Sustainability in the Japanese Coffee Market:
What is motivating large Japanese companies to bet on sustainability?

Mark Rijnties

Leiden University

MA Asian Studies 60 EC

13235 words (excluding Appendices)

Contents

Introduction

The world is currently experiencing unprecedented population growth combined with the threat of climate change. These factors have led to much discussion regarding more sustainable ways of life. Progressive climate change may lead to crop failure, which may in turn cause food shortages. The widespread use of plastics is also increasingly shown to be polluting our oceans with microplastics, making sustainability a topic of particular interest among academia. Although sustainability is relevant in a wide variety of economic sectors, the influence is especially perceivable in the coffee industry. The coffee industry has been at the core of sustainability efforts since the inception of the Fairtrade initiative. The Fairtrade initiative criticized and set out to improve upon the coffee trades' notoriously poor treatment of local producers, a practice with roots in colonialism (Hoffman 2018, 168). Fairtrade also criticizes the lack of incentives given to farmers to prioritize environmentally sustainable production. The initiative launched one of the first private labels to be accredited to products indicating an effort to attempt and improve social sustainability for coffee farmers. This initiative was first launched in the Netherlands, and the concept has grown and been expanded upon across the globe (Ingenbleek & Reinders 2012, 462). Coffee is consumed all over the world, and among these global markets Japan is particularly distinctive. It is one of the largest consumers of coffee beans, only behind the United States, Brazil, and Germany ("World Coffee Consumption." 2020). The global demand for coffee continues to increase, while the livelihood of coffee farmers and the survival of coffee farms are under constant threat due to environmental and economic fluctuations (Samper & Quiñones-Ruiz 2017, 3). The main goal of sustainability standards as applied to coffee products is to reduce and ultimately eliminate these issues. The complex supply chain leaves many issues to be solved and initiatives such as Fairtrade step in to address these issues.

Although often overlooked in research on the consumption of sustainable coffee products, Japan has historically had a coffee market distinctive in comparison to other major coffee consuming countries. For example, the consumption of canned coffee beverages has been commonplace in Japan for decades, peaking in popularity in the 1990s according to statistics by the All Japan Coffee Association (AJCA, 2019a). However, canned coffee also leads to a significantly higher carbon footprint compared to other types of consumption (Hassard et al. 2014, 316). Another element that makes Japanese coffee consumption distinctive is its decade long history of specialty coffee consumption through *kissaten*. These are cafes initially inspired by European influences, but which quickly transformed into a unique concept of their own (White 2012, 29). In comparison to abroad however, knowledge regarding the value of sustainable consumption is present but takes a different shape in Japan. The widespread usage of plastic packaging is one such example that draws much criticism. Although it is reported that Japan recycled 84 percent of the 2018 plastic waste, critics argue that all use of plastic should be discouraged due to the danger of microplastics. The seas surrounding Japan are estimated to have comparatively high levels of microplastics (Inagaki 2020). However, there has been a recent shift in the Japanese coffee market, with large companies increasingly adding sustainable coffee products to their line-up. Companies such as UCC Ueshima are promoting their sustainable efforts on company-owned farms (UCC 2020). This seems to indicate a demand for these products in Japan, despite education regarding the necessity of sustainability being uncommon (Tanaka 2016, 251). It could be surmised that rather than analysing current developments in their domestic market, large companies in Japan are following global trends in coffee. The majority of sustainability initiatives such as Fairtrade are European in origin, which is often explained as being due to the region's colonial heritage and the inequal supply chains that resulted because of it (Hoffman 2018, 168). Although more briefly, Japan also has a history of colonial influence and foreign relations with coffee producing countries, and this history continues to influence modern-day supply chains. However, there is little data on whether this history has been a motivation for Japanese companies to expand their line-up to include more sustainable options.

The latest trend in specialty coffee, also referred to as the third-wave of coffee, is described as a revolution in the consumption experience, mainly because it elevates coffee from a beverage enjoyed for its energizing capabilities to a beverage enjoyed for its flavour and origin not dissimilar to wine (Boaventura et al. 2018, 255). This development can be credited as a significant step towards mainstreaming small-scale sustainable coffee, because one of the third waves' core elements is traceability to the local coffee producer. The trend is possibly a natural progression on the *kissaten* concept already widely popular in Japan. The third wave has penetrated the Japanese market in recent years, and could also provide an explanation as to why large companies are investing in sustainable products despite a perceived lack of consumer awareness in Japan. The market share acquired by these third-wave coffee producers may pose a threat to the profits of larger companies. To further analyse the sustainable coffee market in Japan a literature review will be conducted. In order to establish a clear framework this paper will start by analysing prior research on global coffee sustainability efforts, criticism regarding the various efforts, and the extent to which these efforts have penetrated the Japanese coffee market. In the next section the focus will shift towards research into coffee consumption in Japan, and the ways in which historical events have shaped contemporary supply chains and consumption habits. Finally, the Japanese market penetration of the third-wave coffee trend will be analysed through existing literature. The existing literature will serve as a foundation on which to further analyse what is motivating large Japanese companies to invest in the sustainable coffee market segment. In-depth analysis of primary sources, such as press releases, news articles, and interviews with stakeholders will be conducted to answer the question: why are large Japanese companies investing in the sustainable coffee market despite a lack of domestic consumer awareness?

Literature Review

1. How Sustainability is Defined in the Coffee Industry

The topic of sustainability encompasses a wide spectrum of issues, which may differ in applicability depending on the economic sector that is focused on. Sustainability markers are utilized to specify and identify broader structural issues facing sustainable food production. Over the past few decades' initiatives by non-governmental organisations to make food production more sustainable has mainstreamed awareness of the social, economic, and environmental threats to our favourite consumer products, particularly coffee. Consumer awareness has been impacted to such an extent that large producers and retailers now actively adapt their business strategy to incorporate sustainable products. This was initially a phenomenon in the Netherlands, where two of the leading sustainability standards, Fairtrade and Utz Certified, were first established in the 1980s. In the decades that followed the share of certified coffee in Dutch supermarkets and restaurants increased rapidly (Ingenbleek & Reinders 2012, 463). Ingenbleek & Reinders focus on the Dutch origins of sustainable coffee certifications, but further reading reveals that this newfound popularity of sustainable certified coffee rapidly transformed into a worldwide trend reaching countries such as Japan. Kolk notes that these certified coffees created a new market segment with high projected growth rates (Kolk 2011, 326). Initially, this was likely the primary motivation for companies to invest. As the sustainability trend grew increasingly popular in the 1990s, the Japanese government introduced an organic certification system for coffee in 2001 (Sakagami et. al. 2006, 247). Sustainable products are increasingly common in Japan according to Tanaka, but his research concludes there is still room for improved education among younger Japanese people to increase general awareness of its benefits. He argues that further elaborating on issues such as the inequal supply chains might increase the popularity of sustainable products (2016, 251). Rather than education, I would argue that a larger market presence through large company adaptation has the highest probability to lead to increased awareness of sustainability issues. However, it ultimately depends on how this information is conveyed by the companies. One could argue that the extent to which sustainable standards are adopted by suppliers of finished coffee products (such as coffee shops, retail stores, and roasteries) depends primarily on large company cooperation as they have the largest influence on the market. In the early 1990s up to 75% of all coffee was imported through large trading companies in Japan (Nakamoto 1990, 5). In the decades that followed a number of large companies have created their own sustainability programmes. For example, large companies in Japan such as UCC (Ueshima Coffee) and Starbucks Japan proudly promote their sustainability efforts on their websites (UCC 2020)(Starbucks Japan 2020). These larger companies are increasingly leveraging sustainability as a marketing tool.

The aforementioned high projected growth rates of the sustainable coffee market likely provide a tangible motivation for large companies to invest, but a lack of general awareness among the Japanese population raises questions on the actual returns on investment. The visibility of sustainable products either through labels or marketing might also influence consumer awareness. Although in Japan most larger coffee producers now run their own internal sustainability programmes, sustainable certification agencies operate independently and certify a wide variety of products (with a strong focus on coffee) and can therefore be considered more recognisable. These certifications are commonly used worldwide, and each have their own unique strategy. Also known as ''Voluntary Sustainability Standards (VSS)'' these labels provide coffee growers a new avenue through which to differentiate their products (Samper & Quiñones-Ruiz 2017, 3). In four papers consulted, the most commonly highlighted standards were the Fairtrade, Utz Certified, and Rainforest Alliance initiatives. Three papers also mentioned Organic certification as a measure of sustainability. Finally, one paper mentioned the Shade/Bird Friendly initiative (Raynold et. al. 2006, 152). Fairtrade was the first standard to gain global awareness, and also the first to be introduced to Japan ("フェアトレードジャパンとは ." 2020). Ingenbleek & Reinders write about the establishment of Fairtrade under the name of Max Havelaar in the 1980s in the Netherlands, and the challenge the organisation initially faced in convincing large companies to adopt the label (2012, 464). If the large company focus in the Netherlands is any indication for the strategy employed by Fairtrade in the Japanese market, it might help explain partly why large Japanese companies increasingly invest in sustainability. Furthermore, Hoffman describes how the name Max Havelaar is inspired by the name of a Dutch book released in 1860 that exposed major colonial abuses on coffee farms in Indonesia (2018, 168). This portrays how the coffee industry has a long history of inequality dating back to the colonial era and might explain why coffee in particular is a focus field in sustainability research. However, this possible correlation between a colonial heritage and demand for sustainable products is not strongly highlighted in the existing literature. The popularity of Fairtrade inspired the establishment of 'competing' sustainability standards, such as Utz Certified. This NGO is also based in the Netherlands, which allegedly lead to competitive tensions between the two organisations (Ingenbleek & Reinders 2012, 465-469). Unlike Max Havelaar and Utz Certified, the Rainforest Alliance was established in New York and did not initially focus solely on coffee production (Kolk 2011, 328). Overall, all three organisations have grown to acquire a global reach, and continue to lobby primarily large companies to adopt their respective sustainability standards. The labels granted by these organisations can now be found on coffee packaging globally, including in supermarkets and cafes across Japan.

