

The Seeds of Stability: A systematic analysis of the coffee market in Monteverde, Costa Rica

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## **ABSTRACT**

This purpose of this study is to illuminate the relationships of actors in the coffee market of Monteverde, Costa Rica. As a continuation of my previous research surveying coffee retailers and producers, this study targeted consumers as the final actor in the commodity chain. With the award of an Undergraduate Research Opportunity Program (UROP) Grant I returned to Monteverde in January to conduct participatory field research. This was done through a brief survey of ten questions intended to gain information about consumer knowledge on the sustainability of Monteverde's coffee production. Responses of 50 participants were collected in two popular coffee shops, Café de Monteverde and ChocoCafé. In addition to my survey results, I utilized informal conversations with respondents and locals to analyze the market as a whole. I found that my results are not fully reflective of the complexities associated with factors which influence the decision-making of these actors. The research I conducted is unique to this particular coffee market but can stand as a basis for further research from multiple fields of study.

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## PREFACE

I began this project in the spring of 2017 while studying abroad through the CIEE Tropical Ecology and Conservation (TEC) program in Monteverde, Costa Rica. During the semester before I moved to Costa Rica, I created a literature review in an Environmental Studies Advanced Writing course. While doing general research on the country I began to see that there was an extensive and rich historical connection between Ticos (Costa Ricans) and coffee and I was determined to learn more while at the origin. Going into the TEC program I was double majoring in Environmental Studies and Ecology and Evolutionary Biology convinced that I would be pursuing a career in plant ecology after undergrad. After the first month of my ecologically intensive program I realized that I was missing the social aspects of conservation and was more interested in the conversations I was having with locals than learning about the dispersal patterns of every plant I saw. For the last month of the program students conducted their own independent research projects. While my classmates were creating transects and capturing critters to conduct their first ecologically intensive studies, I decided to take a different approach to my project. I surveyed coffee retailers and coffee producers in the area to evaluate the trade relations between shareholders in Monteverde's coffee market. This was my chance to have the conversations I was longing for. This project has allowed me to grow academically and personally in many ways. Living abroad helped me to establish my independence and amplified my desire to become a global citizen. Throughout the development of this document I have honed in on my inquisitive nature and that has allowed me to continually broaden my lens of analysis.

## ACKNOWLEDGMENTS

The staff of the CIEE Tropical Ecology and Conservation Program supported my initial investigation while studying abroad, in particular my advisor Gisella Fernández Estrada who was a tremendous help through every step of that process. My additional field research was funded by the University of Colorado at Boulder Undergraduate Research Opportunity Program (UROP). Johel Chaves connected me with Maricella Solis and her daughter Maya who graciously welcomed me into their home for my stay during my second investigation. Luis Jimenez D'Lukes and his dog Prem helped me to relax and take in the beauty of Monteverde before I returned home. Luis Perez the manager of Café de Monteverde, Heyner Varela the manager of ChocoCafé and the staff of both establishments were kind to let me dwell in their shops for days on end. This study would not have been possible without the participation of the wonderful coffee producers, retailers, and consumers who were willing to take my surveys.

I would especially like to thank my thesis committee Kate Fischer, Sarah Rogers and Dale Miller for their encouragement and support while writing this paper through tears and endless cups of coffee. I have dedicated myself to the development of this study for the past year and a half and I extend my sincerest gratitude for all of my contributors.

## INTRODUCTION

This project was designed to continue a previous study evaluating factors that influence consumers when purchasing coffee in Monteverde, Costa Rica. The previous research project was intended to generate a case study unveiling characteristics of the full commodity chain of a local coffee market. With the approval of the Institutional Review Board (IRB) and the award of an Undergraduate Research Opportunity Program (UROP) Individual Grant, I was able to return to Monteverde to conduct participatory field research through a brief survey of 50 coffee consumers in two popular local coffee shops. My research question was; *what factors influence the decision-making of coffee consumers in Monteverde, Costa Rica and how do consumers influence the sustainability of local coffee trade?* The survey that I created was intended to produce empirical data to compartmentalize factors of influence in this market. The numbers I gathered however are not a true reflection of the complexities in the decisions that consumers are making. I began to see disconnections between the conversations I was having with respondents and locals and what the numbers were telling me. My quantitative results were not as informative as the qualitative conversations and observations I was collecting. I found that producers, retailers, and consumers share influence by quality, price, and sustainability but each of these factors stem from the choices they make and values they hold. To come to a conclusive answer of the specific factors that are influencing any part of a commodity chain requires listening to the conversations of all those involved. The research I have conducted is unique to this particular coffee market and thus can serve as a base for continued investigation from multiple fields of study.

## **BACKGROUND**

### **A Unique Sustainable Model for Coffee in Costa Rica**

Agricultural commodities tend to fall into the category of buyer-driven chains, in which large retailers in industrialized countries, brand name merchandisers, and international trading companies are the key actors in setting up decentralized networks of trade in developing countries (Ponte, 2002). The traditional coffee supply chain is comprised of seven principal nodes: the farmer, the mill, the exporter, the importer, the roaster, the retailer and the consumer (Wilson et al., 2013). When small farmers participate in this market, they typically sell their cherries to a local association or cooperative that pays them based on the price determined by the current international commodity market (Wilson et al., 2013). Coffee is the world's most widely traded tropical agricultural commodity (Whelan & Newsom 2014) and in the tropics over 25 million farmers in 56 countries export coffee with an estimated 100 million people depending on it for income (Castro-Tanzi, 2012). When there are more links in the commodity chain, there is more distance between producers and consumers, which inevitably leads to the disconnection of the ends of the market.

Sustainability in an agricultural context in the simplest terms is using farming techniques that protect both the environment and socio-economic aspects of production and trade. The production and commercialization of coffee in Costa Rica is based on a unique sustainable model which represents the country's high value for the socio-economic and environmental dimensions of the system as a whole. Dating back to 1933 Costa Rica has been developing this trade system with the founding of the Costa Rica Coffee Institute (ICAFFE) a now public non-governmental institution that was established to promote the national coffee growing activity. As a direct link to the Costa Rican Government, ICAFFE oversees and enforces Law No. 2762 which protects the transparent and ethical commerce of coffee between the four main groups that compose the



Costa Rican Coffee Sector: Producers, Millers, Roasters, and Exporters (ICAFE | About ICAFE, 2017). To ensure that this law is being implemented ICAFE registers all coffee activity, sales and delivery transactions, taking the international market prices into account. This results in a national average of producers receiving 80 percent of the price per 60-kilogram bag they sell. Producers are guaranteed protection and knowledge of the market which is unique to many other coffee growing countries. Under Law No. 2762, ICAFE enforces a Liquidation Payment system which sets a fair and ethical minimum price for Costa Rican coffee. *Figure 1* gives a step by step explanation of this process (The Costa Rica Coffee Institute, 2011).

How does it work?

## LIQUIDATION PAYMENT

Protecting the Coffee Producer under a unique model

(ICAFE, Costa Rican Law No 2762)

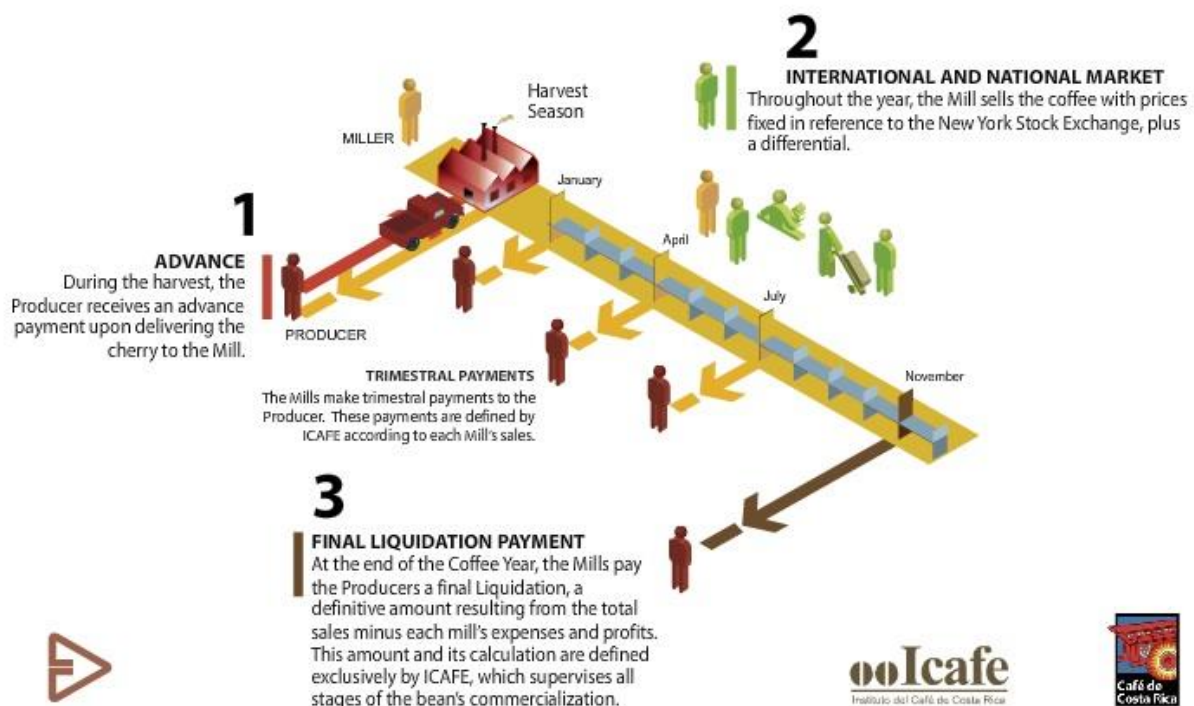


Figure 1: ICAFE Liquidation Payment System (The Costa Rica Coffee Institute, 2011)

92 percent of Costa Rican producers are small hold farmers, producing coffee on less than two hectares and using family labor to harvest crops (ICAFFE, Documentary Café de Costa Rica, 2014). Law No. 2762 allows these producers to receive a premium price for their coffee while focusing on the quality of their product instead of quantity. This is another factor that sets them apart in the demanding market. For one hundred years Costa Rica has been consistent in the quality of its coffee exports. By doing so the country has established trust in international buyers and importers. Costa Rica has created stability in coffee and no matter how the market shifts, producers will stay true to their value in the excellence of their product which was something apparent to me while conducting my initial surveys on farms in Monteverde.

