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Portland Roasting Company: Farm Friendly Direct

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"Coffee is now about not only finding great coffee but showcasing who you're buying from. It's about sustainability. What's driving the industry is people think of coffee as a commodity that's picked by hand. There's a lot of work involved in it. There are people behind this coffee bean and that's the cutting edge stuff right now."

Mark Stell, Managing Partner, Portland Roasting Company

INTRODUCTION

As Mark Stell waited to board the plane to Bujumbura, the capital city of Burundi in Africa, he contemplated an exciting market opportunity for his specialty coffee roasting company. Within a few short weeks, Stell and his management team were pitching Fred Meyer, a major regional grocery retailer. This account would provide access to a large retail distribution channel and represented a significant business opportunity for Portland Roasting Company (PRC). Not only would this account help PRC achieve growth goals, potentially boosting revenue by as much as 25%, it would give PRC unprecedented exposure to retail consumers. As a wholesale coffee company, PRC relied heavily on retailers to promote its brand directly to consumers. Fred Meyer would feature PRC coffee and promotional material in grocery stores throughout the Pacific Northwest. Ultimately, this was an opportunity to build the PRC brand. Last year, Stell had made significant investments in new roasting and packaging equipment and he knew he had the capacity and infrastructure to supply a large account. PRC would also promote the virtues of the Farm Friendly Direct (FFD) program and the company's long-term commitment to sustainability.

From the beginning, PRC had developed trade relationships with individual coffee growers, paid premium prices, and invested additional funds in local projects that directly benefited the lives of coffee farmers and their communities. The FFD program is featured on the company website, in marketing materials and on product packaging (**Appendix 1**). In 2005, PRC was awarded the prestigious Sustainability Award by the Specialty Coffee Association of America (SCAA). Yet despite the merits of the FFD program, "Farm Friendly Direct" was relatively unknown compared to Fair Trade, Organic and Rainforest Alliance certified coffees. PRC would have to convince Fred Meyers that "Farm Friendly Direct" coffee was superior to conventional third-party certifications and competitor's direct trade programs. Stell also realized that the FFD program alone would not be sufficient to secure the account. Grocery retailers were also concerned about price, order fulfillment, brand strength, marketing support, product quality and customer service in addition to the sustainability attributes of a product.

As the last boarding call rang out over the loudspeaker, Stell picked up his laptop bag and headed for the departure gate. Stell was always searching for high quality coffee and made frequent international trips to source from different growing regions. Despite his focus on the upcoming pitch to Fred Meyer, he couldn't help reflecting on the long-term outlook for the coffee industry and the challenges facing coffee growers around the world. With global temperatures continuing to rise, the area of land around the equator capable of growing coffee was shrinking fast. Stell was eager to spend time with his new supplier from Sogestal Kayanza, in North Burundi. He was planning to spend a week getting to know the farmer and working to improve product quality. Stell hoped to establish a direct trade relationship with

this farmer and negotiate an FFD project that would most effectively address local needs. Yet doing so took time, the results of such projects were difficult to measure, and the positive impacts on sustainability were not easily communicated to customers in the US. Despite these challenges, Stell believed the direct trade model was superior to conventional certification, but would it gain enough momentum in the coffee industry to ensure the long-term viability of growing regions? Stell was motivated to grow his company and extend the positive impacts of FFD, but how could PRC convince customers like Fred Meyers to base their coffee purchase decisions on the relative merits of FFD? Stell pondered these questions and continued to work on his pitch during the long flight.

Company Profile

Portland Roasting Company was headquartered in the bustling central eastside industrial district of Portland, Oregon. The 20,000-square-foot facility contained roasting equipment, warehouse space, a coffee tasting facility and offices for 27 employees. PRC's core business was sourcing, roasting and distributing high-quality coffees to wholesale customers including retail coffee shops, restaurants, businesses, food merchants and institutions. Consumers could purchase PRC coffees directly through the company website. The company sold coffee equipment and associated supplies including a line of flavored syrups. Coffees were sourced from more than 20 different countries (**Appendix 2**) and Farm Friendly Direct relationships existed with farmers and cooperatives in Guatemala, Costa Rica, El Salvador, Ethiopia, India, Papua New Guinea, Sumatra and Tanzania (**Appendix 3**). Working with Stell on the management team were Paul Gilles (VP of Operations) and Marie Franklin (National Sales Manager). Gilles' duties were to oversee production, customer service, human resources, risk management, international business development and general administration (**Appendix 4**). Franklin led a team of sales, marketing and communications professionals. All PRC employees were encouraged to write blogs about coffee on the company website and most had already visited coffee farms that supplied the company's coffee beans in order to better understand the supply chain and farmer relationships.