The efforts by these organisations have made consumers increasingly aware of economic, social, and environmental consequences of their consumption habits, as argued by Samper & Quiñones-Ruiz

(2017, 3). Coffee in particular makes a suitable case study for sustainability issues, as there are tangible issues related to each of the three sustainable markers. These markers can be used to identify sustainability trends in the Japanese markets, and are therefore useful to highlight. In *economic terms*, the livelihoods of coffee producers are in constant flux due to unpredictable coffee market prices, and ultimately only 1 to 3 percent of total profits go to the farmers (Tanaka 2016, 34-35). This baseline price for coffee is also known as the C-price, and is the price of commodity coffee traded at the New York Stock Exchange. This causes the price to change on a daily basis, engendering high degrees of uncertainty among local growers (Hoffman 2018, 42). In *social terms*, especially in producing countries that strongly depend on the coffee trade, communities can be negatively impacted due to changes in the local supply chain, for example when a local trader goes bankrupt (Anh & Bokelmann 2019, 12). In *environmental terms*, the coffee plant is often highlighted as being extremely sensitive to progressive climate change. However, recent research suggests the influence of climate change might be exaggerated (DaMatta et. al. 2018, 167). There is an ongoing debate on whether the coffee rust epidemic is caused by the genetic evolution of the microorganism, or by progressive climate change. Regardless, the coffee plant continues to be highly susceptible to environmental influence, and research is still ongoing (Amico et. al. 2019, 491). Crop failure greatly impacts farmers worldwide, for example in the Blue Mountain region of Jamaica which exports the vast majority of its production to Japan (Guido et. al. 2018, 255-258). This reveals that the coffee trade is threatened on many different levels, and a lack of sustainability measures might lead to dire consequences such as disturbances in the supply chain and crop failure, affecting consumers in Japan. Therefore, it is valuable to identify whether these threats are sufficiently conveyed by NGOs and Japanese coffee producers to their consumer base. However, even if properly conveyed, consumers might question the true effectiveness of purchasing sustainable products.

It is important to remember that despite the large amount of literature promoting sustainability efforts, there is also a large body of criticism regarding the effectiveness of third-party labels such as the ones discussed. Kolk notes that only ''consumers that are involved and aware'' of these labels are going to alter their consuming patterns. He also sheds light on the greater question of whether ''commercialization and consumption'' of the labels is the correct approach to rectify sustainability issues (Kolk 2011, 335). Samper & Quiñones-Ruiz elaborate on this point, noting that critical voices describe the labels as ''limiting the local scope of decision making'' and increasing the cost for growers to adhere to the sustainability standards. Furthermore, they describe the labels as often being used ''as a form of protection of brand reputation" (2017, 5). Although these criticisms focus on a macro scale, there is also similar evidence on a micro scale. Coffee is commonly produced in the southern hemisphere, and predominantly consumed in the northern hemisphere. Therefore, the fact that coffee production spans such a large area of the earth south of the equator also indicates that the effectiveness of sustainability efforts varies greatly depending on which area is focused. The research by Guido et. al. into crop failure in Jamaica is one example of its limited effectiveness (2018, 255-258). Research into the effectiveness of sustainability standards for Vietnamese coffee farmers also garners mixed results, especially when focusing on economic markers (Anh & Bokelmann 2019, 16). Although environmental pressures are significantly alleviated through eco-efficient farming, these effects also have a tendency to converge over time when compared to traditional coffee farms (Ho, Hoang, et. al. 251, 2018). Finally, research into Brazilian farmers reveals that while sustainability efforts are increasing, there need to be demonstrable benefits to convince farmers into making the necessary adjustments which can be costly. Monetary incentives are likely to remain the strongest motivator for farmers to make their production more sustainable, and therefore sustainability efforts are correlated to demands in consumer markets (Benami 2018, 94). All of the problematic cases highlighted in the critical literature above can ultimately be argued to be tightly intertwined with the supply chains and market demand that established them. Higher demand in consuming countries reflecting in local benefits is likely to increase sustainability efforts among local coffee growers.

It is to the north of the equator where coffee consumption continues to experience its primary popularity and, in many markets, nearly unbridled growth. The sustainability effort is becoming increasingly mainstream, as an increasing number of large companies are pressured into adopting certified coffee into their product line-up. It is important to note however that crediting companies for their corporate responsibility is likely an oversimplification; out of all coffee market segments certified specialty coffees have the highest growth rates and are increasingly in demand (Kolk 2011, 326). Therefore, while the benefits for local farmers are under continuous debate, large producers and roasters are witnessing increasing profits and demand. Over the last decade the focus on specialty coffee has transformed the coffee industry, especially among the largest coffee consumers; the United States, Europe, and Japan. Over recent years Brazil has also become one of the largest coffee consumers, while simultaneously being one of the largest coffee producers. Developments in this market may also shape sustainability efforts (Benami 2018, 94). Although described above is only a fraction of the greater issues within the global coffee supply chain, they serve as examples of what sustainability standards intend to rectify or in the very least improve.

2. Sustainability Certification in the Japanese Coffee Market

There are a number of excellent overviews highlighting the differing approaches of the largest sustainability standards. Most of these overviews are based on research by Consumers International in 2005 (23), but some also base their information on first-hand accounts by employees of the non-governmental organisations (NGOs). The existing literature consulted generally does not focus on which standards are present in the Japanese market, therefore requiring a more in-depth analysis of the various standards. For the purpose of this paper the standards discussed were confirmed to be present in the Japanese market. This section will contain a short summary of existing literature on each sustainability standard, highlighting their methods and approach, and finally an analysis to determine which of the discussed sustainability markers (economic, social, and environmental) they are mainly focusing on.

Fairtrade is the oldest certification, and differentiates itself through their efforts to provide liveable wages for coffee farmers, this is done by working with cooperatives and setting a minimum price for primary producers (Raynolds et al. 2006, 464). Through this approach they address both economic and social issues. However, a common critique of the Fairtrade standard is that the requirement for farmers to be part of a cooperative makes traceability difficult, and disincentivizes the farmers to increase the quality of their coffee, instead focusing too much on commoditisation of the product (Hoffman 2018, 44). The benefits clearly outweigh the negatives for producers involved, but critics do note that what Fairtrade promises does not always align with reality (Weber 2007, 115). Fairtrade was also the first standard to establish itself in Japan in 1993, and while working with a variety of companies, their main focus remains coffee (“フェアトレード ジャパンとは .” 2020).

Figure 1: Fairtrade, Rainforest Alliance, Utz Certified, Organic JAS logos.

Utz Certified and *Rainforest Alliance* originated as separate entities. However, the two organisations officially merged in 2018 ‘’in response to the critical challenges facing humanity: deforestation, climate change, systemic poverty, and social inequity’’. The newly merged organisation will continue under the name *Rainforest Alliance* (“About Us.” 2018). The organisations both differentiated themselves from Fairtrade by not providing a minimum price guarantee for farmers, but instead focusing stronger on allowing producers to diversify themselves through the label. There are clear environmental and social requirements to use the labels, and systems to aid producers in achieving these requirements (Ingenbleek & Reinders 2012, 464). The first Rainforest Alliance products were sold in Japan in 1998 (“レインフォレストアライアンスについて.” 2011).

Organic does not refer to one unified organisation, but is instead composed of private certifiers regulated by the state, and accredited by the overseeing organisation IFOAM, or the International Federation of Organic Agricultural Movement (Raynolds et al. 2006, 464). It does also not just limit itself to coffee, but to all food sectors. In the case of Japan, the Japanese Agricultural Standard (JAS) system provides certification along similar criteria. Established in 2000, the organic JAS label is completely overseen by the Japanese Ministry of Agriculture, Forestry, and Fisheries and regulated through accredited certification bodies (Partap et al. 2010, 113). In all cases, organic certified farms strive to produce goods in harmony with nature, through the usage of verified sustainable agriculture systems (Hoffman 2018, 44).

The majority of existing literature that was consulted for the above overview base their information on the 2005 research by Consumers International, which is already significantly outdated due to the fact Rainforest Alliance and Utz Certified merged in 2018. Therefore, it is important to reference updated materials when attempting to map the share of these certifications in the Japanese market. This information can be utilized to determine how large the market share of these standards is in Japanese large company product line-ups. Although all of the above certifications are present in the Japanese market, there is very little recent research on their exact market share and the general customer awareness. The organic JAS label is seemingly the most common, and therefore also accounts for the highest customer awareness in Japan. Research from 2006 indicates that customers were willing to pay an additional fee for JAS certified organic products, but this willingness was trumped by the willingness to pay for 'freshness' and a desirable 'country of origin' (Sakagami et. al. 2006, 247). The JAS certification was introduced for coffee in 2001, and was initially plagued by incoherent communication and confusion among farmers on how to be eligible for the certification. This led to large amounts of imported certified organic coffee to be sold as non-organic products. However, according to Giovannucci & Koekoek, the market quickly adjusted and by 2002 the number of organic certified coffee sold in Japan had more than tripled (2003, 135).

It has been twenty years since the introduction of the organic JAS certification, and despite its troublesome start domestic organic production is seeing an upswing in recent years according to Nakajima. Although Japanese agriculture is shrinking due to an aging population, according to a 2015 census organic production continues to grow and is spearheaded by a distinctively younger population segment (Nakajima 2017, 29). However, although the participation of younger people reveals possible sustainability trends, this data is not applicable to organic coffee as this is almost exclusively produced outside of Japan. As a result, little updated data exists on the exact market share of sustainable certified coffee. It is interesting to note however that these sustainability initiatives are primarily spearheaded by younger generations. The history of coffee in Japan involves large companies that control the entire vertical production chain, and their business decisions can provide some insight into the larger market trends.

3. The History of Coffee in Japan

The history of coffee consumption and cultivation in Asia is tightly intertwined with colonial influence. This influence is also largely what kickstarted the sustainability efforts by Fairtrade, and therefore may provide insights into tangible motivations for Japanese company motivations to invest in this market segment. Hoffman writes that the original introduction of the coffee bean was through the Dutch colonial oppressors, who recognized the Indonesian climate as suitable for coffee cultivation. Indonesia thus became the first country on the eastern edges of Asia to produce coffee, outside of Arabia and Ethiopia, and numerous slaves worked the farms. The establishment of Max Havelaar was directly inspired by the identically named novel which depicted these harsh labour environments. Hereafter, the Dutch East India Company transported large quantities of the raw product, the coffee bean, back to Europe and to other colonial strongholds throughout their extensive global network (Hoffman 2018, 168). It is thought that through this network, the coffee bean also arrived upon Japanese shores in possession of Dutch traders (White 2012, 94). Japanese writings on coffee can be traced back to the late 17th century, when it was formally introduced by these Dutch traders who were stationed off the coast of Japan in the port city of Nagasaki. Records indicate that these traders would present a 'black liquid' to local Japanese *shogun* or feudal lords as a gift. The early reception of coffee was reportedly lukewarm, and the small sample of tasters described the substance as bitter and unsatisfactory (White 2012, 94-96). However, coffee continued to find its way into Japan through the Dutch traders. The drink slowly grew in popularity, and by the 1880s became a symbol of Western-style modernity. This period in Japanese history known as the Meiji period was particularly defined by the fact Japan opened its borders to larger amounts of foreign trade.