Costa Rica has opted to be one hundred percent environmentally friendly and grows coffee in harmony with nature. As it is the country has the ideal climatic conditions for growing coffee: rainfall, height of mountains, and enriched soils from volcanic activity, so by respecting the natural state of the environment producers benefit. ICAFFE researches the development of initiatives to face climate change, using a series of studies that point to an environmentally friendly agro-business as a mitigating strategy. Every coffee mill in Costa Rica is obliged by law to respect a series of operating conditions to protect the environment such as the optimization of fertilizer usage which helps to avoid unnecessary application and reduces production cost. Byproducts generated in coffee mills are now used for organic fertilizer, livestock feed and fuel for the drying process, among other uses. The Milling Sector has invested more than 100 million dollars in new technologies that have helped reduce water consumption and re-circulate served waters (Costa Rica: A Unique Sustainable Model, 2011). Water use has been reduced from 4 cubic meters to less than 0.5 cubic meters per processed fanega (46 kilograms of coffee). Such initiatives guarantee that each step of the coffee production process from producer to consumer is

done sustainably.

All of these factors have necessarily increased the price of Costa Rican coffee, but it is a price that consumers are willing to pay. The extra value goes to the producers allowing them to continue to perfect the quality of each cup they produce.

### [A Special Market in Monteverde](#)

Monteverde, Costa Rica is a small community about a four-hour drive from the Central Valley and is considered a major ecotourism destination in Costa Rica. Monteverde encompasses a unique set of environmental, cultural, historical & socio-economic factors which have established an overarching value of conservation and sustainability not only for the residents but also for most visitors.

In protest to the peacetime draft after World War 2, several Quakers from Fairhope, Alabama and other locations in North America established a new life in Monteverde in the early 1950s (Nadkarni, 2000). The Quakers chose Costa Rica for its peaceful values and democratic government and believed that there is power in creation and that all life is interrelated. They wanted to live simply by farming and producing dairy products. Historically the Quakers were the first to begin preserving land and in years following their arrival land was purchased by researchers, philanthropists, and locals leading to the establishment of the largest public reserve, the Monteverde Cloud Forest Reserve. An even larger private protected area is the Children's Eternal Rainforest which began when a Swedish teacher traveled to Monteverde and now consists of land purchased by children in over 44 countries. Costa Rica is one of the most biologically diverse countries in the world, having 4% of all the known species of plants and animals in only 0.04% the earth's surface, so a considerable numbers of tourists and naturalists are drawn to the country each year.

Though tourism has influenced the local economy in recent years, agriculture has long been the main source of income and sustenance for both Costa Ricans and Quakers in Monteverde. Quakers took advantage of infrastructure improvements in the 1960s and exported cheese and beef to the rest of the country but due to overgrazing, the dairy industry declined in the following decade. This led the population to turn to coffee as an agricultural opportunity.

During the 1990s coffee production and marketing in the Monteverde area expanded considerably. The Santa Elena Cooperative was established and connected with the Montana Coffee Traders where the harvest of members could be sold at prices superior to the international rate. Based on an agreement with producers in Monteverde, the co-op created "Monteverde Coffee", a brand sold regionally as "Coffee Produced in Harmony with Nature" (Stuckey et al., 2014). Beginning in 1989 Montana Coffee Traders purchased Monteverde Coffee at Fair Trade pricing, and donated an additional \$1US to the community of Santa Elena for every pound sold (Montana Coffee Traders Inc., 2010). This allowed Monteverde Coffee to be sold at higher prices in international markets. With a ready market and good prices, the area's production increased. However, the cooperative later faced economic problems and weakened which caused a loss of confidence by farmers, a slight decline in the area's coffee production, and encouraged the search for alternative marketing channels (Stuckey et al., 2014).

Today some local entrepreneurs are seeking strategies for joint marketing of the region's coffee and there is some support for collectively promoting Monteverde as a region that produces high quality coffee but local producers who have successfully developed niche markets have a strong incentive to strengthen their own brands, rather than to subsume them under a collective identity. And with the fall of previous cooperatives in the area, there is lack of trust and little incentive for farmers to participate in such a system. Private coffee processing and roasting

initiatives began in the early 2000s and by 2014, there were 12 local coffee brands in the Monteverde area (Stuckey et al. 2014). Today the coffee economy is diverse with brands from outside the area such as Café Britt and 1820 which are two of Costa Rica's largest commercial coffee brands that compete with Monteverde's own brands.

There are now two key forces reshaping the Monteverde region's economy. First, international free trade agreements have opened Costa Rica to global competition, which would typically put small producers and local businesses at a disadvantage relative to large scale, capital intensive operations (Strange, 2012). Because producers are theoretically receiving 80 percent of profits, this is not the case in the area but it does present producers with the opportunity to intensify their production to increase their international trade. The results of my previous study showed that 69% of retailers were buying their coffee directly from local producers which shows that the majority of coffee in Monteverde is staying local. Second, commercial tourism in Monteverde has generated wealth and jobs, and has created important local synergies for economic opportunity. Agro-tourism has created economic opportunities for several Monteverde families, and has become the third most popular attraction for visitors after eco and adventure tourism (Stuckey et al. 2010).






There is a small but growing number of integrated farms that provide produce for local markets. Several producers have linked their farming activities to eco-tourism and some coffee farmers are marketing farm-branded products directly to clients (Stuckey et al. 2014). By keeping trade in the local market, money is staying in the local economy. Two of the farms in my previous study reported selling their coffee to a cooperative in Tiláran (approximately a two hour drive from Monteverde) and are receiving \$5-7US per cajuela (about 13kg) and others that were selling directly to retailers or roasters were receiving an average of \$10-14US showing the

benefit of having the direct trade system.

### Sustainable Labeling

In the last twenty years, third-party voluntary sustainability standards (VSS) have emerged as an increasingly popular strategy to guarantee sustainability in global value chains (Grabs et al., 2016). VSS can be conceptualized as non-state, market-driven governance approaches intended to improve the economic, environmental and social sustainability of production. Through the establishment and enforcement of specific norms of behavior signified by certification labels that stamp products, VSS guarantees that production was sustainable and fair to the workers. These stamps inherently carry not only political, but also ecological and economic complexities (Eden, 2011). Certification labels attempt to create global green governance by giving the consumer the power to address dysfunctional elements of the economy. This applies especially in commodity chains where the search for profits and cost reduction leads to environmental and human damage, through pollution, resource depletion, dangerous working conditions, poor rates of pay, employment insecurity and other forms of exploitation (Eden, 2011). *Table 1* shows the five most common coffee certifications in the global market. These certifications have an overarching theme of sustainable practices and fairness for the environment and workers. The top countries that consume products with these labels are the US, Canada, Europe, Japan, and Australia.

Table 1: The five most common coffee certifications.

	Five Most Common Coffee Certifications				
	Organic	Fair Trade	Rainforest Alliance	Bird Friendly	UTZ
					
<b>Mission</b>	Create a verified sustainable agriculture system that produces food in harmony with nature, supports biodiversity and enhances soil health.	Support a better life for farming families in the developing world through fair prices, access to direct trade, community development and environmental stewardship.	Integrate biodiversity conservation, community development, workers' rights and productive agricultural practices to ensure comprehensive sustainable farm management.	Conduct research and education around issues of neo-tropical migratory bird populations, promoting certified shade coffee as a viable supplemental habitat for birds and other organisms.	Achieve sustainable agricultural supply chains, where: -Producers are professionals with good practices for better businesses, livelihoods and environments; -The Food industry demands and rewards sustainably grown products; -Consumers buy products with social and environmental responsibility.
<b>Market Focus</b>	All markets	All markets	Global markets: emphasis on N. America, Europe, Japan, Australia	All markets	Mainstream and specialty markets
<b>Countries of Consumption</b>	US, Canada, EU, Russia, Japan	US, Canada, EU, Japan, Australia, New Zealand	44 countries on 6 different continents.	US, Canada, Japan, The Netherlands	US, EU, Japan, Australia

(SCAA Sustainability Council, 2010)

Sustainability labeling programs are designed to support consumers' food choice since they serve as a tool to explicitly communicate the presence of sustainability aspects on food products. A study by Wang, Shieh and Jung (2016) investigated consumers' purchase behaviors for canned coffee in Taiwan by applying a statistical analysis model to verify the relationship and influences among consuming behaviors such as consumers' life styles and consuming motives, and their purchase decision-making behaviors (Wang, 2016). The study found that different life styles have a significant influence on consuming motives. The results showed

significant differences in the preference degree of use and purchase decision-making behaviors of consumers. This study suggests that there is a significantly mutual influence existing between lifestyles and the consuming motives. A consumers' motives for purchasing items can be a tangled web. Some and maybe most consumers remain ignorant to the extensive networks that connect them to the products they select. Consumers who remain oblivious would have different consuming motives than a consumer who values knowing how their product got to them. An aware consumer who values the knowledge of production is more likely to understand why a sustainably sourced item is more expensive and they may be more inclined to search for indications that a company's values align with theirs, such as certifications. There are also consumers who claim to be aware by selecting items with certifications placing value on the "feel good" nature of the product for their own satisfaction rather than value alignment. These brief examples give a glimpse at the complexities behind consumer motives.

One study published in the *Journal of Ecological Economics* explored the importance that consumers attach to sustainability attributes and investigated how it relates to the visual attention paid to such attributes during their decision-making and to willingness-to-pay (WTP). This study contributes to the need to better understand consumers' attention to sustainability information when decision-making. Sustainability characteristics in food are credence attributes which suggests that consumers would need to spend more time evaluating the source of their products to be fully aware of the sustainability of the producer. This type of attribute is neither directly observable by consumers before purchase, nor can it be experienced after purchase. The results of the study suggest that consumers who spend more time paying attention to sustainability attributes value them more (Loo, 2015).



My previous study found that there was little knowledge of certifications for both retailers and producers. Certifications are meant to validate the sustainability of coffee production and trade. There is little incentive for farmers to get certified because they are already large actors in the local market. There are also costs and benefits for certifications. Using USDA Organic as an example, having the certification may improve access to markets, production inputs, and agricultural extension services, but it also has transaction costs for initial certification and subsequent annual monitoring and reporting that are too significant for a small farming operation (Blackman & Naranjo, 2012). The lack of education on certifications in the area could be a result of the initiatives and laws put in place by ICAFE that ensure and promote the sustainability of Costa Rican coffee commercialization.