Stell had participated in the United Nations Conference on Sustainable Development in 1992 in Rio de Janeiro, and as a member of a student delegation, helped to publish the "Youth Action Guide on Sustainable Development." His experience in Brazil exposed Stell to the export side of the industry and inspired him to learn more about the coffee business. After a brief apprenticeship with a local roaster in Portland, Stell opened a retail coffee shop called Abruzzi Coffee Roasters in 1993. Three years later he sold the business and opened PRC with business partner Todd Plummer, choosing to focus exclusively on the wholesale coffee business. Stell described his original vision for the company, "What we saw was a niche for small quality coffee roasters that had creative marketing, creative design and upscale packaging. We wanted to be synonymous with Portland and we wanted to buy sustainable products, and my involvement with the Earth Summit in '92 was kind of the driving factor to help us steer our direction. We wanted to be as sustainable as possible and that has always been our motivation."

In the first year of operation PRC sold 40,000 pounds of coffee. Since then PRC achieved an average of 20% annual growth and in 2007 the company sold 600,000 pounds of coffee, yielding approximately $5 million in revenues (**Appendix 5**). In 2006, 2007 and 2008, PRC was a finalist for Roast Magazine's Roaster of The Year awards, and since 2005, PRC has made the Portland Business Journal's list of 100 fastest growing local businesses. After

learning the pitfalls of having one customer represent 40% of total sales, PRC subsequently diversified across market segments with the largest customer representing no more than 20% of total sales. In anticipation of continued growth through targeting hotels, mass grocers, universities and other institutional accounts, PRC invested in new roasting and packaging equipment in 2008.

Coffee Production and Trade

Coffee is produced in more than 50 tropical countries generally around 23.5 degrees north or south of the equator, with approximately 63% produced in Latin America, 22% in SE Asia and 14% in Africa[1]. Similar to wine, coffee beans from different regions have distinct characteristics displayed in aroma, body, acidity and nuances of flavor. These variations are dependent not only on the appellation, or geographical location, but also the varietal grown and the manner in which the coffee is produced. The first flowers appear on coffee plants during the third year, but production is only profitable after the fifth year. Coffee cherries typically ripen around eight to 10 months after flowering and in most countries there is only one major harvest each year. Shade grown coffee often results in berries ripening more slowly, producing lower yields but with a higher quality and flavor. Ripened coffee cherries are typically harvested by hand, which is very labor intensive. Some coffee crops are picked all at once, but for better quality coffees only the ripe cherries are picked and for this reason harvesting may be undertaken as many as five times during a season. The ripe berries have higher aromatic oils and lower organic acid content, lending to a more fragrant and smooth flavor. Because of this, the timing of coffee picking is one of the chief determinants of the end product.

After coffee is picked, it must be processed quickly to avoid spoilage. Each coffee cherry usually contains two coffee beans, covered by a silvery skin, a layer of parchment, a pectin layer, a pulp layer and finally the outer skin (**Appendix 6**). These outer layers must be removed in one of two processing methods. The dry processing method is used in arid countries where water is scarce and humidity is low. Freshly picked cherries are simply spread out on large surfaces to dry in the sun. In order to prevent the cherries from spoiling, they are raked and turned throughout the day then covered at night. When the moisture content of the cherries drops to 11%, the dried cherries are moved to warehouses where they are stored. In wet processing, the freshly harvested cherries are passed through a pulping machine where the skin and pulp is separated from the bean. The beans are then transported to large, water-filled fermentation tanks for 12-48 hours where naturally occurring enzymes dissolve the pectin layer. The beans are then removed from the tank and dried. Eduardo Ambrocio, who works for the Guatemalan National Coffee Association as a master cupper and quality control expert, believed the riskiest process in the industry is wet milling. “You need to manage the fermentation process while the cherries are in the tank, and you need to carefully control the drying process. Everything is a chain of different times and events that need to be precisely controlled." With so many variables involved in wet milling there is ample opportunity for error, but wet processing can enhance the brightness and floral acidity of coffees.

[1] International Coffee Association, Total production of exporting countries, Crop years 2003/04 to 2008/09, http://www.ico.org/prices/po.htm

In order to compete against the larger estates, many small growers[2] have formed cooperatives to help negotiate better prices and increase access to markets. Most growers dry the coffee themselves and then sell the unprocessed coffee to intermediaries for milling. This involves a mechanical hulling process that removes the parchment layer from wet processed coffee or removes the entire dried husk from dry processed coffee cherries. The coffee beans are then graded and sorted by size and weight. The intermediaries often make a larger profit since small growers may not have direct access to buyers, and are thus forced to accept whatever price the intermediary offers. From the intermediary, the coffee is then sold to exporters or brokers who buy and sell coffee on commission, before passing it onto importers. Importers then sell the beans to roasters who roast, package and market the coffee to distributors and retailers. Roasting is generally performed in the importing country because coffee freshness diminishes rapidly after roasting. This way the roasted beans reach the consumer as quickly as possible to ensure quality.