The extensive network of colonial powers such as the Dutch traders were also the catalyst for the introduction of coffee to the South Americas. The establishment of Brazil as a major coffee producer was a significant stepping stone for the foreign relations of the country, especially those with Japan. Coffee was first shipped over to Brazil from French Guinea in the 18th century, and by the 1850s Brazil accounted for over half of the global coffee production. This transformation was again strongly rooted in colonialism, and required large amounts of slave labour to realize (Iijima 2011, 4). At the end of the 19th century Brazil accounted for 80% of the global coffee production. Simultaneous to this development a global movement to abolish slave labour stipulated the Brazilian coffee production now predominantly relied on foreign workers from Germany, Italy, and Japan. In the early 20th century thousands of Japanese labourers moved to Brazil to work on coffee farms, attracted to the continent by a promise of high earnings and a stable life. However, the arrival of Japanese labourers was quickly followed by a crash in the coffee market, leaving them in difficult circumstances. Ultimately, in the

1930s many of the Japanese immigrants moved away from coffee farms, and diversified their position in Brazilian society (Iijima 2011, 7-10). In total however, approximately 35,000 Japanese made the voyage between 1908 and 1924 (White 2012, 99). On the other side of the Pacific, the Japanese empire was experimenting with coffee production within its own borders (Iijima 2011, 14-17). During the course of these developments, coffee was gathering mainstream appeal in the domestic Japanese market. Therefore, while the Japanese empire was a colonial power in the Asian territories, Japanese nationals were simultaneously subjugated to harsh labour circumstances outside of their home country. This reveals that although Japan has a colonial legacy similar to that of other coffee consuming countries, depending on which continent research is focused, its people were both the suppressor and the suppressed. One could also argue that the Japanese empire was too short-lived for its legacy to have a lasting impact on modern consumer awareness. However, the modern import trends of coffee in Japan continues to be greatly influenced by the supply chains that were established during this period from the late 19th century to the early 20th century. An analysis of import statistics reveals that approximately 60% of imports continue to be sourced from countries such as Brazil, Indonesia, and Colombia (White 2012, 104). These supply chains continue to influence contemporary consumption trends in Japan which strongly values the country of origin.

4. Coffee Consumption & Supply in Japan

In contemporary Japanese society, coffee consumption is strongly rooted in Japanese daily life, and coffee beans are imported into the country in large volumes. Recent numbers by the International Coffee Organisation (ICO) reveal that Japan is the third largest coffee importer after the European Union and the United States respectively ("World Coffee Consumption." 2020). The common assumption is that Japanese consumers are more inclined towards tea consumption compared to coffee. However, statistical analysis refutes this view, delineating Japan as a country where coffee is consumed in large quantities on similar levels to tea (Ito 2006, 62). Ito's research is already over a decade old, but recent numbers continue to back his claim. Specifically, Japanese consumers consumed 102,186 tons of green and black tea, compared to 470,213 tons of regular and instant coffees (AJCA 2019b). Even when accounting for the fact that one average cup of tea requires less soluble material than a cup of coffee, there is a clear demarcation of coffee as a popular widely enjoyed beverage. Furthermore, coffee consumption has significantly higher growth rates than green tea (which is shrinking) and black tea (AJCA 2019b). This makes the Japanese coffee market highly valued and competitive, including by companies that are not primarily in the coffee business.

Although regular and instant coffee are particularly popular in Japan according to data by the All Japan Coffee Association (AJCA) data, what makes the Japanese coffee market particularly unique is the significant supply and demand for canned coffee products (Hassard et al. 2014, 311). Hassard argues that this market in particular has a comparatively high carbon footprint (2014, 316). Therefore, the degree to which a company invests in canned coffee products can be argued to indicate a lack of sustainability. Nearly all Japanese coffee market research such as those conducted by AJCA and Nikkei divides the market into three segments: regular, instant, and canned. Regular referring to beans and its ground material, instant referring to processed instantly dissolvable materials, and canned to liquid coffee ready-to-drink in cans. Hassard et al. criticizes this approach, as it does not account for ready-to-drink liquid coffees (such as those in cartons and PET bottles and siphon brewing methods (2014, 311). However, I would argue that since siphon brewing uses regular coffee in its brewing process, it is consequently not a good example of an alternative market segment. The canned coffee market in particular is dominated by large company interests competing under various brand names with products sold only in the Japanese domestic market. For example, the Coca Cola Company is market leader and sells canned coffee under their Georgia brand. Following this lead are companies such as Suntory, which actively markets its Boss coffee brand. However, when compared to regular and instant coffee, canned coffee is witnessing a downwards trend in popularity since its peak in the 1990s (Kimura & Iwatubo 50-51, 2010). There is little existing literature on the possible correlation between canned coffee losing popularity and an increase in sustainable efforts. In order to determine which companies are involved in the coffee market, the following overview summarizes larger Japanese companies and what market sectors they are focused on:

Company Name	**Coffee Type**	**Strategy**
UCC Ueshima Coffee	Regular, Instant, Canned	Multifaceted, varied line-up
Key Coffee	Regular	Regular coffee focus
Unicafe	Regular	Regular coffee focus
Tokyo Allied Coffee Roasters	Regular	Regular coffee focus
Ajinomoto AGF	Regular, Instant	Initially instant coffee focus to wider
Nestle Japan	Instant	Instant coffee as part of line-up
Coca-Cola Japan	Canned	Canned coffee as part of line-up
Suntory	Canned	Canned coffee as part of line-up
Dydo Drinco	Canned	Initially canned coffee focus only
Kirin Beverage Company	Canned	Canned coffee as part of line-up
Asahi Soft Drinks	Canned	Canned coffee as part of line-up

Figure 2: Data accumulated by Kimura & Iwatubo (2010)

The data above is a decade old as of the writing of this paper. It is important to analyse whether there has been a large shift in focus of these large companies over the past decade. For example, an interesting trend that can be observed in 2010 is that canned coffee is most commonly incorporated into the line-up of companies that already had a priorly existing beverage line-up such as Coca-Cola Japan. It was established that demand for canned coffee is decreasing, so these companies might have diversified their coffee product line-up in recent years. Although much of the preceding literature has focused on the raw material needed to make coffee, there has also been a large shift in how the final product, a cup of coffee, is served to paying customers. Kurosaki describes the significance of convenience store chains entering the coffee serving market and the impact this has had on large companies in the industry. Over the past decade nearly all Japanese convenience stores and a large number of supermarket chains have entered the coffee market. The convenience stores collaborate with large trading companies to source the beans and offer comparatively cheap cups of coffee to customers (2015, 4). The popularity of this serendipitous relationship has had a profound impact on the business strategy of large companies, because it opened up a large new sales outlet. The convenience stores and large companies continue to explore new ways to diversify their product line-ups, and specialty coffee seems to be an important element in their recent marketing strategies (Kurosaki et al. 2015, 4). The continuing growth rates in the coffee market, including the diversification offered by sustainability standards, make it very likely that the Japanese coffee market continues to grow and transform. The average Japanese coffee drinker is now likely to purchase their daily brew from the nearest convenience store, a big shift from prior consumption patterns which largely relied on coffee shops and cafes. However, despite the significance of the convenience stores' entry into the Japanese coffee market, this alone does not sufficiently describe the full scale of transformation undergone by coffee-serving retail fronts.

5. Third-Wave Coffee & Japanese Kissaten

The Japanese coffee industry has always been strongly influenced by global trends. From its inception in Japan coffee was served in European style cafes referred to as *kissaten* in the early 20th century. This was followed by American Starbucks-style glocalization at the end of the century; a trend which was quickly embraced by the masses. The industry is in a constant state of transformation, and sustainability is one of its most recent trends. The most recent transformation in the global coffee consumption is commonly referred to as the third-wave coffee movement. The history of the coffee industry is divided into three distinct 'waves', which indicate new major developments and trends. This term was first coined by barista Trish Skeie, in a guide published by the Specialty Coffee Association of America. The first wave is said to have started around the second half of the 19th century (Ott 2017, 6), when the major consumption and subsequent commoditization of coffee first started. This resulted in generally poorer quality coffees (Boaventura et al. 2018, 255). The second wave started around 1970 and accompanied the establishment of companies such as Starbucks (Ott 2017, 6). For the first time the focus shifted towards sourcing high quality coffee and traceability to the initial producer, and providing this in a convenient and standardized environment (Boventura et al. 2018, 255). We are currently in the third wave, characterized by a shift in the consumer experience. Whereas the second wave already characterized itself by an increased focus on quality, the third wave put coffee on a similar level of connoisseurship as wine (Rosenberg et al. 2018, 205). First starting in Norway and quickly spreading across the United States in the 1990s, specialty coffee consumption in the third wave puts a strong focus on slower 'manual' (perhaps traditional) methods of preparation rather than costly equipment that can produce coffee at the press of a button (Ott 2017, 7). Furthermore, there is a strong focus on traceability to the initial producer; highlighting how the producers' unique methods translate to the flavour found in the final product is key. In this approach, coffee is not regarded as a finished drink, but as a fruit (Rosenberg et al. 2018, 203). Here again we can see the similarity to wine, which is also fruit-focused. The literature fails however to mention the significant role of Japanese consumption methods in this movement. The third wave coffee movement has been widely embraced by local coffee shops worldwide, and especially in major Japanese cities is slowly gravitating towards the mainstream.