“Relationship coffees” or “ethical coffees” are ones which involve a direct relationship between producers and either their retailers or the roasters who theoretically commit to paying an ethical price although not the standard fair trade price. Without certifications these coffees are then offered to special interest groups like tourists in Monteverde who may assume that it was produced ethically. Since most of the coffees in the region lack independent third-party certification, they presuppose a consumer’s high level of trust in the producer or retailer (Giovannucci & Koekoek, 2003). Currently there is little research on the factors which are driving the decision-making of coffee consumers in the Monteverde area and there seems to be little knowledge of certifications in local producers and retailers.

## ETHNOGRAPHIC BACKGROUND

This section is intended to aid in the contextualization of my two survey locations. The population of the Monteverde community has 250 to 750 residents, of whom about 50 are Quaker. The more developed Costa Rican-dominated town of Santa Elena has 6,500 permanent residents. There are approximately 250,000 tourists annually in this area.

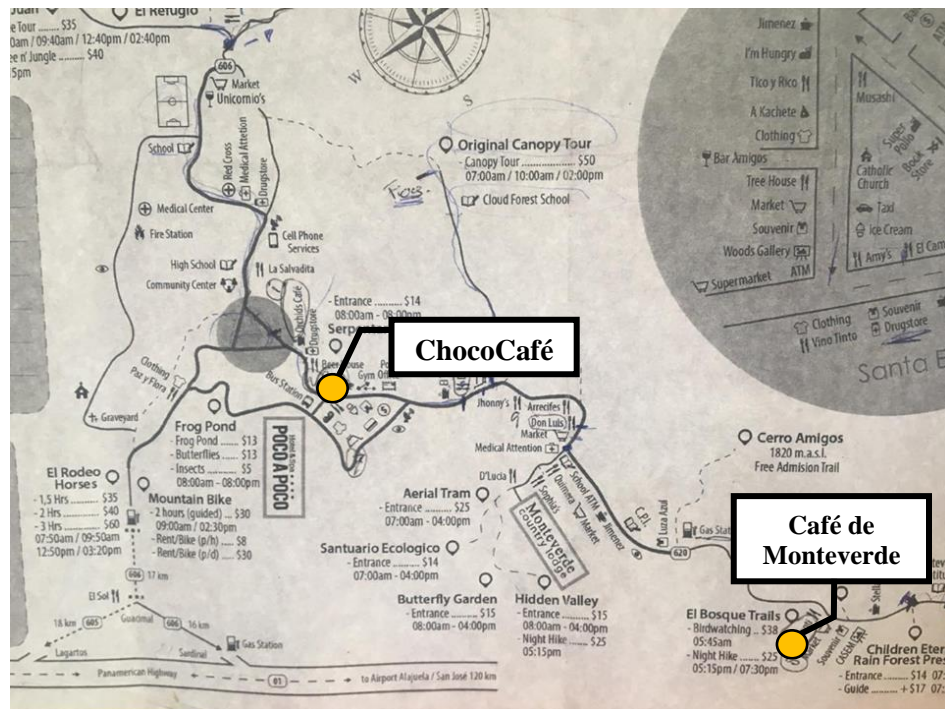


Figure 2: Map of the Santa Elena to Monteverde region. The two survey locations ChocoCafé and Café de Monteverde are highlighted on this map.

### Café de Monteverde

Café de Monteverde is located in the center of Monteverde and is the only established coffee shop in the area. The shop is located at the end of a small shopping center and is not in plain sight from the road. The shop has art and photography from local artists on display and there is a millennial atmosphere to the décor. Mostly English is spoken by workers and consumers and there are many tourists. Baristas are passionate and have a lot of knowledge of every aspect of the coffee process. There is a display of coffee beans and canisters of coffee for

people to sample, allowing customers to gain knowledge on the coffee before they purchase it. I observed many people trying samples and asking questions about roasts and words they did not understand such as the difference between the natural and fully washed processes. Café de Monteverde is in collaboration with Life Monteverde an association of twelve families in the area with a strong background in agriculture and nature conservation. The group members have various professions and skills, including forestry, environmental education, administration and finances, coffee trade, agriculture, human resources and arts. Their mission is to produce, protect, and educate. Since 2008, Life Monteverde has organized educational activities for locals and tourists with the objective to help people achieve more awareness about sustainability in coffee production. The Life Monteverde programs or tours are carried out in a 42-acre (17 hectares) farm in Monteverde and educate patrons on coffee production, conservation, organic agriculture and low environmental impact energy systems. Their approach to the practice of sustainability through agro-tourism attracts people involved in educational programs and those with an interest on learning strategies to reduce environmental impact (Coffee Center, 2017).

### ChocoCafé

ChocoCafé is located approximately three kilometers from the center of Monteverde in downtown Santa Elena. This is where most hotels and hostels are located drawing a larger tourist population with many backpackers. The shop is off of a very busy street which makes it easier to access and more noticeable for consumers than Café de Monteverde. ChocoCafé is also a larger establishment with more seating and has a full restaurant menu which could be affecting consumer motives for going there. Workers are bilingual here as well. As in the majority of Costa Rica, the official and most-spoken language is Spanish in the area but due to the presence of Quakers and three schools taught at least partially in English, one can expect a fair deal of

bilingual Costa Ricans. Hotels and hostels as well as restaurants have either English menus or staff who can speak English due to the large number of tourists from English speaking countries. There is less art on the walls and a much older atmosphere than Café de Monteverde. I observed many larger groups of eight or more people coming from tour buses into the shop. Based on the sheer volume of tourists it was difficult to randomly select locals because the tourist ratio outnumbered them. The locals that I did interact with were mostly there to eat with their families.

There are no educational materials or samples for guests but they do roast beans in house. ChocoCafé is connected with Don Juan Coffee and Tours and sells their product in the retail portion of the shop. Don Juan Cruz was born in 1937, to one of the first pioneering farming families that arrived to the Monteverde area. For most of his life he has been dedicated to sharing his history and the culture of coffee plantations with many tourists. The Don Juan coffee tour holds the Certification for Sustainable Tourism (CST). This a program of the Costa Rican Tourism Institute (ICT), which is designed to differentiate tourism companies according to the degree to which its operations approach a model of sustainability in the management of natural, cultural and social resources. The mission at Don Juan is to offer tourists an educational and cultural experience, by encouraging education on the consumption of local high-quality product, sustainable development, and Costa Rican coffee traditions (About Us: Don Juan CR, 2017).

## **METHODS**

I conducted participatory field research in Monteverde through a brief survey housed in Qualtrics. The survey consisted of ten open-ended questions intended to gain information about consumer knowledge on sustainability in local coffee shops (Appendix II). These questions were designed to evaluate consumers' patterns of consumption, their familiarity with the five most common coffee certifications, and to see what factors they found most important when

purchasing coffee. The first critical step to conducting this research was getting the Institutional Review Board (IRB) to review and approve the research protocol.

With IRB approval and the award of a UROP grant I was able to return to Monteverde, between January 3, 2017 and January 15, 2017. This was my first experience traveling abroad fully independently and it was exciting to arrive without seeing someone waiting for me with my name on a sign. After spending most of the day in shuttles and buses I finally arrived to my homestay with one of my CIEE professor's good friends, Maricella Solis and her daughter Maya. Their house is located just past downtown Monteverde and is only a ten minute walk to Café de Monteverde and approximately a forty minute walk to ChocoCafé in Santa Elena.

As this was a participatory study, the primary source of data came from a brief written consumer survey that I administered electronically on a personal tablet. In addition to the written consumer survey, informal interviews and conversations with consumers, coffee shop managers and locals were beneficial to conceptualizing factors at play in this coffee market. I utilized the conversational Spanish skills I gained while living there in order to converse with locals which helped me to establish relationships with workers and photographers whom I will stay in contact with. There are four popular coffee shops; ChocoCafé, Café Orchid Coffee Shop, Café de Monteverde, and Stella's Bakery, in the Santa Elena to Monteverde region. After speaking with the managers of Café Orchid Coffee Shop and Stella's Bakery, both locations were unaccepting of my survey. Stella's is more of a restaurant and Orchid is very small so for these reasons the managers preferred that I not give my survey to their customers. Alternating locations in the span of eight days, I conducted all of my research in the two largest establishment, ChocoCafé, and Café de Monteverde. 50 surveys were conducted in equal proportion between the locations.

The patron population of coffee shops in the Monteverde area includes both locals and

tourists. The exact age range, gender, and ethnic distributions anticipated was difficult as the study was conducted in public locations with daily shifting demographics. After sitting in the coffee shop making observations of consumer traffic, and with the permission of the store managers, I randomly selected subjects and asked them to participate in my study based on the flow of customers that approached the counter. I asked them if they were willing to participate in a brief anonymous survey being conducted for my Honors Thesis research at the University of Colorado. I used the consent script that I created in English and Spanish that was approved by IRB (Appendix I). The research in this study presented no risk of harm to subjects and involved no procedures for which written consent is normally required outside of the research context by IRB.

All the data is stored in Qualtrics, an Application Service Provider (ASP) who provides a platform for creating and distributing online surveys. The platform records response data, performs analysis, and produces reports on the data. The survey took no more than 5 minutes and those willing to participate were presented a tablet where the survey was housed in an offline method of distribution on the Qualtrics app. Printed copies of the survey were also prepared to account for technical difficulties (Appendix II).

Many factors caused unexpected modifications to my study such as weather and time of day. It rained during five days of data collection which reduced the number of consumers that were in the coffee shops and it also effected the randomization technique that I used. As there were less people I would select every other group of people instead of every third. The time of day that I was in the coffee shop correlated with the type of clientele that were present. If I arrived around the time that the coffee shop was opening there was a higher ratio of locals to tourists and later in the day locals tapered off.

## RESULTS

In this section I will analyze the primary results of my consumer survey with figures generated from my data in Qualtrics. I also tie in secondary results I gathered through conversations and observations.

### Respondent Demographics

A total of 50 coffee consumers were randomly surveyed between two locations; 25 surveyed in ChocoCafé and 25 surveyed in Café de Monteverde. 70% of my survey population was between 22 and 54 years of age and 38 of the respondents, (76%) were daily consumers and nearly the same amount reported coffee shops as their main source of consumption in Monteverde. 60% of those who found it applicable responded that they did plan to take coffee as a souvenir. The results suggest that the majority of these respondents were not well informed of the environmental, social and economic impacts of coffee production. 76% of the total respondents fell between “Moderately Well” to “Not Well at All” categories. 42% of respondents reported “Probably yes” when asked if they believed that coffee in Monteverde was sustainable regardless of their knowledge of production. A large portion of the remaining respondents selected “Might or Might Not” suggesting they were unsure of the region’s sustainability based on their lack of knowledge of coffee production in the area (Appendix III).

