

THE IMPACT OF SPECIALTY COFFEE ON COLOMBIA'S COFFEE INDUSTRY

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By

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On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

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THE CURRENT STATE OF COLOMBIAN COFFEE:

The global coffee industry is going through many changes as customers are drawn towards higher quality coffee. Coffee is a major export of Colombia, and the developments in market demand, farming practices, and environmental conditions have had a rippling effect all across the country (Baum et al., 2019). A recent rise the consumption of specialty coffee has led to significant changes in the coffee industry that have a dramatic decline in both the price and export of Colombian coffee over the last three decades. Actor-Network Theory (ANT) can be used to accurately assess the effects of several major groups including National Federation of Coffee Growers (NFCG), the Colombian Government, and the Federal Coffee Fund of Colombia (FNC) on the state of small farms and co-ops across the country. While the economic state of many of these small farms and co-ops continues to decline, the specialty coffee industry is thriving. Concerns for Colombian coffee partnered with the economic power of consumers in North America, Europe, Japan, and Australia indicate specialty coffee could support this struggling industry (Doga, 2019). In the technical partner to this thesis, developments in smart farming could prove crucial to further advancements in rural agriculture.

COLOMBIAN COFFEE THROUGH THE ACTOR NETWORK THEORY LENS

Actor-Network Theory (ANT) (Latour, 2005) is a science, technology, and society (STS) framework that seeks to avoid categorizing aspects of a scientific works into societal and technical factors. Each aspect of the scientific research is considered an “actor” with each actor affecting the “network” or total system under observation (Bencherki, 2017). The Colombian coffee industry is a particularly complex system that is greatly impacted by tradition, culture, and worldwide economic trends as well as the technology and agricultural practices that are used to produce coffee. The Colombian Coffee supply chain relies on these actors, and, as shown in

Figure 1, is an extensive process. Most steps of the process are dependent on multiple actors, especially in areas like quality tests and assurance, washing, and marketing.

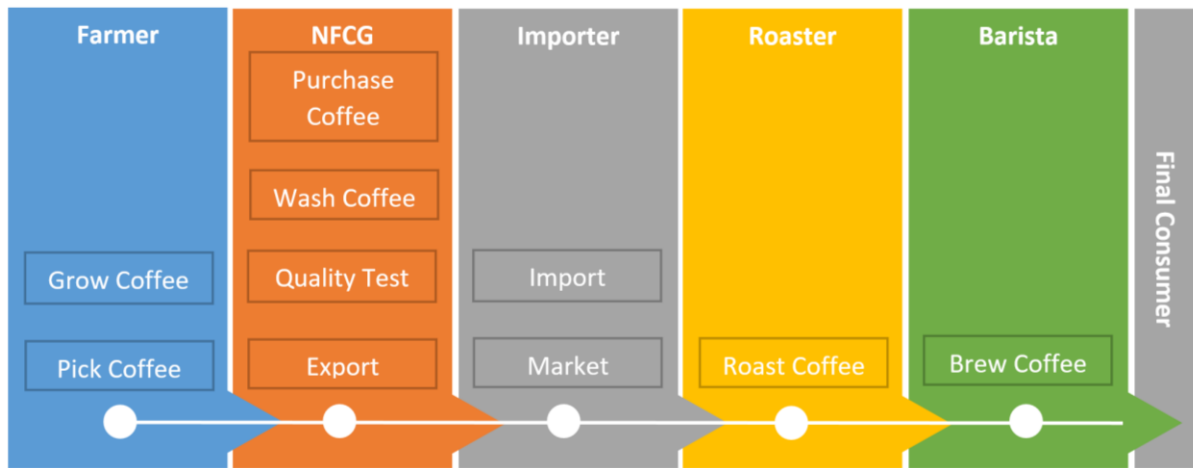


Figure 1: Summary of the Colombian Coffee Supply Chain: It is clear that many different actors at many different levels impact the journey of coffee to consumer. Each level has many individual actors that change the value of the coffee.

