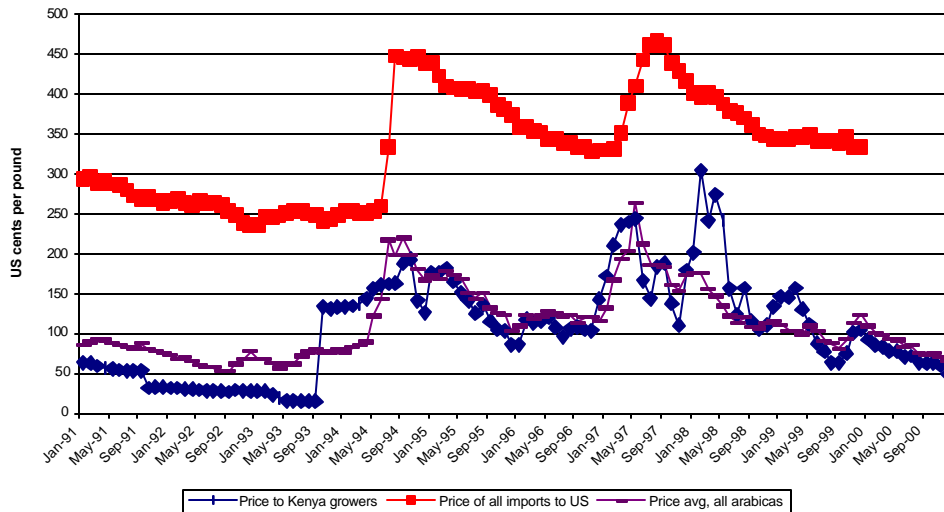
"The farmers have not generally seen an increase in income from the gourmet coffee boom," said Deborah James of Global Exchange, a San Francisco-based advocacy group. It campaigns to get more money for farmers in poor nations, though not in Kenya. Seattle-based Starbucks, which reported a 38 percent increase in second-quarter profits, says real estate, advertising and labor costs add to coffee costs. It offers coffee certified by Global Exchange as meeting fair trading standards and gives \$200,000 a year to help farmers in Africa and other poor regions.

The World Coffee Market.

Figure 1 provides information for the decade of the 1990s on the price of coffee per pound in US cents for two important groups. The lower line indicates the average price paid in auction to the Kenyan cooperatives. There is a clear change in pricing policy at

the beginning of 1994, with prices of Kenyan coffee rising markedly after that time. The price was also very volatile during that period, with high prices of about 300 cents reached in mid-1998 and a low of 60 cents observed in late-1999.¹ The upper line of the figure indicates the average price paid for coffee imported into the United States. Since Kenyan coffee is a relatively high-priced Arabica coffee, its imported price will be substantially higher than those observed here.

Figure 1: Prices on World Coffee Market

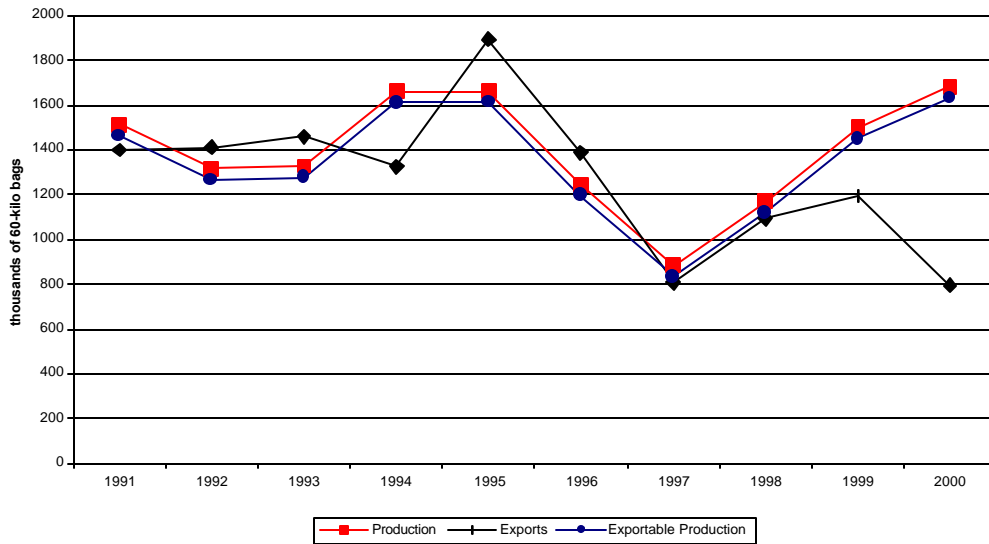


Source: International Coffee Organization. Monthly figures for 2000 interpolated from ICO estimates.

Figure 2 illustrates the production and export trends in Kenya during the 1990s. Production quantities are variable over the period, but there is no evidence of the production shortfall cited by the US coffee purchasers. There is, however, a dramatic fall in exports from production in 1999 and 2000.

¹ While consistent data are not available for this study, the average prices of coffee on world markets have fallen below their 1999 lows in 2001. Average world coffee prices, as reported by the International Coffee Organization, in June 2001 were only 65 percent of their level in September 1999, and only 26 percent of the values observed in May 1997.