Respondent Origins Outside of the U.S.A	
Location	Number of Respondents
Germany	6
Thailand	2
Canada	4
Spain	1
Denmark	2
Ireland	1
England	1
Holland	1

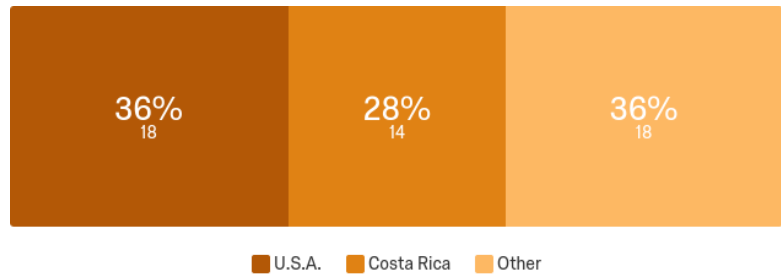


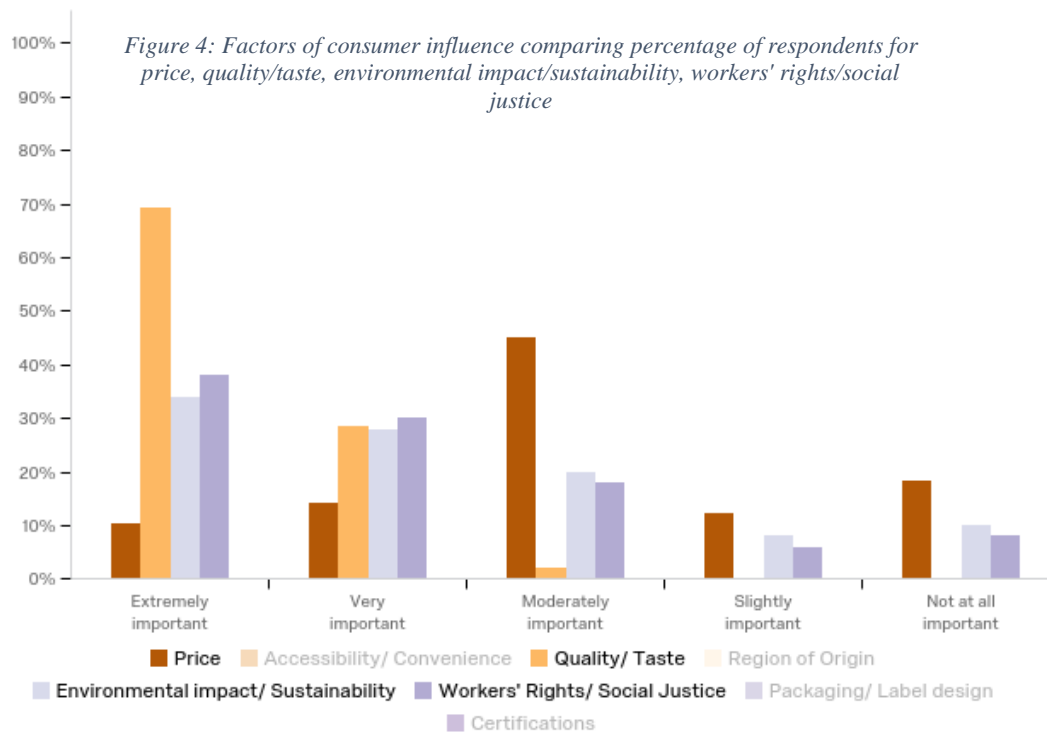
Figure 3: Respondent origins.

Table 2: Respondent Origins Outside of the U.S.A.

Of those 50 consumers 72% (36 respondents) reported that they were from locations outside of Costa Rica (*Figure 3*). Half of these respondents were from the U.S.A. and half were mainly from European countries (*Table 2*). While speaking with Luis Perez, the manager of Café de Monteverde since 2015, he told me that he often sees a 70:30 tourist to local ratio. During High season this ratio is about 80:20 and during Low season 50:50. According to Luis the locals that he sees are very regular, both daily patrons and others not as often because it is expensive. The price of a black coffee for an average customer is 1200 Colones (\$2.14) a standard price in coffee shops everywhere. Café de Monteverde has a local discounted price at 850 Colones (\$1.50USD) which could give incentive for locals to come to the shop. However because they must work during the day it is more likely that they would stop in quickly in the morning before work and are less likely to spend time in the shops later in the day. Even if they did have the time during the day, it is not customary for Ticos to go to coffee shops. In every home I was in coffee was prepared in a chorreador, a traditional coffee maker, and offered upon entrance to the home and throughout the day. Conversations in my host family's home were also indicative of the rarity of locals spending time in coffee shops. To my family, specialty coffee was expensive, they did not have time during the day, and to them the quality of coffee in the supermarket was just as good.



## Factors of Influence



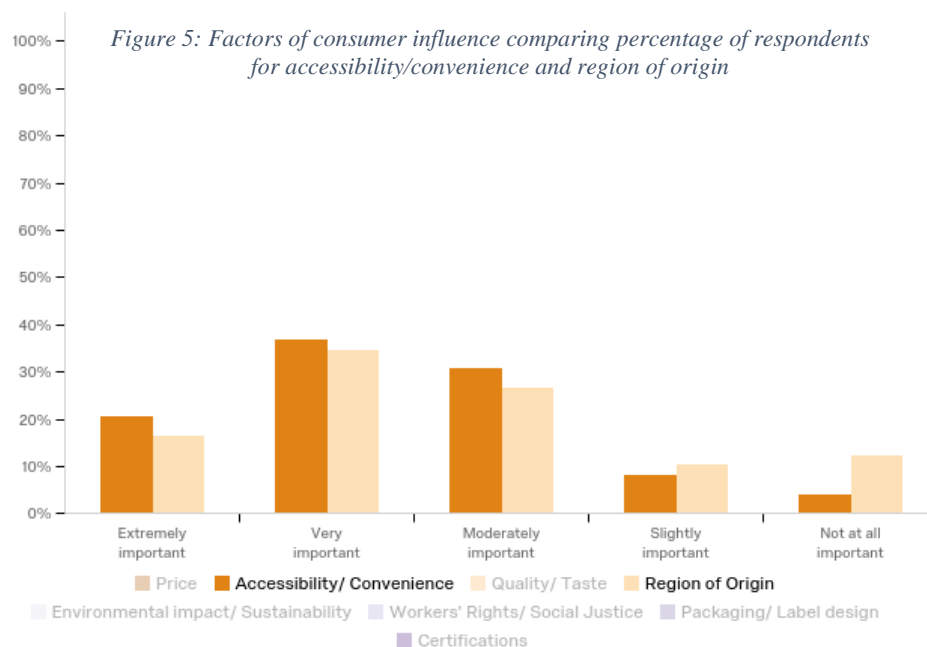
In response to the question, “When consuming coffee, how important are the following factors?” 70% of participants placed extreme importance on quality/taste. The next categories of factors that had the highest percent of responses of extreme importance were workers’ rights/social justice and environmental impact/sustainability. These factors followed very similar trends in response with roughly 40% of participants reporting that they found them to be extremely important. Very few responded that they did not find these factors to be important. Price was moderately important to half of the respondents and had the highest percentage of responses in the ‘Not at All Important’ category (*Figure 4*). The results suggest that when compared to price, environmental impact or sustainability, and workers’ rights or social justice quality or taste is the most important factor to this consumer sample.

Table 3: Price comparison of coffee brands sold in Monteverde at the supermarket, Super Compro, and coffee shops. (\*) indicates two of the most popular commercial coffees for locals.

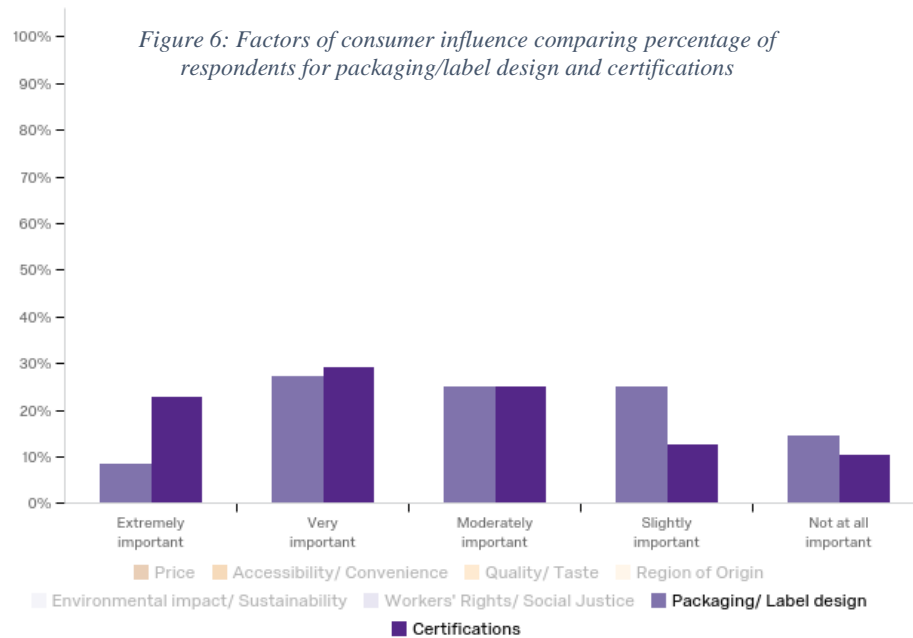
Other Coffee Brands at Super Compro				
Brand Name	Price in Colones (₡)	Price in USD (\$)	Weight (g)	Price/g USD(\$)
Café 1820*	1,274	2.30	250	0.009
Café Britt*	4,800 (Non-organic)	8.60	340	0.025
	5,130 (Organic)	9.15	340	0.027
	5,875 (Decaffeinated)	10.50	340	0.031
Leyenda	2,245 (Certified Puro)	4	500	0.008
	1,715 (Flavored)	3	250	0.012
Café 7 am	1,040	1.85	200	0.009
Volio	1,205	2.15	250	0.009
Montaña	2,575	4.60	500	0.009
Specialty Coffee Brands in Coffee Shops				
Brand	Price in Colones (₡)	Price in USD (\$)	Weight (g)	Price/g USD (\$)
Café de Monteverde	3,925	7	250	0.028
	6,730	12	1000	0.012
Don Juan	5,047	9	340	0.026
	3,365	6	250	0.024

Table 3 shows that there is significant difference in the price of coffee available to consumers at the supermarket compared to coffee sold at coffee shops. Looking at the price per gram column we can see that the majority of the commercial coffees available in supermarkets are sold at an average of \$0.009 per gram. Specialty coffee sold in coffee shops are sold at an average of \$0.023. Café 1820 and Café Britt are two of the largest commercial coffee brands in

Costa Rica and seem to be popular with locals. When in the homes of my two host families and in conversations with locals these two brands were mentioned most frequently. Café Britt is sold at prices similar to those in coffee shops around \$0.025-0.031 per gram and it is found everywhere. On arrival to or departure from either of the two international airports in Costa Rica Café Britt gift shops dominate the terminals. Some large chain hotels such as Marriott have partnerships with Britt in which specialized Britt coffee makers are found in each guest room. In these hotels gift shops have also been capitalized by Café Britt. These reasons make the coffee easily recognizable which could explain why locals are still inclined to purchase Britt instead of specialty coffee from Café de Monteverde or Don Juan even though they are similar in price.