The Japanese coffee industry is thought to have developed along similar lines, although with a delay of a few decades. Important to note is that in between these decades Japanese society was developing a unique hybrid coffee culture of its own. The current popularity of the third wave coffee movement in Japan is by no means a coincidence, and the influence of Japanese coffee culture cannot be overstated when analysing the movement. The Blue Bottle Coffee Company is one of the major success stories within the third wave movement, and its founder James Freeman largely credits Japanese coffee brewing practises as its inspiration. In his book he describes that slower manual preparation methods using a pour-over kettle and paper filters were already commonplace at the UCC Ueshima Coffee Company headquarters in Kobe, Japan in 2007 (Freeman 2012, 72). He also praised the Nel drip preparation method, which uses a flannel filter rather than paper, which dated back to 1920s in Japan, but only recently found a resurgence in popularity in the United States (2012, 84). Furthermore, it is in Japan where the method of siphon brewing was developed into an art-form, inspiring Blue Bottle to open a Japanese-style siphon coffee bar in San Francisco in 2008 (2012, 94). Freeman does not make particular claims about how this Japanese influence shaped the third-wave movement, but its influence is palpable. As a result, although not frequently highlighted in the existing literature, it can be argued that Japanese coffee culture either directly or indirectly inspired and largely defines the third-wave coffee movement.

The Japanese inspiration is not limited to the preparation methods. Freeman's suggestions on coffee equipment also reveals that there are a number of Japanese coffee equipment manufacturers popular in third wave coffee production, most notably Hario and Kalita (2012, 72). The demand for reproduceable and consistent flavours as part of the third wave has made coffee brewing increasingly data-driven, and Hario responded to this demand by selling their highly popular coffee dripper in combination with an electronic scale in 2012 (Kurosaki et al. 2015, 18). It is therefore not surprising that in their work about the recent coffee revolution, Kurosaki et al. describe the third wave as a familiar sight to any patron of traditional Japanese *kissaten*. The act of carefully brewing each coffee diligently through manual methods is a staple of the Japanese café experience (2015, 16). The practice was already commonplace in Japan over the past century, preceding the historical division of the coffee industry into three distinct waves. Furthermore, Merry White describes how the import of coffee to Japan, or more specifically its purchasing trends, set itself apart from other countries early on. This is mainly due to its long history of strongly focusing on the purchase of specific regional varieties, such as Jamaican Blue Mountain coffee, and Hawaiian Kona coffee. Interestingly however, writings on the third-wave coffee movement fail to identify this focus on traceability as something inspired by Japanese coffee culture. This might be because although the origin country of the coffee was considered vitally important, complete traceability to the local producer as lauded in the third-wave movement was less strongly a focus of Japanese consumers. However, the trend of single origin import continues in Japan. For example, in 2012 around 93 percent of the Jamaican crop was sold to Japan, and almost exclusively to UCC Ueshima Coffee (White 2012, 106). In recent years, a large number of micro roasteries have opened across Japan, aiming to continue this trend of providing traceably sourced coffees. This time complete traceability is the default.

These micro roasteries usually purchase the raw green beans directly from local producers, and roast them according to their in-house specifications. It is incorrect to say however, that the recent developments in coffee consumption and the rise of micro roasteries in Japan, or more specifically the third wave, is simply a re-import of Japanese coffee culture. Although traceability has been uniquely valued in Japan as pointed out by White, Kurosaki et al. note a key difference between Japanese coffee culture and the 're-imported' third wave movement. Japanese baristas did not work on the basis of determined parameters, they simply provided what matched their subjective personal standards. This technique and preference were then passed on to apprentices, but there was no standardization of the sourcing and production process. Contrarily, the new third wave movement works along objective quality parameters for the final resulting cup of coffee. In order to achieve a satisfactory result three components are considered: the quality of the beans, traceability to the initial producer, and the sustainability of the production (Kurosaki et al. 2015, 18). Although it is quite possible that the micro roasteries in Japan stock coffee that could qualify as sustainable, the small scale of these third wave coffee shops in Japan and consequently the smaller size of its local partners makes it unlikely that sustainability certification is granted to all of its coffee. The shops often build direct connections to the local producers, completely circumventing the supply chains established by large trading companies. This has the potential to lower the barrier of entry into the sustainable market segment for local coffee growers, particularly growers and farms that are not part of a collective (such as required by Fairtrade) or do not qualify for particular standards due to a lack of financing. The third-wave movement has the potential to provide an avenue through which sustainable coffee sourcing becomes lucrative for smaller producers as well. Although when analysed on a case-by-case scale the sustainable impact is smaller, the perceived benefits have the potential to convince a large number of farms to make their production more sustainability incrementally leading to positive change.

Methods

The coffee market in Japan has witnessed nearly unbridled growth over the past few decades, and as a result the share of sustainable certified coffee has grown as well. Although critics highlight misconceptions and problems with the popular sustainability certifications, research does indicate that the guarantee of minimum wages combined with the ability to differentiate their produce has been a strong incentive for local farmers to reconsider their producing methods. The Japanese coffee market in particular has strong potential to drive this sustainability trend forward. The large companies often manage vertical supply chains, giving them full control over sustainability efforts. These companies also differentiate themselves from foreign competition due to their packaging choices; canned coffee being particularly non-sustainable. Furthermore, historical trade agreements centred around coffee has largely shaped the Japanese diaspora and the initial harsh circumstances these emigrants faced might motivate consumers to choose coffee produced in better labour conditions. This research will attempt to provide an overview of the sustainable coffee market in Japan and what is driving companies to include sustainable coffee in their product line-up. The overview of large Japanese companies with products in the coffee market by Kimura & Iwatubo will be utilized as an initial framework and expanded upon. The initial step will be to include possible newcomers in the overview, and analyse how the sustainable business strategy of the listed companies has evolved. Furthermore, the share of sustainable coffee in each company's product line-up (as certified by relevant NGOs) as compared to conventional non-certified products will also be assessed, along with any possible internal sustainability programmes. Public statements and data on why investments in the sustainable coffee market were made will be analysed through primary sources. This information will be gathered through press releases, public interviews, and where possible through fieldwork in a variety of Japanese retail outlets. All the certifications discussed in the literature review will be taken into account, and also updated to account for new developments such as company mergers and criteria changes. Where possible, attempts will be made to correlate sustainability efforts of large companies with customer demand, using domestic sales data to further illuminate tangible motivations for investing in sustainable coffee. Furthermore, internal company initiatives will be analysed for third-party verification to ensure non-partial data.

The existing literature also revealed a recent development among small-to-medium sized (SME) coffee suppliers. A growing number of small-scale coffee shops and micro roasteries in Japan are supplying non-certified coffee, which could be classified as sustainable. Their lack of certification is primarily due to the smaller scale of their operations, but depending on their sourcing criteria it could be argued that 'third wave coffee consumption' is providing new opportunities for local producers to differentiate themselves similar to what sustainability standards offer. The question that will primarily be focused on is whether this third-wave coffee trend has influenced large company sustainability efforts, or if the influence was reversed. A mapping of Japanese coffee shops that can be classified as supplying 'third wave' coffee will accompany this research. The specific type of shops that qualify will be small-scale coffee shops that provide non-certified coffee beans, but publicize the following three data points in order of importance: traceability (country of origin), sustainability information, and quality (tasting notes) on the beans they provide. An overview will be made of coffee shops that have public information on the origins of their products, and a quantitative analysis will be conducted using websites, newspaper articles, and magazines. In order to determine the influence of the third-wave coffee movement on sustainability efforts in Japan the year of establishment of these coffee suppliers will be compared to the timing of large company investments in the sustainable coffee market. Finally, there will be a particular focus on successful SME-sized micro roasteries that have expanded to chain-store formats. There will be an analysis on whether a correlation can be established between the successful companies and their sustainability efforts.

Research

1. A macro analysis of the Japanese sustainable coffee market in 2020

The existing literature repeatedly describes the Japanese coffee market as one of the largest in the world. It is distinctive partly due to its continuous growth, but also due to its long history of embracing a variety of consumption methods. The continuous growth of the Japanese coffee market can be confirmed through statistical analysis. The AJCA releases monthly reports containing a statistical analysis of raw, instant and elixir coffee imports into Japan divided by country of origin. Taking the month of October as a benchmark, 2019 accounted for an approximate 11.67 percent increase in kilograms of raw coffee imported as compared to the previous year (AJCA 2019c). However, 2020 marked a considerable challenge due to the economic effects of the COVID-19 crisis. The raw coffee imports into Japan from October 2019 until October 2020 accounted for a decrease of approximately 11.57 percent when compared to the previous year (AJCA 2020a). According to the ICO the global coffee demand decreased by an estimate of 0.9 percent as of November 2020 ("World Coffee Consumption." 2020). Although demand does not immediately correlate to import numbers, it does highlight that comparatively the impact on the Japanese market is quite significant. The extent to which the Japanese coffee market in 2020 is affected by the COVID-19 crisis is not yet fully understood, but due to restrictions on movement it is likely that on a global scale home brewing and take-out options have increased in popularity where the popularity of cafes has decreased. The popularity of *kissaten* and cafes in Japan might explain this disparity as instead of embracing alternatives consumers might simply decrease their coffee consumption altogether. The imposed movement restrictions not only affect consumers; during the initial lockdown in the first half of 2020 producers especially in landlocked countries struggled to get their shipments across border lines. The shipments that did manage to arrive at their destination were primarily micro lots shipped through air freight, which provided some higher quality producers an avenue for income (Roberts & Carias 2020). As established in the literature review, these micro lots are often purchased by third-wave coffee shops in the form of a direct transaction. The shock of the COVID-19 crisis might need its own sustainability measures to ensure the survival of coffee producers, as an overwhelming majority indicate the pandemic will affect them in the long-term (Cadena & Pollo 2020). The main focus of the 2020 annual International Coffee Day held on October 1st was 'Coffee's Next Generation' in order to support the people whose livelihood is under threat as a result of the crisis (''International Coffee Day'' 2020). This context is important as it might influence the results of the research conducted, especially considering the possible impact on luxury coffee markets.