Analyzing each aspect separately or categorically does not allow for an accurate analysis of the industry. The effect that any individual has sends ripples through the entire supply chain i.e. the actions of the farmers dramatically affect the analysis given by a coffee quality expert at the NFCG. ANT can be used to analyze the contemporary struggles of Colombian coffee and recognize the potential impact of specialty coffee in Colombia.

The Colombian Coffee Industry has been Steadily Declining in Recent Years

The exports and prices of Colombian coffee have been steadily declining over the last 30 years (Doga, 2019). This decline began in the early 1990's and can be attributed to several different actors. First, the International Coffee Agreement (ICA) of 1983 was terminated in 1989. Among other things, the ICA of 1983 was an agreement between all major coffee producers to set quotas that maintained a stable commodity price for coffee. While three more ICA agreements followed in 1994, 2001, and 2007, none have stabilized coffee exports or prices in

Colombia (International Coffee Organization, 2014). The aftermath of the termination of the 1983 agreement led to extremely volatile prices in coffee driven by oversupply. Several of the major coffee producers in southeast Asia, most notably Vietnam, and were able to rapidly and cheaply produce robusta coffee. Colombian coffee farms were unable to maintain the steady export products and prices that had made the industry so successful for the previous century (Linton, 2008).

A decade later, in 1999, as Colombia was still in the throws of the fallout from the termination of the ICA of 1983, a 6.2 magnitude earthquake hit Quindío, one of the major economic outposts of the Coffee Cultural Landscape of Colombia (CCLC). This earthquake destroyed the capital city of Armenia, along with many of the surrounding farmland and villages. Current estimates suggest that, due to the slope and inaccessibility of this region, the cost to repair a single hectare of farmland is between \$3,000 and \$5,000 USD (Baum et al., 2019). With 45% of Colombia's 2.7 million coffee producers below the poverty line, and many others struggling financially, economic damage such as the earthquake of 1999 is near impossible to recover from (Baum et al., 2019).

Another major factor in Colombia's struggles in coffee has been the National Federation of Coffee Growers (NFCG). The NFCG is a non-profit business that oversees the coffee industry. Historically they have been responsible for processing, rating, marketing, and exporting Colombian Coffee. They are most notable internationally for their "Juan Valdez 100% Colombian" marketing campaign (London, 1994). NFCG purchases the majority of small farmers' coffee and sells it as a commodity after processing and rating the beans. The individual farms sell their coffee still in its parchment coating and unprocessed to the NFCG. Since the NFCG does all further processing, and the processing adds significant value to the coffee, much

of the profits from the coffee never make it back to the farms (Doga, 2019). The NFCG also varies the price they will pay farmers for coffee significantly by region and the availability of co-ops and other processing opportunities in the nearby area, leading to coffee pricing system that is often out of the farmers control (Giovanucci et al., 2002).

The National Coffee Fund (FNC) is the Colombian Government's stake in the coffee industry. The FNC has two primary funds, an investment fund and a stabilizer fund. The investment fund is responsible for the growth of the Colombian coffee industry and, among other things, funds CENICAFE, the research and development bureau for coffee in Colombia. The stabilizer fund is responsible for maintaining price and export quantities across the nation. Unfortunately, the stabilizer fund has been ineffective in recent years. In 2001, the stabilizer fund stopped regulating the minimum export cost of coffee, driving coffee prices even lower and expanding on much of the destabilization that occurred after the termination of the ICA of 1983 (Giovanucci et al., 2002). Despite the fact the coffee taxes fund many public works and support much of the coffee industry in Colombia, the FNC terminated the coffee tax. Current political change suggests the coffee tax may return at a far lower rate, but the struggles Colombia is facing today make added costs significant burden on farmers (Doga, 2019).