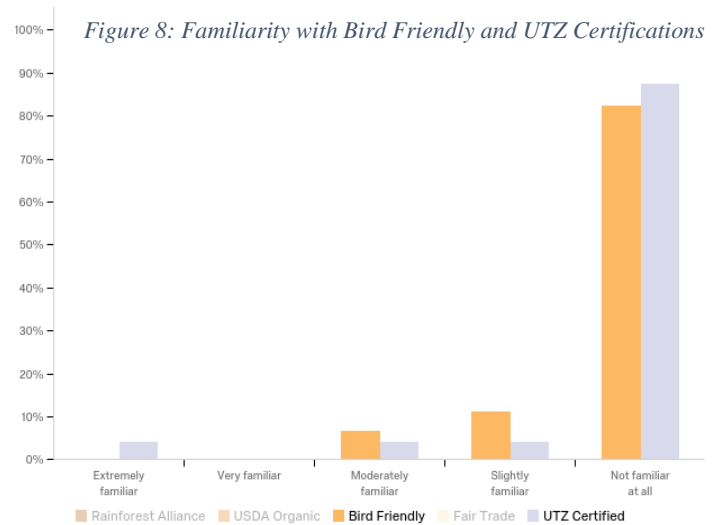
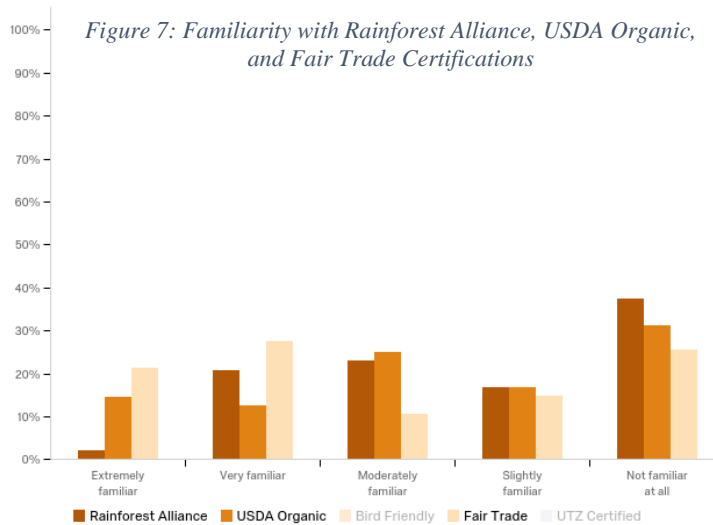


In *Figure 5* we can see that ‘Region of Origin’ and ‘Accessibility/Convenience’ had similar patterns of response with most respondents falling between ‘Very Important’ and ‘Moderately Important’. The results show that the accessibility or convenience of consuming coffee was slightly more important than the region of origin.



While speaking with participants about their plans to take coffee as a souvenir some responded that they look for certifications or labels that signify their product's origin when choosing items to take home for themselves and others. I spoke with one couple from Denmark who were very interested in the sustainability of coffee production in the area. They had previously been on coffee tours in other countries and told me that certifications are one of the first things that they look for while purchasing coffee because to them it shows that a company's values align with their own. Other respondents told me that they never even consider certifications but that the presentation of the packaging or label design could be enough for them to buy a product. The results in *Figure 6* show that there was nearly an even distribution of responses for 'Very Important', 'Moderately Important', and 'Slightly Important' for packaging/label design which is consistent with the conversations I was having. 77% of responses fell between 'Extremely Important' 'Very Important' and 'Moderately Important' for certifications. This also was consistent with what people were telling me in conversations.

## Familiarity with Sustainability Labels



When talking to customers about certifications, USDA Organic, Fair Trade, and Rainforest Alliance were most frequently mentioned as certifications that they look for on their products. The results show that all three received the highest percentage of responses in ‘Not Familiar at All’ but Fair Trade appeared to be the most recognizable certification to these consumers as it has the highest percent of respondents in the ‘Extremely Familiar’ and ‘Very Familiar’ categories (Figure 7). Over 80% of consumers were not familiar at all with Bird Friendly and UTZ certifications (Figure 8).

## Results Analysis

I conducted qualitative research through my survey, observations and semi-structured as well as in-depth conversations. I collected people’s perceptions of the questions I asked and discovered that as a qualitative researcher I was continually reforming my research question as I realized I was looking for answers to broader issues. The results of my initial questions were simply too narrow to encompass all factors that are influencing the decision-making of consumers. There are factors which cannot be quantified such as people’s values and motives. Ethical aspects of decision-making stem largely from societal norms that can be better addressed

by having conversations with people and listening. By only conducting segmented evaluations of decision-making in actors of this market, I did not illuminate the unique system that is in place. The systematic approach that I took to analyzing the coffee market in Monteverde did not give me conclusive results on decision-making but rather solicited the opportunity to broaden my perspective at each junction. These results have lead me to question; *what lens should we use to conduct a systematic analysis of a single market like this one?*

## DISCUSSION

Monteverde residents seek to produce and consume food that is grown with environmentally and socially sustainable practices. In my initial study the data showed that most producers and retailers valued the quality, sustainability, and locality of coffee trade. 72% of retailers responded that they either knew some information or were completely aware of the environmental, social, and economic impacts associated with production and when asked whether they considered coffee in Monteverde to be sustainable, 69% retailers responded that they believed that it was. Consumers also placed high value on quality and sustainability but also social justice as factors that they found important when consuming coffee. Based on observations I made of consumer populations in coffee shops while I was living in Monteverde before the continuation of this study, I anticipated that respondents would be conscious consumers. Though the consumer population that I sampled does not appear to be well informed of aspects of coffee production they were interested to learn more, or so it seemed. Many would ask me questions about my findings when I told them that this was a continuation of my own previous work. Few of them had prior knowledge on coffee in Costa Rica and even less knew that coffee was produced in Monteverde. With such a large proportion of tourists as respondents in my survey seeing that they were interested in gaining additional knowledge on the market was

an important factor in interpreting their values which inherently effect their decision-making.

Economic discrepancies have caused a rise in dependence on tourism for many sectors of the market. This dependence has increased the need for a diversified tourist market with educational tourism as a mitigation strategy to reduce the increasing pressure on the social, economic, and environmental implications associated with tourism. Today there are 14 educational centers, 15 action committees, community groups, and non-profit organizations supported by students, researchers and volunteers (Wilkins, 2011). Though educational travelers make up a small portion of annual tourists, their impact can be seen throughout the community through the diversification of the economy, support of local businesses, community projects for improvement of infrastructure and health, and homestay or cross-cultural exchange programs that have connected tourists to locals on deeper levels (Wilkins, 2011). Educational tourism creates the opportunity for tourists to engage with locals gaining knowledge that they can carry through their lives when they return home.

With shifts in the local economy of Monteverde and opportunities such as tourism, producers and retailers have been influenced in their decision-making while participating in coffee trade. When the Santa Elena Cooperative weakened it caused a loss of confidence by farmers, a slight decline in the area's coffee production, and encouraged the search for alternative marketing channels. Since then, some land-owners have abandoned farming to establish tourist businesses while others have integrated some tourism activities into their farms. With the cooperative's weakening, and the rapid growth of tourism, some farmers moved into tourism, as employees, entrepreneurs, or by diversifying their farms to appeal to tourists (Stuckey et al., 2014). Of an estimated 250,000 annual tourists, approximately 20,000 participate in tours of coffee, sugar cane, cocoa and other farms that have developed sustainable agro-

ecological practices (Holland et al., 2010).

Although agro-tourism has been more predominant on coffee plantations in the Monteverde area (e.g., Café Monteverde, Café San Luis, Café La Bella Tica, Café Don Juan), other farms have also taken advantage of tourism to diversify their productive activities. Other farms offer guided farm tours, and educational activities linked to the region's natural history and culture; some offer lodging and entertainment for visitors (Stuckey et al., 2014). Some of the farms visited in my initial study that had coffee as their secondary source of income had tilapia production or restaurants that were generating their main income. I had not considered participation in coffee farms as a factor of influence in consumer decision-making while creating the questions in my survey but this would have been an important factor to gather data on. Coffee tours offered in the area are a direct source of education on the environmental, economic, and social implications of coffee production. It would be interesting to see if there is a correlation between consumers' level of knowledge on coffee production and their participation in coffee tours.

While describing my study to a local, Luis Jimenez D'Lukes he made an interesting comparison of the artisanal markets of specialty coffee and craft beer that I had not previously thought of. He compared specialty coffee to craft beer because in both markets there are quality seeking consumers who only want to drink the best quality regardless of the price because they have an appreciation for the taste. On the other hand there are people who drink commercial coffee religiously out of habit or for the effects of caffeine with less concern for quality and more concern for price. To him this was similar to craft beer drinkers in comparison to domestic beer drinkers. There are people who understand that craft beer is more expensive because it is better



quality and others who want to experience the effects of beer regardless of quality for a cheap price. To Luke the mentality of tourists and locals may differ based on quality and price seeking.

My results could support Luke's hypothesis if only looking at what the data showed. My results suggest that consumers were in fact quality seekers and they did not place high importance on price. Tourists may be more inclined to pay more for coffee to take as a souvenir regardless of whether they have or have not tried it themselves simply because they are interested in the fact that it came from Costa Rica. They may even have heard that coffee in the country is of high quality. Even without the influence of recognized third-party certifications, tourists could be drawn to the "label" of coffee produced in Costa Rica. This is what I discovered in my qualitative results and in many conversations that I had with respondents.