Specialty and certified sustainable (luxury) coffee markets are shown to be equally influenced by the COVID-19 crisis. The ICO predicted in May that the economic recession is likely to cause a shift in demand from luxury coffees to alternatives in a cheaper market segment. However, it should be noted that due to the inelastic nature of coffee it might take time for the true effects on consumer demand to materialize. This primarily depends on the ''household savings and social safety nets'' available to consumers (Hernandez et al. 2020). The Sustainable Coffee Association of Japan (SUSCAJ) has not released any market data reports since the start of the COVID-19 crisis. However, they regularly release a web magazine named 'Coffee Business Frontline' which focuses particularly on sustainable development goals (SDGs). The annual conference organized by the Specialty Coffee Association of Japan (SCAJ) was due to be held in October, but was cancelled due to concerns over the COVID-19 pandemic (SCAJ 2020). Nevertheless, their 53rd annual ''Coffee Salon'' event was held on a virtual basis in early December. The 2020 edition was completely focused on the effects of the crisis on producers in Hawaii, Brazil, and Indonesia and provided a platform for Japanese coffee suppliers to discuss SDGs and threats to local producers. The spread of coffee leaf rust in Hawaii was also discussed, in addition to the effect of the crisis on coffee demand in Switzerland (SusCAJ 2020). The general consensus among suppliers remains that the true effects of the crisis are yet to be felt, but an important take-away is that the more dire consequences may take until the next harvest to materialise, as many coffee producers were faced with difficult labour circumstances as a result of social distancing requirements. The effects of possible crop failures will not have an impact for the immediate future, but will affect the market in the coming years. Conversely, the difficult situation has also given rise to innovative ideas, such as the production of masks using fibre produced with recycled coffee residue in Vietnam providing producers additional sources of revenue (AJCA 2020b). Sustainability was already a core concern in the volatile coffee market, but the COVID-19 crisis will require additional resilience for both producers and suppliers.

2. Motivations for large Japanese companies to invest in sustainable coffee

The existing literature on large company investment in Japan into sustainable coffee is largely insufficient and further analysis of market reports by organizations such as the AJCA, SUSCAJ, and ICO also reveals that no recent statistical analysis was conducted on the market segment. The most recent data on the ICO website dates back to 2003. The Japanese market at the time was described as being in the initial phase of developing an interest in eco-friendly coffees and sustainable coffees held approximately 1.2 percent of the market share. Further highlighted was a lack of large companies creating sustainable coffee brands (Giovannucci & Koekoek 2003, 135). To establish a framework of company initiatives, it is necessary to analyse various companies' sustainable initiatives and create an overview. The 'Sustainability Communication Hub (SUSCOM) is a pioneer in reporting on these initiatives in the Japanese market. The company provides an aggregate news source on sustainability, and has been active since 2003 which they describe as the ''origin of CSR (corporate social responsibility)'' in Japan ("ようこそ、Suscom へ。." 2013). SUSCOM has written reports about various large company initiatives, particularly those in the coffee industry. However, their main website has been largely inactive since 2017 and now primarily provides reports to the Sustainable Brands publication. Furthermore, the articles written by SUSCOM in this publication are seemingly sponsored by large company interests and therefore its partiality is questionable. The reporting by SUSCOM on large company sustainability initiatives seemingly accelerated after the year 2015[1]. This coincides with a global event; the establishment of the Sustainable Coffee Challenge. The project launched in 2015 during the Paris climate meetings and provides clear definitions for success and long-term goals to improve the sustainability of the coffee industry. The project was organized by Conservation International which is an NGO mainly focused on environmental preservation. The main concern addressed by the project is the risk that the growing demand for coffee will eclipse the possible supply as environmental challenges take its toll. Participating companies pledge to follow the roadmap laid out by the challenge, and pledge that sustainable farming methods are introduced to facilitate long-term sustainable solutions ("About." 2015). Analysis of participating companies confirms that Japanese participation in the project remains low, but the framework might function

[1] The following articles found focusing on the companies Key Coffee and Ajinomoto respectively were published after the year 2015, such as: source 1, source 2.

as a guideline along which companies structure their sustainable efforts.

The timing of the ICO report on sustainable coffee and the establishment of SUSCOM in 2003 is arguably no coincidence. The report was published shortly after the global expansion of an iconic coffee store chain; Starbucks Coffee Japan was established in 1995 and opened its first store in the Ginza district of Tokyo the following year. Their mission from its inception was to popularize specialty coffee, but in a standardized environment. The rapid expansion of Starbucks retail fronts across Japan indicates this tactic was by all probabilities a success, and domestic competitors took notes. It is frequently highlighted that the specialty coffee culture in Japan was already commonplace in *kissaten*, however Starbucks added a focus on sustainability to the equation. The sustainability initiatives by Starbucks can be traced back to 2000 when the first Fairtrade certified coffees were added to the companies' product line-up ("Starbucks." 2020). In 2005 Starbucks launched its own sustainability initiative, the 'C.A.F.E. Practices' in collaboration with Conservation International (also responsible for the Sustainable Coffee Challenge). Starbucks partners with SCS Global Services for third-party verification of sustainability commitments by producers ("Starbucks C.A.F.E. Practices." 2016). Participating producers are scored on economic, social, and environmental responsibility through a standardized scorecard available publicly, consisting of 'zero tolerance' (non-negotiable) requirements and initiatives that are rewarded 'extra points'.[2] While only one page is dedicated to economic responsibility, five pages and nine pages respectively are dedicated to social and environmental responsibility. The scorecards were drafted in collaboration with local producers in Mexico, and highlights the particular importance of environmental sustainability. The coffee producers that acquire a satisfactory score are allowed to sell their products through Starbucks supply chains with a Conservation International logo. Through its collaborations with various NGOs and the sourcing of coffee through the Fairtrade and C.A.F.E. schemes Starbucks achieved a self-proclaimed 99 percent share of ethical sourced coffee in 2015[3]. This achievement was widely utilized as a marketing tool by Starbucks and coincided with the Paris climate agreements. Since their entry into the Japanese market Starbucks has actively promoted initiatives encompassing all three sustainability markers, but the environment in particular is prioritized as showcased by their collaboration with Conservation International. These initiatives not only resounded with environmentalists, but also with the stock market. The coffee traded within the framework of the C.A.F.E. Practices scheme is consistently sold at higher prices than the baseline C-Price at the New York Stock Exchange (Mizuo 2013, 156). This effect gives confidence to both shareholders and local producers due to the

[2] SCS Global Services provides a comprehensive overview of the scoring system in the following PDF: https://cdn.scsglobalservices.com/files/program_documents/cafe_scr_genericv3.4_011516.pdf

[3] The 99 percent ethical sourcing is actively promoted globally, including in Japanese stores: https://www.starbucks.co.jp/socialimpact/glocallyresponsible/ethicalsourcing/

perceived added value providing them a tangible financial motivation to support these initiatives.

The market underwent a rapid transformation in the decades since the establishment of Starbucks Coffee Japan and the 17 years since the ICO publication. The majority of Japanese companies now indicate a short-to-long term CSR strategy in their statements, often focusing on environmental concerns. UCC Ueshima Coffee openly promotes their sustainable efforts through their website, listing the precise SDGs the company strives to pursue. This is primarily pursued by highlighting which SDGs are enacted at the company-owned farms and factories. These claims are seemingly completely based on internal data and there is no third-party verification to support them ("UCC" 2020). Key Coffee is highlighted by publications as a sustainable brand on the forefront of research into the development of climate-change resistant coffee varieties. Their KEY Post-Harvest Processing method is reported to be unique and force-ripens coffee cherries by ensuring they do not freeze even when temperatures reach below zero. Key Coffee believes this will provide an important solution as climate change reduces the temperature differential between night and day which is vital for coffee production[4]. Key Coffee also has a variety of sustainable brands including Fairtrade, Rainforest Alliance, and JAS Organic ("FOR SUSTAINABLE" 2016). In addition to their promotion of innovative harvesting methods they also pursue various SDGs that encompass all three sustainability markers[5]. Unicafe utilizes a different strategy, the company promotes no internal sustainability efforts, but mainly focuses their efforts on including a large variety of third-party certified coffees in the product line-up of daughter company Art Coffee ("ART COFFEE" 2020). However, the company engages in very little public promotion regarding sustainability initiatives[6]. The Tokyo and Kansai Allied Coffee Roasters supply organic-certified coffees, but this is not actively promoted through the company websites. However, their parent company S. Ishimitsu & Co. Ltd. does dedicate a section to their CSR efforts ("コーヒーと共に 1 世紀." 2019). This analysis reveals that among large companies with coffee as its main product, every company analysed has sustainable products in its line-up. The majority of the six companies analysed had international certifications in their line-up, and also had some form of sustainable activity within the company. The similarity between all these companies is that they are all active in foreign markets. Furthermore, there is a strong focus on pursuing SDGs and reporting on its progress.

---

[4] This is based on one of the articles sponsored by SUSCOM and therefore likely to represent large company interests.

[5] Key Coffee has a dedicated webpage on sustainability and their efforts to solve the '2050 issue' with a comprehensive explanation on how climate change will affect coffee farming. Furthermore, information on the sustainable brands and SDGs can be found here.

[6] Based on the fact that Unicafe has no mention of CSR or sustainability on their webpage immediately visible upon entry: https://www.unicafe.com.

Company Name	Claimed Internal Sustainability Initiatives	Third-party Verification	Third-party Certifications on products in Japanese market	Total Percentage of Sustainable Certified Coffee
Starbucks Coffee Japan	Economic, Social, Environmental	Yes	Fairtrade, Conservation International, JAS Organic	99% (in 2020)
UCC Ueshima Coffee	Economic, Social, Environmental	N/A	Rainforest Alliance, JAS Organic	N/A
Key Coffee	Economic, Social, Environmental	N/A	Fairtrade, Rainforest Alliance, JAS Organic	N/A
Unicafe	N/A	N/A	Fairtrade, Rainforest Alliance, JAS Organic	N/A
Tokyo Allied Coffee Roasters	Environmental, Social	N/A	JAS Organic	N/A
Kansai Allied Coffee Roasters	Environmental, Social	N/A	JAS Organic	N/A

Figure 3: Data accumulated on large company sustainability initiatives whose main product is coffee.