The FNC, NFCG, environment, and the International Coffee Organization (ICO) that has overseen all ICA agreements are actors on the Colombian coffee industry that heavily impact the production and export of coffee. Individual farmers and farm workers are also actors, as is the coffee itself. The impact of each of these actors has led to the decline in export quantities and prices that is dramatically harming the lives of farmers and the industry as a whole (Edwards, 1984).

The Rise of Specialty Coffee has Changed the way Countries Import of Coffee

The Specialty Coffee Association of America defines specialty coffee by “the quality of the product, whether green bean, roasted bean or prepared beverage and by the quality of life that coffee can deliver to all of those involved in its cultivation, preparation and degustation” (Rhinehart, 2017). The emphasis on the quality from start to finish is a relatively new concept in the worldwide coffee industry. Due to the added value that comes from distinguished locations, altitudes, flavor profiles, and climates, specialty coffee is both purchased for and sold for far more than its commodity counterpart (Bookman, 2014). Despite the rapid growth of specialty coffee, it is only worth a fraction of the US \$173.4 billion (Borella et al., 2015) coffee industry. In 2017, the SCAA reported that specialty coffee had reached a 59% market share of coffee in the United States. This market share is only magnified by the continuous upward trend in specialty coffee consumers in the United States as shown in Figure 2. Should the increase in market share continue, it can be inferred that the number of “Good Consumers” in the United States will grow and their impact will positively affect Colombian coffee growers.

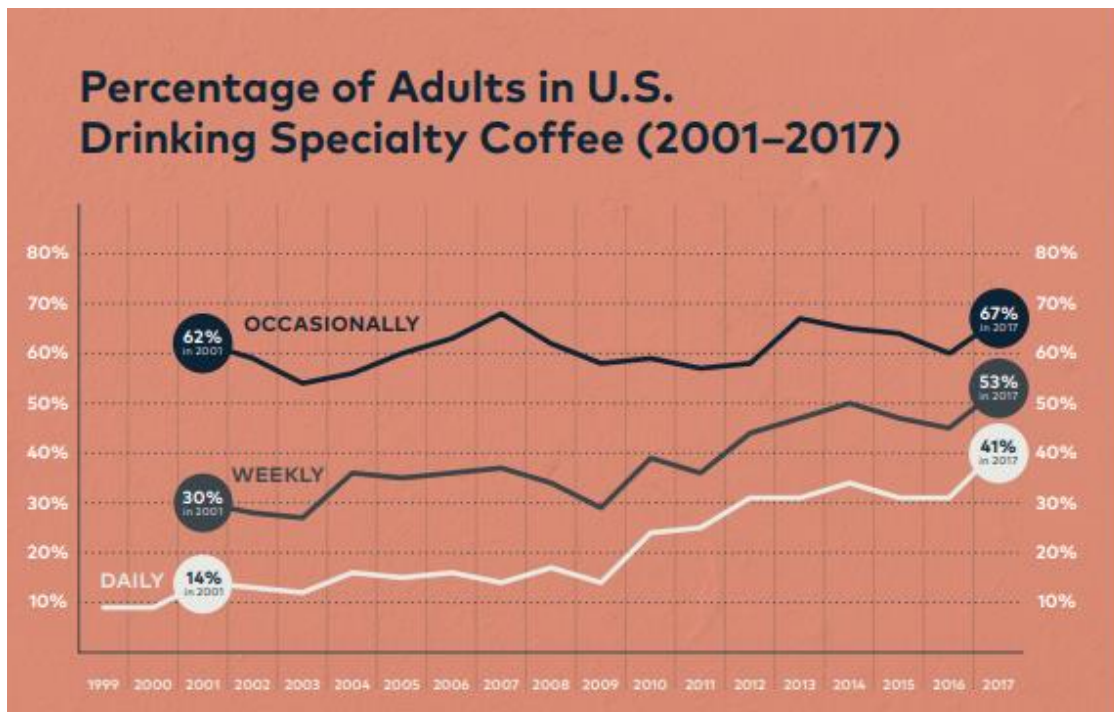


Figure 2: Percentage of Adults in U.S. Drinking Specialty Coffee (2001-2017): The clear rise in specialty coffee consumption in the United States shows the rapid growth of specialty coffee. It is particularly evident in the rise in daily consumers, though all forms of specialty coffee consumption in the United States are clearly rising. (Specialty Coffee Association of America, 2014)