Locals on the other hand may be less inclined to buy from specialty coffee shops because they can find cheaper options at super markets. Conventional or big name coffee from super markets can be more convenient, cheaper, and familiar for some locals as it is what they are used to buying. In *Table 3* we can see that there is indeed a difference in price per gram for several conventional coffee brands at the supermarket in comparison to specialty coffees from coffee shops. Tourists may or may not be aware of the price difference and because quality or taste was their most influential factor in my results, it suggests that they may be drawn to coffee shops for their souvenir coffee because they are able to try it before purchase. It also has the "feel good" factor of buying it from a local coffee shop instead of at the supermarket or from a Café Britt souvenir store on the way out of the airport.

Though there is relatively no influence of third-party certifications producers in my previous survey were using sustainable practices on their farms and retailers believed in the integrity of the sustainability of local farmers. While visiting the farms of producers I

interviewed I also believed in the integrity of these local farmers. Their passion for producing their best quality coffee in harmony with nature was evident. The results for consumers suggest that there was a disconnection between what people were telling me and the knowledge they actually had on certifications. People claimed that they looked for certifications before purchasing coffee but then seemed to have little knowledge on the foundations of those certifications. While reading Sally Eden's article on the politics of certification I came across the following quote;

*"The production knowledge that is read into a commodity is quite different from the consumption knowledge that is read from the commodity. Of course, these two readings will diverge proportionately as the social, spatial and temporal distance between producers and consumers increases"* (Appadurai, 1986).

Certifications are intended to simplify the consumers' dilemma when making purchases. If they did in fact signify that a product was produced sustainably, and the consumer was aware that such practices could reduce the distance from them to their producer, then selecting is easy. Reading into a commodity with certifications the production knowledge showcases the sustainable practices that made that product. At the final stage of the market the knowledge that is read by a consumer is entirely dependent on the knowledge that they have on those certifications. There is an assumption that without certifications, modern consumers have little or no knowledge about the products that they consume, because they are distanced from production systems. Although they can make interpretations of the physical attributes such as quality, taste and price, they must infer the circumstances of the item's production. Such "distancing" from production can be the result of not only geographic separation but also socially constructed values. Most consumers do not visit farms and factories even when in proximity which

contributes to the disconnection. So instead of gaining firsthand knowledge of the production of an item, consumers increasingly rely on secondhand information about products from the media in advertisements, newspapers, and internet sources or less formal means, such as folklore and gossip. Or more often than not, they simply do without information at all (Eden, 2011). The top consuming countries of the most common coffee certifications are the US, Canada, and Europe (*Table 1*). Of the 72% of respondents were from the top consuming countries. This could explain why some consumers were more familiar with the certifications that are found in all markets or those that focus their marketing in North America and Europe such as Organic, Fair Trade and Rainforest Alliance. Though they may have seen these labels before, they could still be unaware of what they mean and the values that they are intended to signify. It is not about whether consumers have access to the knowledge of production and certifications but rather if they value or even care about such knowledge. There is little simplicity in sustainable labeling when consumer motives are unclear. Evaluating consumer motives is not possible in a brief 10 question survey when such motives are deeply rooted in people's values.

## CONCLUSION

This study has been an attempt to illuminate a uniquely sustainable system in place in the coffee market of Monteverde. I began with an interest in the ecology of coffee plants where I realized I wanted to talk to people because I found them more interesting. This led me to an economic investigation of the relationship between two shareholders in the market, producers and retailers. From there it felt natural to “complete” the study with the last part of the commodity chain, consumers. After analyzing the results of both of my studies I realized that it is not about the commodity chain and each of its individual actors, but instead about the larger system as a whole. On the broadest scale, Costa Rica has established effective laws and regulations which have allowed it to be competitive in the global market while retaining sustainable means of production. This has created economic stability and drawn many people interested in similar ventures. In Monteverde despite the large influence of tourism, producers have been able to remain stable in the coffee market and have even diversified their farms to educate tourists about sustainable farming. The results that I have collected from surveys of each shareholder in this market have not been fully reflective of the complexities associated with the factors that influence each actor. These complexities stem from ecological, economic and anthropological factors that make it difficult to come to a conclusive answer of why people make the decisions they do. As a qualitative researcher I have moved away from a narrow focus and scaled back to reveal even larger questions than I thought I would have. Moving forward I would like to further investigate frameworks of analysis that would give a more comprehensive investigation of a market similar to this one. Without previous studies of this nature in Monteverde, my study can stand as a base for further research from multiple fields of study.

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## **Appendix I- Verbal Consent Script in English and Spanish**

My name is Jesyca Lazo and I am an undergraduate student in environmental studies at the University of Colorado in the United States. I am conducting research for my Honors Thesis on coffee consumption here in Monteverde. The main objective of this research project is to provide an academic case study which evaluates factors that influence consumer decision-making in a commodity market. I have a brief 10 question survey that should take no more than 10 minutes to complete. Your participation is voluntary and your responses are anonymous. There are no questions which solicit any personal identification so there are no risks associated. There are no direct benefits to you but your participation is greatly appreciated. Would you be willing to take my survey? If you have any additional questions, concerns, or would like additional information you can email me at [jesyca.lazo@colorado.edu](mailto:jesyca.lazo@colorado.edu).

Me llamo Jesyca Lazo y soy una estudiante de pregrado en estudios ambientales en la Universidad de Colorado en los Estados Unidos. Estoy realizando investigaciones para mi tesis de honores sobre consumo de café en Monteverde. El objetivo principal de este proyecto de investigación es to provide un estudio de caso académico que evalúe los factores que influyen toma de decisiones del consumidor en mercados de materias primas. Tengo una breve encuesta de 10 preguntas que no debe tomar más de 10 minutos para completar. Su participación es voluntaria y sus respuestas son anónimas. No hay preguntas que soliciten una identificación personal por lo que no hay riesgos asociados. No hay beneficios directos para usted, pero su participación es muy apreciada. ¿Podría tomar mi encuesta? Si tiene más preguntas, preocupaciones, o quiere más información puede envíeme un correo electrónico a [jesyca.lazo@colorado.edu](mailto:jesyca.lazo@colorado.edu).

## Appendix II- Consumer Survey in English and Spanish

### Coffee Consumption in Monteverde, Costa Rica (English)

Location

- ☐ ChocoCafé
- ☐ Café Orchid Coffee Shop
- ☐ Café de Monteverde
- ☐ Stella's Bakery

Q1 Where are you from?

- ☐ U.S.A.
- ☐ Costa Rica
- ☐ Other \_\_\_\_\_

Q2 What is your age?

- ☐ 18 to 21
- ☐ 22 to 34
- ☐ 35 to 44
- ☐ 45 to 54
- ☐ 55 to 64
- ☐ 65 and over

Q3 How often do you consume coffee?

	Daily	Weekly	Monthly	Occasionally	Never
Frequency of consumption	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q4 Have you consumed coffee in your time in Monteverde?

- ☐ Yes
- ☐ No

Q5 Where do you get the coffee you are consuming? (check all that apply)

- ☐ Coffee Shops
- ☐ Hotels/ Hostels
- ☐ Supermarkets/ Retail stores
- ☐ Producers
- ☐ Unknown

Q6 If applicable, are you planning to buy coffee to take as a souvenir?

- ☐ Yes
- ☐ No
- ☐ Not applicable

Q7 How familiar are you with the following labels?

	Extremely familiar	Very familiar	Moderately familiar	Slightly familiar	Not familiar at all
Rainforest Alliance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
USDA Organic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bird Friendly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fair Trade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UTZ Certified	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q8 When consuming coffee, how important are the following factors?

	Extremely important	Very important	Moderately important	Slightly important	Not at all important
Price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accessibility/ Convenience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality/ Taste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Region of Origin	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental impact/ Sustainability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Workers' Rights/ Social Justice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Packaging/ Label design	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Certifications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q9 Are you informed about the environmental, social, and economic impacts (positive or negative) of coffee production?

	Extremely well	Very well	Moderately well	Slightly well	Not well at all
How informed are you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q10 Do you believe that coffee produced in Monteverde is sustainable?

- ☐ Definitely yes
- ☐ Probably yes
- ☐ Might or might not
- ☐ Probably not
- ☐ Definitely not

## Coffee Consumption in Monteverde, Costa Rica (Spanish)

Location

- ☐ ChocoCafé
- ☐ Café Orchid Coffee Shop
- ☐ Café de Monteverde
- ☐ Stella's Bakery

Q1 ¿De donde eres?

- ☐ Estados Unidos
- ☐ Costa Rica
- ☐ Otro \_\_\_\_\_

Q2 ¿Cual es tu edad?

- ☐ 18-21
- ☐ 22-34
- ☐ 35-44
- ☐ 45-54
- ☐ 55-64
- ☐ 65 y más

Q3 ¿Con qué frecuencia consume café?

	Diario	Semanalmente	Mensualmente	Ocasionalmente	Nunca
Frecuencia de consumo	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q4 ¿Ha consumido el café en Monteverde?

- ☐ Sí
- ☐ No

Q5 ¿Dónde compra el café consume? (marque todas las que aplican)

- ☐ Las cafeterías
- ☐ Hotels/ Hostels
- ☐ Supermercados
- ☐ El/la productor(a)
- ☐ No sé

Q6 Si es aplicable, ¿Comprará el café como un recuerdo?

- ☐ Sí
- ☐ No
- ☐ No es aplicable

Q7 ¿Está familiarizado con las etiquetas siguientes?

	Extremadamente familiar	Muy familiar	Moderadamente familiar	Un poco familiar	Para nada
Rainforest Alliance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
USDA Organic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bird Friendly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fair Trade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UTZ Certified	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q8 Cuando usted compra el café, ¿qué importancia tienen los siguientes factores?

	Extremadamente importante	Muy importante	Moderadamente importante	Un poco importante	Para nada
Precio	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accesibilidad/ Conveniencia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calidad/ Sabor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Región de Origen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Impacto ambiental/ Sostenibilidad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Derechos del trabajador/ Justicia Social	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Embalaje/ Diseño de etiqueta	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Certificación	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q9 ¿Se le informa de los impactos ambientales, sociales y económicos (positivos o negativos) de la producción de café?

	Extremadamente bien	Muy bien	Moderadamente bien	Un poco bien	Para nada
¿Cómo así?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q10 ¿Crees que el café se produce en monteverde es sostenible?