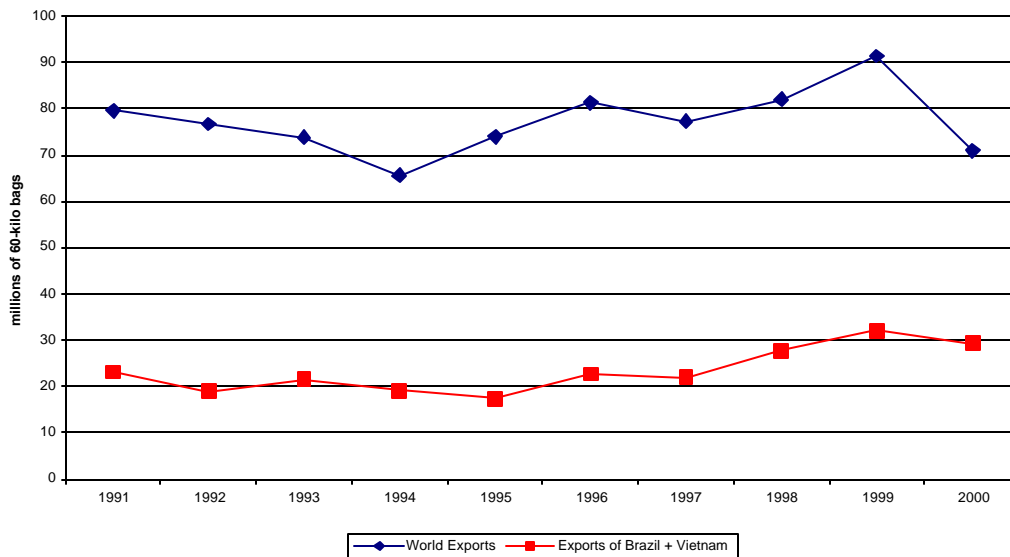
Figure 2: Kenya Coffee Production and Exports



Source: International Coffee Organization

Figure 3 illustrates the trends in global exports reported by the International Coffee Organization. There is evidence of an upward trend in coffee exports from 68 million bags produced in 1994 to 90 million bags produced in 1999. Of that 22 million increase, as the lower line in the figure indicates, Brazil and Vietnam represented roughly half. Strikingly, however, world exports in 2000 fell by 20 million bags while the exports of Brazil and Vietnam remained largely unchanged. Increases in Brazil and Vietnam were apparently able to “crowd out” production in other growing countries – including Kenya.

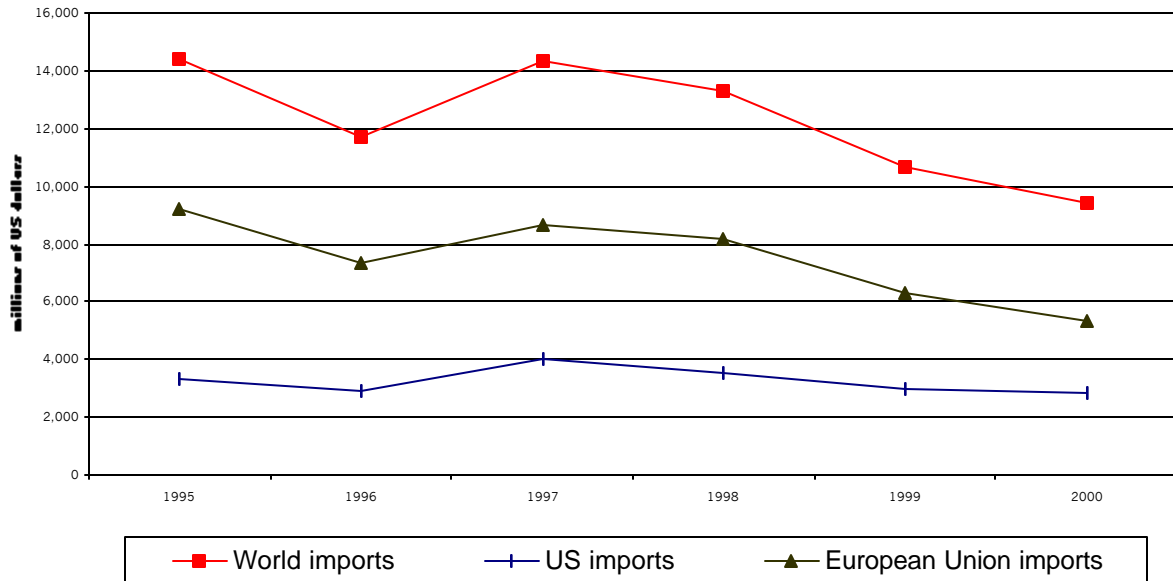
Figure 3: World Coffee Exports



Source: International Coffee Organization

World coffee imports have taken a surprising turn recently, as is evident in the following diagram.

Figure 4: World Imports of Coffee



Source: International Coffee Organization

While the US import of coffee (from all sources) has been drifting downward in the past five years, imports by the world's consuming countries taken together have declined much more precipitously. A major source of this decline can be found in the falling demand of the European Union for coffee imports.

Is Kenya Coffee Vanishing?

Your supervisor at the International Coffee Organization has asked you to explain the shortage of Kenyan coffee in the US retail market. Use the information supplied in this document to provide her with the following information.

1. Identify each of the economic actors involved in bringing Kenyan coffee to the world market.
2. Provide an income statement for each of them, indicating where necessary the places where there is insufficient information to complete the statement.
3. Provide an explanation for Jerry Baldwin's statement in the introduction.
4. Provide an explanation for Joseph Wahome's statement in the introduction.

5. Is the alleged shortage of Kenyan coffee evidence that Kenya does not have a comparative advantage in production of coffee? Explain.

Sources used in preparing this case:

1. Publicity of Rashid Moledina and Company:
http://www.moledina.com/cof_kenya.htm
2. "Struggling Kenyan coffee growers wonder where all the money goes". 29 July 2001. Chris Tomlinson. Reported in Chicago Tribune of that day.
3. http://www.rombouts.com/html/body_news2.html
4. International Coffee Organization data base.