The existing literature revealed that large companies with a broader product line-up (e.g., a majority of non-coffee products) often relied on non-sustainable packaging such as cans and PET bottles for the distribution of their coffee products. Therefore, there is a need to identify whether these concerns are addressed by the companies in their sustainability statements. Suntory is addressing this issue by aiming to replace all PET bottles with fully sustainable alternatives such as plant-derived materials. The chief executive of Suntory, Takeshi Niinami, when questioned whether the company expected a return on investment due to their move away from plastic stated in an interview with the Financial Times that ‘’we don’t know. But there is no other way to survive. Unless we can do it, we will lose a lot of customers in the world.” Although Japan recycles 85 percent of plastic bottles compared to less than half that in Europe and the United States, experts warn that all usage of plastics should be discouraged. Even those properly recycled are a risk to the environment due to the contamination of microplastics (Inagaki 2020). The company Ajinomoto (AGF) does not sell canned nor bottled coffee products, but instead focuses on regular and instant coffees and is therefore less susceptible to packaging concerns. Their sustainability efforts focused nutritional solutions in communities faced with malnutrition are particularly highlighted. Their coffee is sourced from the Fazenda Bau farm in Brazil, and the company promotes its usage of their AJIFOL fertilizer, which according to the groups internal test results enhanced resistance to coffee leaf rust and results equal to conventional fertilizers. Furthermore, the company strives to procure coffee from farms that fulfil the 4C certification[7] ("Ajinomoto Group" 2019, 37). Dydo Drinco publishes their SDGs in a similar manner to UCC Ueshima Coffee, but their efforts are primarily focused on domestic initiatives to improve the sustainability of packaging with no particular focus on coffee ("ダイドードリンコ株式会社." 2020). The Kirin Beverage Company noted in their annual environmental report that the company is aiming to help 400 smaller plantations in Vietnam receive the Rainforest Alliance certification. These initiatives are part of their Kirin Group Environmental Vision 2050[8] (Takashima 2020). The remaining companies are all foreign in origin and therefore might be less reflective of the Japanese market. The Coca-Cola Company acquired the coffee chain Costa Coffee in 2018 and as a result added a partnership with Rainforest Alliance among other coffee-related sustainable initiatives to their portfolio ("BUSINESS" 2019, 21). However, it is important to note that Costa Coffee only has a small number of stores in Tokyo and therefore a very limited market presence[9] ("Costa Coffee" 2020). Asahi Soft Drinks also utilizes the SDGs to showcase what they are pursuing and mentions all sustainability standards in their Corporate Guidance. However, third-party verification is only observed for their environmental efforts ("温室効果ガス排出量" 2014). Finally, Nestle Japan has a relatively limited Japanese language sustainability webpage in comparison to its global website, but does translate their sustainability reports ("サステナビリティ." 2020). Overall, the large companies analysed primarily seem to focus on SDGs and environmental concerns in their Japanese promotion, but concrete data on percentages and verification methods require the analysis of sustainability reports published by the global company.

[7] Ajinomoto (AGF) mentions the nutritional solutions, fertilizer, and 4C certification in their annual Sustainability Data Book 2019. Furthermore, the nutritional solutions are also highlighted in an article by SUSCOM from 2016.
[8] Kirin Holdings has an overview of the various SDGs they pursue on their website. Furthermore, an article on the Rainforest Alliance certification by Business Wire can be found here.
[9] The Coca Cola 2019 Sustainability Report mentions the acquisition of Costa Coffee on page 21 here. Furthermore, the number of Costa Coffee stores in Japan was confirmed through the map provided on their website.

Company Name	Claimed Internal Sustainable Initiatives	Third-party Verification	Third-party Certifications on products in Japanese market	Percentage of Sustainable Certified Coffee
Ajinomoto AGF	Environmental	Yes (4C Certification)	N/A	40% (in 2018)
Nestle Japan	Environmental	N/A	N/Ae	70% (goal by 2020)
Coca-Cola Japan	Economic, Social, Environmental	Yes	Rainforest Alliance (Costa Coffee)	95% (in 2013)
Suntory	Economic, Social, Environmental	Yes	Rainforest Alliance (partly, amount not specified[10])	N/A
Dydo Drinco	Environmental	Yes	None	N/A
Kirin Beverage Company	Environmental	Yes	None (Rainforest Alliance pending)	N/A
Asahi Soft Drinks	Economic, Social, Environmental	Yes (LRQA – Environmental)[11]	N/A	N/A

Figure 4: Data accumulated on large company sustainability initiatives where coffee is not the main product. N/A is inserted when exact numbers are unavailable.

The accumulated data reveals that the Japanese coffee market has largely embraced sustainability efforts. The CEO of Suntory indicated that changes to its packaging are necessary if they want to keep their customers, furthermore environmental concerns threaten the survival of the coffee market in its entirety. There is a notably strong focus on standardization through the usage of SDGs. In the list almost every company analysed utilizes SDGs to differentiate which sustainability goal they are pursuing. Further analysis of the SDGs also reveals that the Japanese Ministry of Agriculture, Forestry and Fisheries (MAFF) is actively pushing for food production companies to embrace the sustainable development goals ("SDGs×食品産業." 2020). On their website the ministry explains that the survival

[10] The sourcing of Rainforest Alliance coffee by Suntory is specified on their sustainable procurement page.
[11] Third-party verification for the Asahi Group their environmental output is mentioned here. However, the connection to coffee is weak.

of companies who do not embrace the SDGs is threatened, and the ministry publicly lists companies that publicly list SDGs they are pursuing. There are also public tenders organised by the cabinet office and funded by local governments (“２０１９年度ＳＤＧｓ” 2019). The result is that the SDGs provide an opportunity for funding and publicity, but also give companies the guise of credibility due to the government involvement Although not the focus of this research, it is important to note that companies with no (easily accessible) information regarding third-party verification should receive additional scrutiny. There is a large issue of companies utilizing a sustainable image to divert attention from non-ethical business practices. Business for Social Responsibility (BSR) and Futerra Sustainability Communication published a guide in 2009 on how to identify these companies. The guide does not specifically mention a lack of third-party verification as a sign of greenwashing, but they do note it increases the risk of ‘vague claims’ (Horiuchi et al. 2009, 23). This has the risk of negative publicity and might explain why companies are eager to embrace the SDGs as a clear non-negotiable roadmap for the future (and add the guise of credibility even when the sustainability efforts are not verified by third-parties).

3. The rise of small Japanese roasteries and specialty coffee shops

The most recent development in specialty coffee is often described as the third-wave movement, which has largely shaped the recent retail coffee landscape in Japan. The entry of Starbucks had a large influence on the long-term goals of the Japanese coffee industry. Similarly, it is easy to argue that the influence of another American company largely shaped recent developments among third-wave coffee shops. Blue Bottle Coffee Japan was established in 2014 and in the six years following has rapidly expanded throughout Japan now operating twenty chain-stores in the Kanto and Kansai regions of Japan (“カフェ 一覧.” 2020). Blue Bottle could be showcased as an example of what similar Japanese initiatives aspire to establish, and many similar trends can be observed. Coffee shops with a humble start in a parking lot similar to that of Blue Bottle in San Francisco can be observed throughout Tokyo. Analysing aggregate websites, Google Maps, and field research at least a hundred micro roasting companies can be identified in the greater Tokyo region, not accounting for the number of chain-stores each individual company operates. However, further analysis reveals that a large number of these companies were established in the few years preceding the Blue Bottle Coffee entry into the Japanese market. Therefore, it is likely that unlike Starbucks, the Blue Bottle Coffee entry was primarily an effort to catch up with perceived Japanese competition. Global trends already inspired the establishment of Japanese third-wave coffee shops and preceded the Blue Bottle market entry. The establishment of a number of these micro roasters was particularly successful with chain stores throughout their respective cities. For the scope of this research the third-wave coffee scene in Tokyo was analysed, drawing conclusions on the specific role of sustainable initiatives in their operations.

Figure 5: Examples of sourcing information provided by various third-wave coffee shops in Tokyo; Glitch Coffee Roasters, Light Up Coffee, Koffee Mameya, Woodberry Coffee, and Fuglen.

The compilation of images above indicates a similarity in approach among the majority of third-wave coffee shops in Tokyo with regards to how each coffee is labelled. The majority of the analysed shops provide information on the location of the farm, varietal of the coffee bean, the processing method (such as washing, drying methods), and altitude at which the beans were harvested. This information is referred to above as the 'labelling information'. On the aggregate micro roastery website Only Roaster a total of 88 micro roasteries are identified in Tokyo, not including some of the shops whose labelling information is included in the image above. (Hikita 2020). Out of the 88 micro roasteries on the website the newest 30 entries (as of December 2020) were analysed for the presence of labelling information in the table below. Furthermore, the number of shops that provide information on where the beans are sourced from is also analysed. This is referred to above as the 'origin information'. Finally, any reference on how any of the three sustainability markers are addressed by both the shop and local farmers is counted under 'sustainability information'. Among the total of 30 companies analysed a number grew to have multiple chain stores across Tokyo and beyond, this is also accounted for in the table and a short analysis of the sustainability initiatives of the most successful shops will follow.

Information on Coffee	Number of shops (30 total)
Labelling Information (origin, varietal, process)	18
Origin Information	24
Sustainability Information	7
Shops with multiple stores	4

Figure 6: Data accumulated on information provided by 30 micro roasteries on their coffee sourcing, shops were selected from the newest articles posted on the 'Only Roaster' website (see appendices for more details on exact shops analysed).

The majority of the 30 shops analysed provided labelling information for their coffees, but only under one-third of the shops provided sustainability information in addition. The four shops with multiple stores included Woodberry Coffee Roasters, Passage Coffee Roastery, Coffee Wrights, and Sol's Coffee Roastery. With the exception of Sol's Coffee Roastery all of these stores provided information on all three parameters, with extensive information on how the beans are sourced and the sustainable methods used by both local producers and the roasters in Tokyo (See annex 1). This could indicate there is a correlation between a sustainable image and the success of a micro roastery business. These shops make considerable efforts to establish a long-term relationship with the local farmers, often traveling to the countries of origin to make a deal and monitor the circumstances. Aside from the sustainable image, the amount of care put into the sourcing process could be appealing to customers. This marketing tactic has also in its turn inspired larger companies; Starbucks opened its first 'Reserve Roastery' in 2014 which serves its coffee in a manner reminiscent of third-wave coffee shops. The concept has now expanded globally including a large roastery in Tokyo ("Starbucks Reserve" 2020). Perhaps this is a sign that micro roasteries are gaining a considerable share of the coffee market. It will be interesting to monitor whether other large coffee retailers follow the Starbucks example once again.