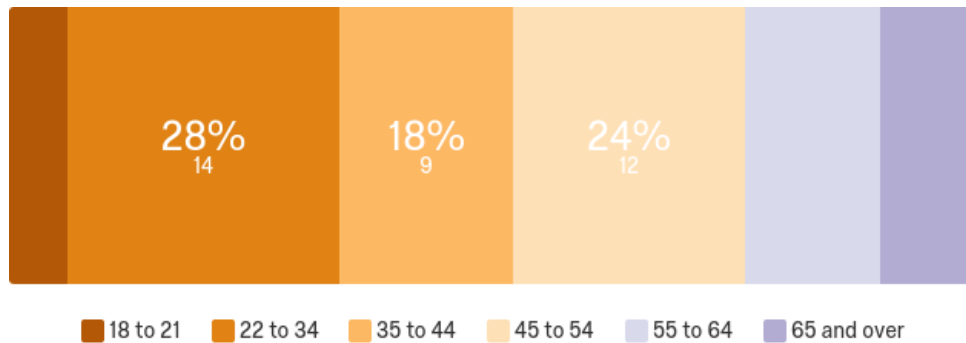
- ☐ Definitivamente sí
- ☐ Probablemente sí
- ☐ Podría o no podría
- ☐ Probablemente no
- ☐ Definitivamente no

## Appendix III- Qualtrics Results

### Q1 - Where are you from?

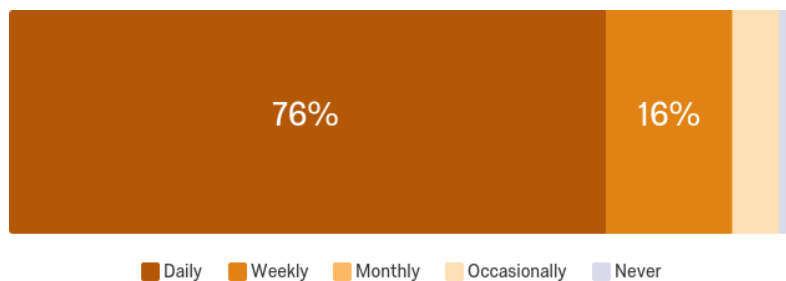
#	Answer	%	Count
1	U.S.A.	36.00%	18
2	Costa Rica	28.00%	14
3	Other	36.00%	18
	Total	100%	50

### Q2 - What is your age?



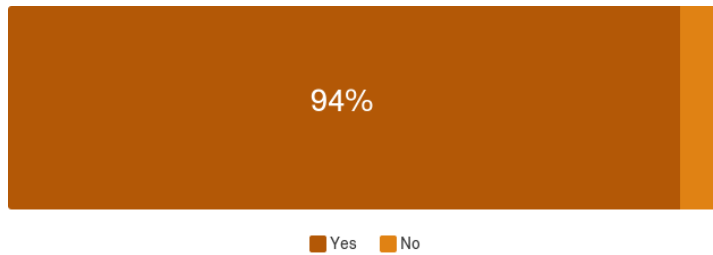
#	Answer	%	Count
1	18 to 21	6.00%	3
2	22 to 34	28.00%	14
3	35 to 44	18.00%	9
4	45 to 54	24.00%	12
5	55 to 64	14.00%	7
6	65 and over	10.00%	5
	Total	100%	50

### Q3 - How often do you consume coffee?



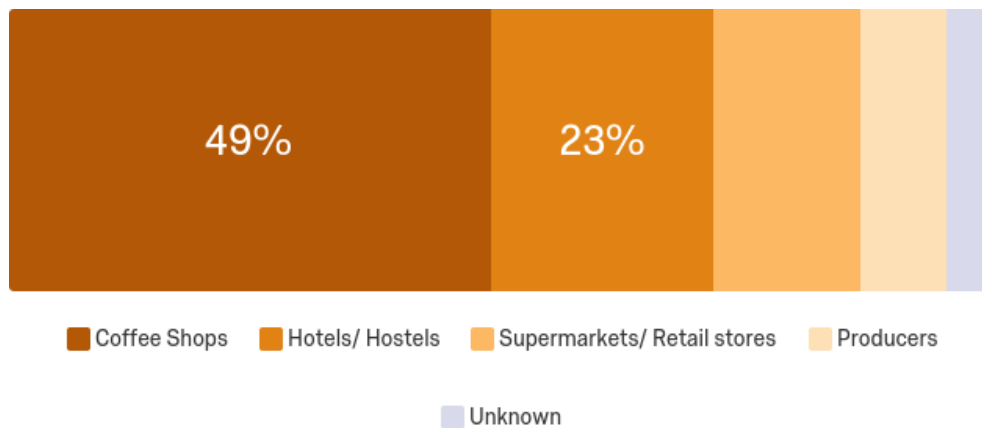
#	Answer	%	Count
1	Daily	76.00%	38
2	Weekly	16.00%	8
3	Monthly	0.00%	0
4	Occasionally	6.00%	3
5	Never	2.00%	1
	Total	100%	50

#### Q4 - Have you consumed coffee in your time in Monteverde?



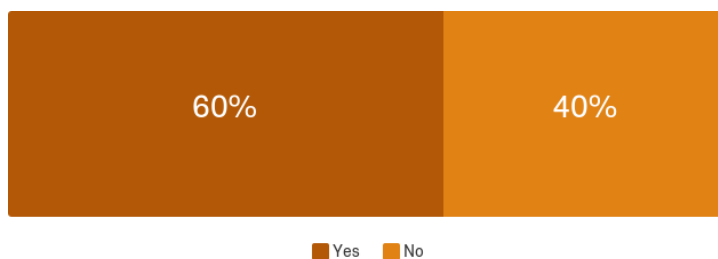
#	Answer	%	Count
1	Yes	94.00%	47
2	No	6.00%	3
	Total	100%	50

#### Q5 - Where do you get the coffee you are consuming? (check all that apply)



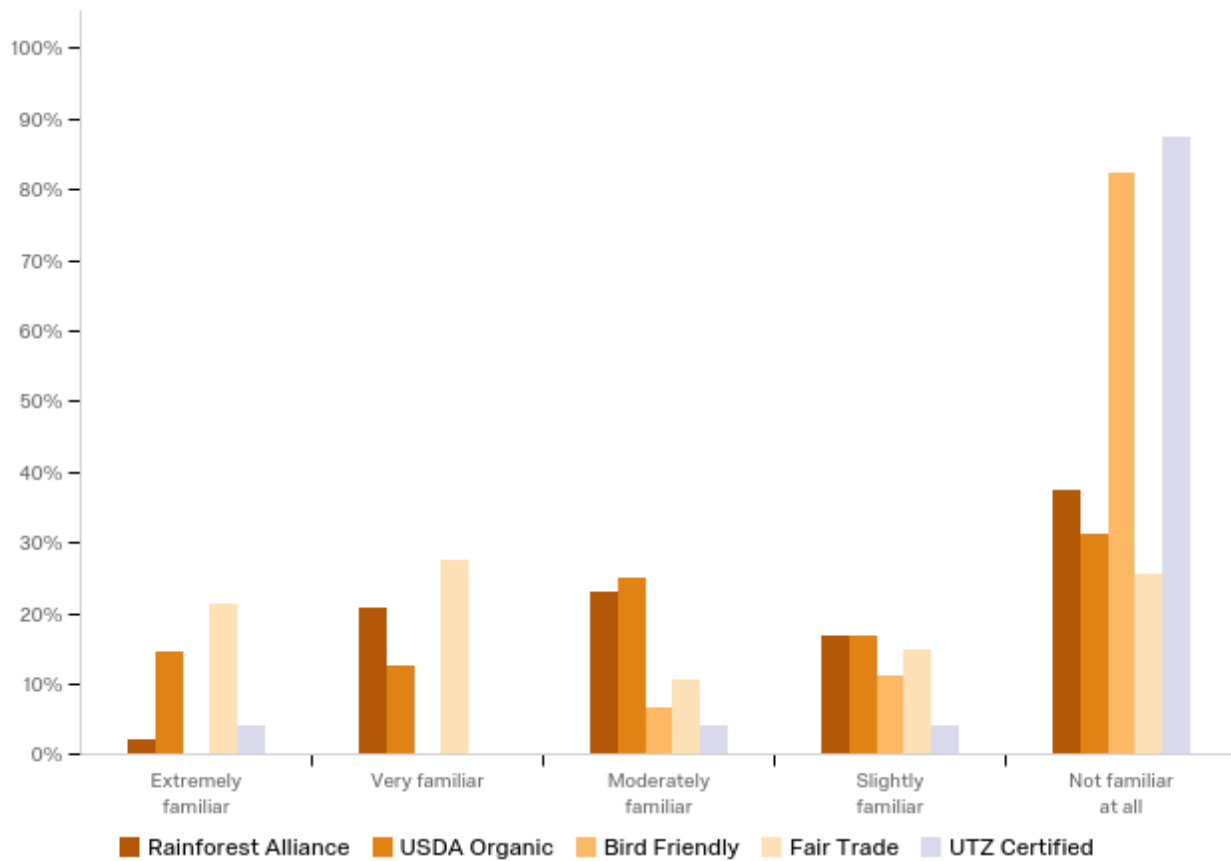
#	Answer	%	Count
1	Coffee Shops	78.00%	39
2	Hotels/ Hostels	36.00%	18
3	Supermarkets/ Retail stores	24.00%	12
4	Producers	14.00%	7
5	Unknown	8.00%	4
	Total	100%	50