While Figure 2 shows the rise in specialty coffee in the United States, specialty coffee has been rising all across the world, with particularly dramatic rises in Europe and Japan. The higher buying power of consumers in these countries has allowed the more nuanced flavors and elaborate brewing methods to flourish, which has in turn, encouraged roasters and importers to seek out higher quality beans (Borella et al., 2015). These importers and brewing methods, and customers add several new actors to the already crowded network surrounding the Colombian Coffee Industry.

In each specialty coffee shop, there are several important actors, each that adds significant value to the bean. A buyer or importer selects which processed, green coffee to purchase for the consumer. This coffee often comes from private importers linked to the NFCG, but more and more often farms in Colombia are establishing direct connections with importers or going through smaller local co-ops (Doga, 2019). Next, the green coffee is given over to a roaster to roast to the ideal temperature. Roasting is a notoriously fickle practice. Under-roasted coffee considered too “light” and fails to extract the flavors sought out by the buyer while over-roasted coffee is too dark and covers up the flavor profile with a “burnt” taste. (SCAA SOURCE). Darker roasts are often used with defective or low-quality coffee in an effort to blend together a large variety of inferior beans. Finally, the prepared beans are prepared by a barista, who uses a variety of additional flavors, brewing methods, and additives to make the drink for the consumer. Colombian Coffee growers are often suspicious of specialty coffee buyers as they

believe the final cup of coffee is the only aspect of the supply chain considered, rather than the effort of the farm and processors (Doga, 2019).

The final actor in the specialty coffee network is the consumer. Consumers of coffee are hard to classify as coffee is prepared at so many different price points in so many different ways that are relevant to many different cultures. Despite this difficulty, Melina Doga coined the terms “Good Consumer” and “Bad Consumer” in her 2019 paper. “Bad Consumer” is an interesting definition as it encapsulates many of the coffee farmers in Colombia today.

What many interviewers point out is a relationship to coffee as a basic product not worthy of specialization, a commodity that people consume regardless of taste, at low prices, with minimal variation in brewing techniques. Because of this relationship, the average Colombian is seen as a “bad consumer” of coffee. (Doga, 2019, p.28)

Given what Doga defined as “bad consumers” it can be implied that a “good consumer” is a consumer who is aware of the source of their coffee, its brewing method, and is willing to pay a premium for higher quality coffee. These customers are prevalent in the United States and Europe, and their influence can be seen blatantly by the clearly labeled altitudes and sourcing locations on the bags of higher priced coffee purchased at local grocery stores and coffee shops. Some organizations, like Fair Trade and Cup of Excellence, have tried to create a larger consumer base in this area, but their efforts have been inconclusive. With that said, the economic impact of the consumer those that can be defined as “Good Consumers” is dramatic in coffee producing areas. (Linton, 2008).

The NFCG has three tiers of coffee that each crop is sorted into after harvest. Tiers one and two, the higher quality beans are sold to consumers in the United States, Europe, and Japan. The third tier are considered inferior or defective and are largely consumed on the farms on which they are grown with heavy amount of milk and sweet cream or “panela” (Doga, 2019).

Coffee producing countries are slowly accepting specialty coffee, and it has become vital in informing farmers of the true value of the crop they are selling. While Brazil has long been a top exporter of coffee, it did not become the number one producer until it became the number two consumer in the world (Giovannucci et al., 2002). Ethiopia produced markedly less coffee until the concept of specialty coffee and the value of Ethiopia's unique tasting notes became apparent locally (Scudder, 2020). This revelation has caused the NFCG to push a narrative of specialty coffee and internal consumption that has slowly begun to help farmers. Though the cultural relevance of the traditional rural brewing method of dark, defective beans mixed with sweet cream is valuable, the rise of specialty coffee shops in urban areas and among younger generation has led to improved farmer and co-op connections with consumers in the United States, Europe, and Japan. (Doga, 2019). These relationships are far more lucrative to farmers.