Conclusion & Discussion

The sustainable coffee market has developed significantly in Japan over the course of the past two decades, and the majority of large Japanese companies have either incorporated coffee certified as sustainable by a third-party into their product line-up, or established internal sustainability goals. However, compared to other major coffee consuming nations this development was slow, and less dependent on consumer demand. The existing literature provides little satisfactory explanation for the exact motivations behind this development in Japan specifically. However, the history of coffee in Japan and the culture surrounding it, although often described as unique, is strongly inspired by initially European café influences and later Starbucks-style American influences. The early sustainability movement was initiated partially due to the colonial heritage of the Netherlands. Although the Japanese trade of coffee shares these colonial roots and continues to influence contemporary supply-chains, its history was shorter and the power-relationship more multi-faceted. Therefore, it is unlikely that this history had an influence on sustainability initiatives in Japan. The trend of Japanese companies establishing internal sustainable coffee brands closely mimics those of Starbucks and in greater extent takes inspiration from climate goals set out by NGOs such as Conservation International. It is likely that the perceived environmental threats such as crop failure and ultimately the resulting inability to source sufficient coffee is an important motivation for these companies. The demand for coffee is projected to continue growing, but no action will make coffee farms non-sustainable within decades. Environmental concerns are also increasingly pushed by governments in addition to NGOs. The credibility of companies' internal sustainability efforts is dependent on transparency and non-partial verification. The existence of an NGO partner that provides third-party verification based on publicly available guidelines, such as the Starbucks C.A.F.E. Practices, needs to be considered to reach the level of credibility that third-party sustainability standards have acquired. Third-party sustainability standards such as Fairtrade and the Rainforest Alliance have been incorporated into the coffee line-up of many large Japanese companies. Starbucks has provided a clear example that an internal programme can be equally beneficial to company image, as showcased by their coffees consistently being valued above the C-Price at the New York Stock Exchange. This reveals that aside from environmental concerns, the perceived value of coffees is likely another important factor in answering the question why large Japanese companies are investing in sustainable coffee. International audiences and perhaps more importantly shareholders place great value on brands that differentiate themselves from competition. To summarize large company behaviour; concerns regarding the environment threaten both the future profits and public image of companies, SDGs and related government incentives have paved a concrete roadmap for larger companies to follow. However, concerns about possible greenwashing remain.

In addition to large companies, the shift towards sustainable coffee is perhaps particularly noticeable in recently established coffee shops inspired by the third-wave movement. These shops often establish independent supply chains directly to the local producers, utilizing a set of guidelines to source high quality coffee in an ethical and sustainable manner. This movement differentiates itself from the pre-existing *kissaten* coffee culture through direct supply chains. Instead of relying on large trading houses the companies often import raw green beans directly from the initial producers. This allows the shops to establish their own criteria and furthermore incorporate the ethical sourcing of the ground materials into their brand identity. The shops take inspiration from foreign third-wave initiatives such as the American Blue Bottle Coffee, but contrarily to the market entry of Starbucks these foreign companies entered the Japanese market after Japanese competition had already established their foothold. The fact that a large number of the Japanese micro roasteries managed to expand to chain stores is a testimony to the success of the strategy. It is arguably not a coincidence that all of the successful small companies also fulfilled a lot of sustainability criteria and utilized this fact in its public marketing. The companies each foster a strong sustainable identity which is potentially driving customers from established chains like Starbucks to newly established third-wave shops. This notion is further reinforced by the fact that Starbucks is taking marketing decisions that mimic the third-wave movement. To summarize, the answer as to why large Japanese companies are investing in sustainability is multi-fold. Large companies are not promoting their sustainable initiatives to customers as aggressively as would be expected; in a large number of cases the data was in an obscure corner of the company website or part of a larger annual report. The smaller companies newly established during the third-wave movement seem to take an opposite approach and embrace sustainability as part of their brand identity. As coffee is a relatively inelastic good the large companies do not need to depend on sustainability to attract new customers. However, SDGs as promoted by government institutions provide additional publicity. Environmental concerns threaten the companies' future supply and a positive environmental image might win over potential investors. The fact that these sustainable efforts have proven to increase the market value of coffee products also is likely to have piqued the interest of shareholders. It will require further analysis to determine how the coffee market continues to develop in the aftermath of the COVID-19 crisis. However, it seems likely that recent developments such as convenience store coffee will continue to gain in popularity and may therefore make an interesting topic for further research. Time will tell what fourth-wave coffee will look like, but it is plausible that sustainability will continue to play an important role.

References

"2019年度SDGs未来都市及び自治体SDGsモデル事業の選定について." *地方創生推進事務局*, Cabinet Office, 2019, www.kantei.go.jp/jp/singi/tiiki/kankyo/teian/sdgs_2019sentei.html.

"2019 BUSINESS &SUSTAINABILITYREPORT." *The Coca-Cola Company*, The Coca-Cola Company, 2019, www.coca-colacompany.com/content/dam/journey/us/en/reports/coca-cola-business-and-sustainability-report-2019.pdf.

"About." *Sustainable Coffee Challenge*, Conservation International, 2015, www.sustaincoffee.org/about/.

"About Us." *UTZ*, 2018, utz.org/who-we-are/about-utz/.

"Ajinomoto Group Sustainability Data Book 2019." *Sustainability Data Book 2019*, Ajinomoto Group, 2019, www.ajinomoto.co.jp/company/en/ir/library/databook/main/00/teaserItems1/0/linkList/0/link/SDB2019e_all.pdf#page=38.

Amico, Antoine Libert, et al. "Learning from Social–Ecological Crisis for Legal Resilience Building: Multi-Scale Dynamics in the Coffee Rust Epidemic." *Sustainability Science*, vol. 15, no. 2, 2019, pp. 485–501.

Anh, Nguyen Hung, and Wolfgang Bokelmann. "Determinants of Smallholders' Market Preferences: The Case of Sustainable Certified Coffee Farmers in Vietnam." *Sustainability*, vol. 11, no. 10, 2019, p. 2897.

"ART COFFEE アートコーヒー / 1934 TOKYO." *ART 357 | 株式会社アートコーヒー*, ART COFFEE CO. LTD., 2020, www.artcoffee.co.jp/product/art357/.

Benami, Elinor. "Shaping the Producer's Problem: Essays on Land-Use Zoning and Certifcation in the Sustainability of Brazilian Oil Palm and Coffee." *Stanford University*, 2018.

Boaventura, Patricia Silva Monteiro, et al. "Value Co-Creation In The Specialty Coffee Value Chain: The Third-Wave Coffee Movement." *Revista De Administração De Empresas*, vol. 58, no. 3, 2018, pp. 254–266.

Cadena, Alejandro, and Alieth Polo. “Mesoamerican Producer Survey: The Pandemic Will Leave Long-Lasting Scars.” *Daily Coffee News by Roast Magazine*, Daily Coffee News LLC. , 15 June 2020, dailycoffeenews.com/2020/06/15/mesoamerican-producer-survey-the-pandemic-will-leave-long-lasting-scars/.

“Costa Coffee: 店舗情報.” *Costa Coffee | 店舗情報*, Costa, 2020, www.costacoffee.jp/map.

Damatta, Fábio M., et al. “Why Could the Coffee Crop Endure Climate Change and Global Warming to a Greater Extent than Previously Estimated?” *Climatic Change*, vol. 152, no. 1, 2018, pp. 167–178.

“FOR SUSTAINABLE COFFEE PRODUCTION.” *KEYCOFFEE INC*, KEYCOFFEE, 2016, www.keycoffee.co.jp/sustainable/.

Freeman, James, et al. *The Blue Bottle Craft of Coffee: Growing, Roasting, and Drinking, with Recipes*. Ten Speed Press, 2012.

Giovannucci, D., and F. J. Koekoek. *The State of Sustainable Coffee: a Study of Twelve Major Markets*. Publisher Not Identified, 2003.

“Glocally Responsible サステナビリティ.” *スターバックス コーヒー ジャパン*, Starbucks Coffee Company, 2020, www.starbucks.co.jp/socialimpact/glocallyresponsible/?nid=mm.

Guido, Zack, et al. “The Stresses and Dynamics of Smallholder Coffee Systems in Jamaica’s Blue Mountains: a Case for the Potential Role of Climate Services.” *Climatic Change*, vol. 147, no. 1-2, 2017, pp. 253–266.

Hassard, H.a., et al. “Product Carbon Footprint and Energy Analysis of Alternative Coffee Products in Japan.” *Journal of Cleaner Production*, vol. 73, 12 Feb. 2014, pp. 310–321.

Hernandez, Manuel A., et al. “Volatile Coffee Prices: Covid-19 and Market Fundamentals.” *International Coffee Organization*, International Coffee Organization (ICO) & International Food Policy Research Institute (IFPRI), May 2020, www.ico.org/news/coffee-break-series-2e.pdf.

Hikita, Masashi. *Only Roaster - コーヒーロースターガイド*, Only Roaster, 6 Dec. 2020, onlyroaster.com/.

Ho, Thong Quoc, et al. “Eco-Efficiency Analysis of Sustainability-Certified Coffee Production in Vietnam.” *Journal of Cleaner Production*, vol. 183, 15 Feb. 2018, pp. 251–260.

Hoffman, James. *The World Atlas of Coffee: From Beans to Brewing; Coffees Explored, Explained and Enjoyed*. Revisted edition 2018 ed., Firefly Books Ltd, 2018.

Horiuchi, Rina, et al. “Understanding and Preventing Greenwash: A Business Guide.” *BSR*, Business for Social Responsibility (BSR) , 2009, www.bsr.org/reports/Understanding%20_Preventing_Greenwash.pdf.

Iijima, Mariko. “戦前日本人コーヒー栽培者のグローバル・ヒストリー.” *移民研究 [Immigration Studies]*, vol. 7, Mar. 2011, pp. 1–24.

Inagaki, Kana. “Japan Faces up to Its Plastic Problem.” *Subscribe to Read | Financial Times*, Financial Times, 23 July 2020, www.ft.com/content/5cf68c84-afeb-11ea-94fc-9a676a727e5a.

Ingenbleek, Paul T. M., and Machiel J. Reinders. “The Development of a Market for Sustainable Coffee in The Netherlands: Rethinking the Contribution of Fair Trade.” *Journal of Business Ethics*, vol. 113, no. 3, 2012, pp. 461–474.

“International Coffee Day: Coffee Pledge: 1 October.” *ICD 2020 Live*, International Coffee Organization, 2020, www.internationalcoffeeday.org/.