#### Q6 - If applicable, are you planning to buy coffee to take as a souvenir?



#	Answer	%	Count
1	Yes	60.47%	26
2	No	39.53%	17
	Total	100%	43

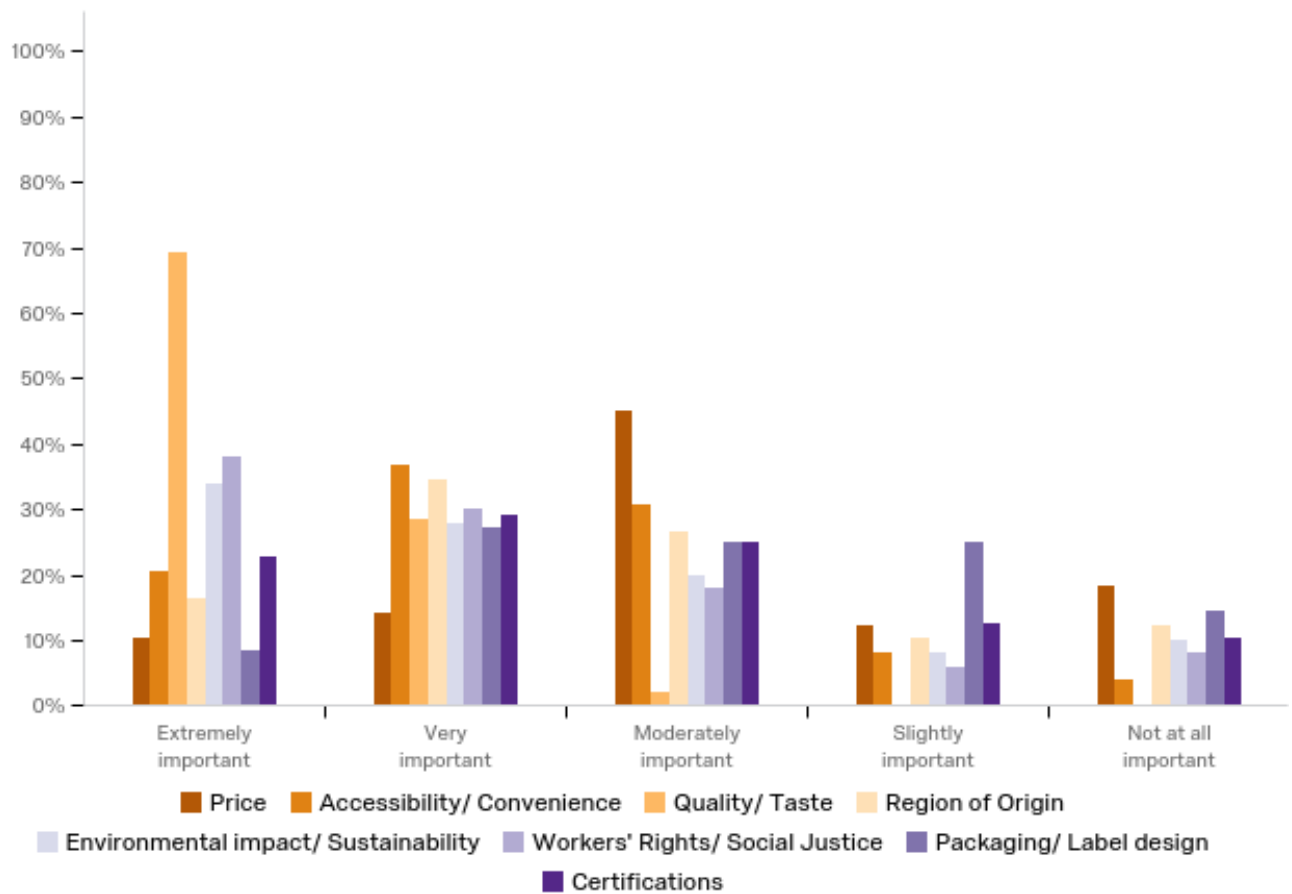
## Q7 - How familiar are you with the following labels?



#	Question	Extremely familiar		Very familiar		Moderately familiar		Slightly familiar		Not familiar at all		Total
1	Rainforest Alliance	2.08%	1	20.83%	10	22.92%	11	16.67%	8	37.50%	18	48
2	USDA Organic	14.58%	7	12.50%	6	25.00%	12	16.67%	8	31.25%	15	48
3	Bird Friendly	0.00%	0	0.00%	0	6.67%	3	11.11%	5	82.22%	37	45
4	Fair Trade	21.28%	10	27.66%	13	10.64%	5	14.89%	7	25.53%	12	47
5	UTZ Certified	4.17%	2	0.00%	0	4.17%	2	4.17%	2	87.50%	42	48

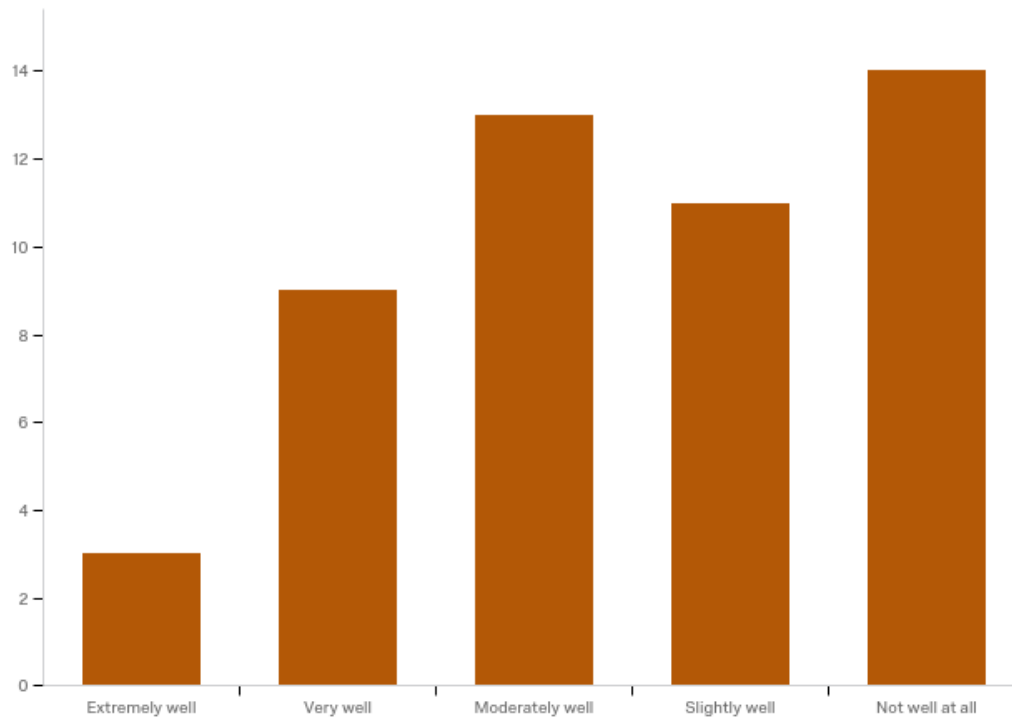


## Q8 - When consuming coffee, how important are the following factors?



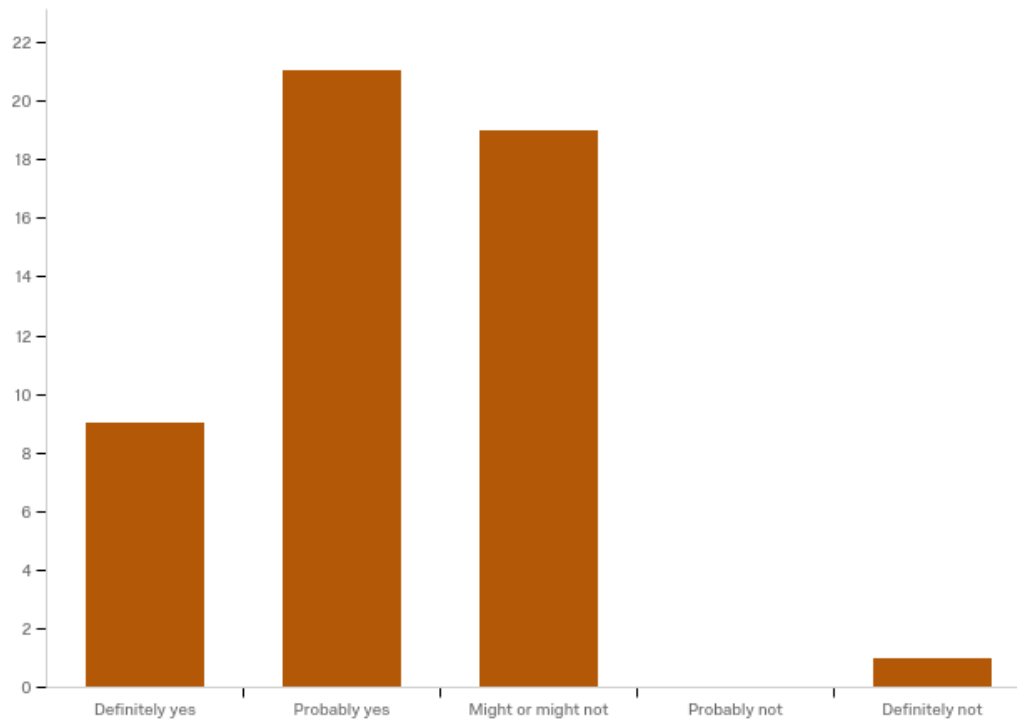
#	Question	Extremely important		Very important		Moderately important		Slightly important		Not at all important		Total
1	Price	10.20%	5	14.29%	7	44.90%	22	12.24%	6	18.37%	9	49
2	Accessibility/ Convenience	20.41%	10	36.73%	18	30.61%	15	8.16%	4	4.08%	2	49
3	Quality/ Taste	69.39%	34	28.57%	14	2.04%	1	0.00%	0	0.00%	0	49
4	Region of Origin	16.33%	8	34.69%	17	26.53%	13	10.20%	5	12.24%	6	49
5	Environmental impact/ Sustainability	34.00%	17	28.00%	14	20.00%	10	8.00%	4	10.00%	5	50
6	Workers' Rights/ Social Justice	38.00%	19	30.00%	15	18.00%	9	6.00%	3	8.00%	4	50
7	Packaging/ Label design	8.33%	4	27.08%	13	25.00%	12	25.00%	12	14.58%	7	48
8	Certifications	22.92%	11	29.17%	14	25.00%	12	12.50%	6	10.42%	5	48

**Q9 - Are you informed about the environmental, social, and economic impacts (positive or negative) of coffee production?**



#	Answer	%	Count
1	Extremely well	6.00%	3
2	Very well	18.00%	9
3	Moderately well	26.00%	13
4	Slightly well	22.00%	11
5	Not well at all	28.00%	14
	Total	100%	50

**Q10 - Do you believe that coffee produced in Monteverde is sustainable?**



#	Answer	%	Count
1	Definitely yes	18.00%	9
2	Probably yes	42.00%	21
3	Might or might not	38.00%	19
4	Probably not	0.00%	0
5	Definitely not	2.00%	1
	Total	100%	50

### Lists for Further Readings

Gamboa, J., Ross, J., & Capelli, L. (2014). *Café De Costa Rica: El Espíritu De Una Nación*. Instituto del Café de Costa Rica.

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Robbins, P. (2004). *Political Ecology*. Blackwell Publishing Ltd.

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Zimmerer, K. S., & Bassett, T. J. (2003). *Political Ecology: an integrative approach to geography and environment-development studies*. The Guilford Press.