The Potential Impact of the Specialty Coffee Network in Colombia

Though the NFCG has pushed a narrative emphasizing the importance of specialty coffee among small and medium-sized farmers, the idea has yet to firmly take hold. The FNC and NFCG still sell a significant crop at lower margins as a commodity and often do not support the farmers as much as is necessary to create a booming specialty coffee industry in rural areas (London, 1994). The rise of specialty coffee is slow in these areas, but there are several reasons to be optimistic besides the gradual increase of specialty coffeeshops in urban Colombia.

As the coffee industry faces economic decline, farmers have been struggling to find workers to assist in bringing their crops from their farms to market. The low price of coffee has led to a lower wage that has led many rural working-class Colombians away from coffee. Specialty coffee is particularly demanding due to the significant manual labor investment necessary to pick coffee at high altitudes at its ripest. Current political upheaval in Venezuela has

pushed many Venezuelan refugees towards other countries in South America, including Colombia. The massive influx of Venezuelan immigrants, nearly 1 million of whom are undocumented, has given coffee farmers the chance to hire cheaper labor to pick their crop. The open-door policy of the current administration has been lauded by progressive leaders for its approach to vaccinating Venezuelan immigrants and its economic boon in rural communities. In a surprising policy change for a notoriously conservative Colombian government, these Venezuelan refugees have almost all been offered a path to citizenship (Otis, 2021).

Finally, the recent political changes in the CCLC have indicated that Colombia may be ready to make changes in their currently failing system. First, the NFCG and CENICAFE have put substantial effort into diversifying the very mild traditional arabica coffee with a variety of different strains in an effort to appeal to the more sophisticated palettes of green coffee buyers. They are expecting to have diversified up to 15% of their crop by next year (Baum et al., 2019). In addition, the Coffee Cultural Landscape of Colombia (CCLC) was named a UNESCO World Heritage Site in 2011 in an effort to preserve the culture and small farm environment in a beautiful location and to build a tourism economy to help subsidize the coffee industry (Doga, 2019). Finally, changes in political parties and leadership in NFCG have proposed and implemented a variety of ways for farms to improve, including the potential reinstatement of a coffee tax and increased access to international markets without requiring all channels to route through the NFCG (Doga, 2019).

THE POTENTIAL OF COLOMBIAN COFFEE The failures of the Colombian Coffee industry have dramatically affected the CCLC and those that produce coffee. Exports and coffee prices have been declining for over three decades due to environmental catastrophes, the termination of international agreements, and the failures of organizations within Colombia, like

the FNC and the NFCG. Inversely, specialty coffee has been on the rise. More and more “good consumers” are purchasing coffee that has been carefully sourced, processed, roasted, and brewed in reputable ways that are slowly trickling down to farms in Colombia. While the “good consumer” alone cannot save the entire coffee industry in Colombia, the ripple effect of all the actors in the specialty coffee network has led to dramatic changes in coffee in Colombia. The Colombian government has offered paths to citizenship for Venezuelan refugees that have offered cheap labor to produce better quality coffee. Younger generations of Colombians are seeking out specialty coffee and sharing the importance the product farms are producing with farmers across the country. The CCLC has been offered the protections and marketing of a UNESCO World Heritage Site. Finally, the NFCG and FNC have encouraged farmers to pursue the more lucrative business of specialty coffee through policy changes like crop diversification and exporting changes by allowing farmers to seek out their own buyers internationally. The combination of the specialty coffee network and the Colombian Coffee network has allowed for actors on both ends of the supply chain to make changes that benefit the Colombian Coffee industry.

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