Kimura, Masatoshi, and Tomoyoshi Iwatubo. “消費者評価から見たコーヒー関連企業の位置付け [Positioning of Companies Related to Coffee from Consumer Evaluation].” *日本経営診断学会論集*, vol. 10, 2010, pp. 49–55.

Kolk, Ans. “Mainstreaming Sustainable Coffee.” *Sustainable Development*, vol. 21, no. 5, 2011, pp. 324–337.

Kurosaki, Ayumi, et al. “知って驚く コーヒー革命.” *週刊エコノミスト*, 10 Nov. 2015, pp. 1–36.

Mizuo, Junichi. “サスティナブル・コーヒーによる BOP ビジネスと CSV(共益の創造)に関する一考察 : スターバックスとそのサプライチェーンにおける CSR 活動の事例に学ぶ (田中友義教授 土方幹夫教授 前山加奈子教授 退職記念号) [The Relationship BOP Business and CSV (Creating Shared Value), Regarding the Sustainable Coffee : Learning from the CSR Activities of Starbucks and the Supply Chain].” *Surugadai Economic Studies*, vol. 22, no. 2, Mar. 2013, pp. 143–179.

Nakajima, Kiichi. “21 世紀最初の 15 年 : 日本の有機農業の動向をふり返って [Critique of Japanese Organic Agriculture in Retrospect during the First 15 Years of the 21st Century].” *有機農業研究*, vol. 9, no. 2, 2017, pp. 29–32.

Nakamoto, Stuart T. *The Coffee Market in Japan*. Hawaii Institute of Tropical Agriculture and Human Resources, College of Tropical Agriculture and Human Resources, University of Hawaii, 1990.

Ott, Brian. “Minimum-Wage Connoisseurship and Everyday Boundary Maintenance: Brewing Inequality in Third Wave Coffee.” *Humanity & Society*, vol. 44, no. 4, 2020, pp. 469–491.

Raynolds, Laura T., et al. “Regulating Sustainability in the Coffee Sector: A Comparative Analysis of Third-Party Environmental and Social Certification Initiatives.” *Agriculture and Human Values*, vol. 24, no. 2, 24 Apr. 2007, pp. 147–163.

Roberts, Peter, and Giselle Barrera Carias. “Crisis Upon Crisis: COVID-19 Threatens the Resiliency of Many Coffee Producers.” *Daily Coffee News by Roast Magazine*, Daily Coffee News LLC., 29 Apr. 2020, dailycoffeenews.com/2020/04/28/crisis-upon-crisis-covid-19-threatens-the-resiliency-of-many-coffee-producers/.

Rosenberg, Lauren, et al. “Practices of Third Wave Coffee: A Burundian Producer's Perspective.” *Business Strategy and the Environment*, vol. 27, no. 2, 2018, pp. 199–214.

Sakagami, Masaji, et al. “Measuring Consumer Preferences Regarding Organic Labelling and the JAS Label in Particular.” *New Zealand Journal of Agricultural Research*, vol. 49, no. 3, 2006, pp. 247–254.

Samper, Luis, and Xiomara Quiñones-Ruiz. “Towards a Balanced Sustainability Vision for the Coffee Industry.” *Resources*, vol. 6, no. 2, 2017, p. 17.

SCAJ ワールド スペシャルティコーヒーカンファレンス アンド エキシビション 2021, Specialty Coffee Association of Japan, 2020, scajconference.jp/.

“SDGs×食品産業.” *SDGs×食品産業 : 農林水産省*, Ministry of Agriculture, Forestry and Fisheries, 2020, www.maff.go.jp/j/shokusan/sdgs/.

“Starbucks.” *Fairtrade America*, Fairtrade America, 24 Aug. 2020, www.fairtradeamerica.org/why-fairtrade/global-impact/impact-stories/starbucks/.

"Starbucks C.A.F.E. Practices." *Starbucks C.A.F.E. Practices | SCS Global Services*, SCS Global Services, 2016, www.scsglobalservices.com/services/starbucks-cafe-practices.

"STARBUCKS RESERVE® ROASTERY TOKYO｜スターバックス コーヒー ジャパン." *スターバックス コーヒー ジャパン*, Starbucks Coffee Company, 2020, www.starbucks.co.jp/reserve/roastery/.

SusCAJ. "第５３回　コーヒーサロン「コロナ禍の世界各地のコーヒー産業」開催のお知らせ." *日本サステイナブルコーヒー協会*, Sustainable Coffee Association of Japan, 2020, suscaj.org/coffee_salon_53th/.

Takashima, Ataka. "Kirin Holdings Initiates Supporting Coffee Plantations in Vietnam to Gain Rainforest Alliance Certification." *Business Wire*, Kirin Holdings, Inc. , 14 Apr. 2020, www.businesswire.com/news/home/20200413005185/en/Kirin-Holdings-Initiates-Supporting-Coffee-Plantations-in-Vietnam-to-Gain-Rainforest-Alliance-Certification.

Tanaka, Hiroaki. " グローバリゼーション下における持続可能な社会の形成に参加する授業開発." *愛知教育大学附属高等学校*, vol. 43, Mar. 2016, pp. 31–42.

"UCC のサステナビリティ: 企業情報." *コーヒーは UCC 上島珈琲*, UCC Ueshima Coffee Co., LTD., www.ucc.co.jp/company/csr/index.html.

"Vol.116　ベトナム・ホーチミンから。 ｜ 全日本コーヒー協会." *社団法人　全日本コーヒー協会*, All Japan Coffee Association, 2020-b, coffee.ajca.or.jp/webmagazine/biz/vol116.

Weber, Jeremy. "Fair Trade Coffee Enthusiasts Should Confront Reality." *Cato Journal*, vol. 27, no. 1, 2007, pp. 109–117.

White, Merry I. *Coffee Life in Japan*. University of California Press, 2012.

"World Coffee Consumption." *Trade Statistics Tables*, International Coffee Organization, July 2020, www.ico.org/prices/new-consumption-table.pdf.

"フェアトレード ジャパンとは ." *Fairtrade Japan*, Fairtrade Label Japan, 2020, www.fairtrade-jp.org/about_us/overview.php.

"レインフォレストアライアンスについて." *Aichi Prefecture Government* , Rainforest Alliance , 2011, www.pref.aichi.jp/uploaded/attachment/25542.pdf.

"サステナビリティ." *ネスレ日本*, Nestle Group, www.nestle.co.jp/research/environmental-sustainability.

"カフェ 一覧." *BLUE BOTTLE COFFEE*, BLUE BOTTLE COFFEE, 2020, store.bluebottlecoffee.jp/pages/cafes.

"こころとからだに、おいしいものを。 ダイドードリンコ株式会社." *容器での環境負荷低減への取り組み | 社会貢献・環境保全 | ダイドードリンコ*, DyDo DRINCO, 2020, www.dydo.co.jp/sustainability/eco/jihanki/package/.

"コーヒーと共に 1 世紀." *CORPORATE PROFILE* , S.ISHIMITSU & CO.,LTD., Dec. 2019, www.ishimitsu.co.jp/wp-content/uploads/2019/12/%E3%83%91%E3%83%B3%E3%83%AC%E3%83%95%E3%83%83%E3%83%88JP_%E3%82%B3%E3%83%BC%E3%83%92%E3%83%BC%E9%A3%B2%E6%96%99%E9%83%A8%E9%96%80_191127.pdf

. "コーヒー輸入統計. [Coffee Import Statistics]" *月刊レポート*, All Japan Coffee Association, 2019-c, coffee.ajca.or.jp/wp-content/uploads/2019/12/j-import201910-sokuhou.pdf.

"コーヒー輸入統計. [Coffee Import Statistics]" *月刊レポート*, All Japan Coffee Association, 2020-a, coffee.ajca.or.jp/wp-content/uploads/2020/12/j-import202010-sokuhou.pdf.

"ようこそ、Suscom へ。." *会社概要 | SUSCOM*, Sustainability Communication Hub Co., Ltd. , 2013, sus-com.net/about.php.

"温室効果ガス排出量、エネルギー使用量、水使用量及び排水量の第三者検証." *Asahigroup-Holdings*, Asahi Group Holdings Ltd. , 2014, www.asahigroup-holdings.com/csr/environment/verification.html.

"日本のコーヒーの飲用状況 [State of Coffee Consumption in Japan]." *統計資料* , All Japan Coffee Association, 2019-a, coffee.ajca.or.jp/wp-content/uploads/2019/06/data04_2019-06b.pdf.

"日本国内の嗜好飲料の消費の推移 [Transition of Preferred Beverage Consumption in Japan]." *統計資料* , All Japan Coffee Association, 2019-b, coffee.ajca.or.jp/wp-content/uploads/2019/11/data05_20191114.pdf.

Appendices

Appendices 1: List of coffee shops and comprehensive analysis of how coffee beans are marketed. Data compiled based on newest entries on 'Only Roaster' website as of December 2020.

Company Name	**Labelling Information**	**Origin Information**	**Sustainability Information**	**Multiple Stores**
saladday coffee	✓			
Coffee Wrights 蔵前	✓	✓	✓	✓
ARiSE COFFEE ROASTERS		✓		
Alternative Coffee Works				
PASSAGE COFFEE ROASTERY	✓	✓	✓	✓
FRESCO COFFEE ROASTERS	✓	✓	✓	
FINETIME COFFEE ROASTERS	✓	✓		
BAKU Coffee Roasters 莫珈琲焙煎所		✓		
MUTO coffee roastery	✓	✓		
LEAVES COFFEE ROASTERS	✓	✓		
SOL'S COFFEE ROASTERY	✓	✓		✓
自家焙煎珈琲ハーモニー		✓		
Coffee Nova	✓	✓		
WOODBERRY COFFEE ROASTERS	✓	✓	✓	✓
Cafe Sucre				
Cafetenango	✓	✓	✓	
Les Deux Chats				
Little Darling Coffee Roasters		✓		
SOCIAL GOOD ROASTERS 千代田				
PANTRY COFFEE	✓	✓	✓	
nericafe	✓	✓		
coffee stand 早川亭		✓		
Khazana Coffee	✓	✓	✓	
TARO'S COFFEE ROASTERY	✓	✓		
sunday zoo	✓	✓		

maruca coffee		✓		
REINO COFFEE STORE	✓	✓		
EAST END WHITE~coffee~		✓		
GRATBROWN Roast and Bake	✓	✓		
Daphne				
Total	18	24	7	4