Large coffee importers and roasters purchase coffee futures and options traded on the Intercontinental Exchange (ICE). The ICE Futures U.S. Coffee "C" contract is the benchmark for world coffee prices. The price of coffee has fluctuated dramatically, falling as low as USD $0.415/pound in 2001 and having reached as high as $3.148/pound in 1997 (**Appendix 7**). These price fluctuations are due to market influences such as natural disasters, supply surplus, transportation costs, political stability in producing countries and investor speculation. For example, a frost in Brazil in 1975 and a drought in 1985 led to a sharp drop in coffee production and significant increases in coffee prices. This price volatility is problematic for both farmers and commercial roasters, directly impacting profit margins and production costs. Just one year of low market prices can potentially put a small farmer out of business. Coffee revenue is also a significant portion of the GDP for many equatorial countries. Burundi, Uganda and Ethiopia earn more than half of their export revenues from coffee alone. The economic disparity between producing and consuming countries, and the determination of a fair price, has long been the subject of active debate within the coffee industry.

The Farmers Perspective

Many of the countries with an appropriate climate for producing coffee are in the developing world. This creates a unique set of challenges and opportunities for the coffee industry. Many of the tools, techniques, resources and technologies that farmers in the developed world use are either not affordable or not available to the vast majority of coffee farmers in developing countries. Unfortunately, there is an inverse relationship between the quality of a coffee bean and the volume of coffee that the plant can produce. Plants that produce high-quality coffee generally do not produce high quantities of coffee beans. Generally, the higher the quality of the coffee the more expensive it is to produce. In addition to processing, handling and delivery, specialty coffee requires more resources, time and attention in order to achieve the highest level of quality. The beans mature at different times on the plant and must be hand picked only when they are ripe. Ambrocio noted, "Coffee is a lot like grapes and many other fruits. We have varieties that probably give you a good yield at times of production, but low quality. As a farmer, you are going to focus on either high quantity or high quality." Don

[2] Many coffee producers are small, family-owned farms covering two hectares or less, while larger coffee estates may be upwards of several thousand hectares.

Jorge, owner of Rancho Carmela, which is located in a region of Guatemala where PRC purchases coffee, has been producing high-quality coffee for decades. Don Jorge said that he spends anywhere from USD $0.70-0.85/lb to harvest his specialty coffee depending on the climate, labor rate and other extenuating circumstances. Jorge states that in selling to exporters, “In a good year I can get almost a dollar per pound for my best beans, but sometimes I have to settle for 80 cents." Dona Miguelina, owner of El Paternal, one of the oldest coffee farms in Nicaragua, and supplier of specialty coffee for PRC, confessed, "This has been a very dry year. If we don't get some rain soon we will not have a very good harvest this year. There is a lot that I can do to ensure a quality harvest, but if it doesn't rain, what can I do?" Dona has implemented a number of different water-saving measures, but most coffee farms must rely on rainwater for irrigation, and without it, their yields and their profits suffer.

Unfortunately for many farmers the harvest season is long, averaging two to four months. It then takes time to process the beans, and get the finished product ready to ship. From the first cherry picked to the time the bean arrives at its final destination can take up to six months. For most farmers, this is a long time to wait for payment, particularly when all of their costs for goods sold are incurred up front. This can create a heavy financial burden on coffee farms of all sizes, especially the smaller farms and premium producers who typically have higher costs of production. Historically, this is where the exporters have added value in the supply chain. Exporters will often finance the crop once it is ready to ship, or sometimes before the crop is harvested depending on the needs of the farmer. Arnoldo Leiva, General Manager of The Coffee Source, Inc., and a coffee broker for PRC, said that the role of the exporter has been changing over the last decade. Leiva, who operates out of San Jose, Costa Rica but works with coffee farmers and purchases coffee from all over the world, stated, "One of the services we provide for both the producers and the roasters is financing, because we pay the farmer up front and the roaster gets credit upon arrival. In essence it is a 90-day loan, or port-to-port plus net 30 from arrival.” Such arrangements allow farmers to pay for the labor and processing before the crop has been harvested and for the roasters to purchase coffee beans as they need them versus trying to buy all they need for the season. This helps roasters maintain more stable cash flow, and in some cases eliminates the need for expensive storage and warehousing. Leiva continues by saying, "We provide a hedging for both the farmer and the roaster. That way, both can fix their price at any given time, but not necessarily at the same time."

According to Dona Miguelina, the most significant change in the industry for coffee farmers since the time of her grandfather has been the increase in market information. Just over a generation ago, many farmers had no knowledge of the value of coffee in foreign markets, but now it is as easy as looking up current prices on the internet. Ambrocio stated that access to information is really benefiting the farmer and, "They now know more about markets, prices, promotion, and perhaps most importantly, the value of consistent quality. Everything is based upon quality and that is the first thing that people need to be convinced of." Access to information has also led to a growing trend in direct relationships between farmers and roasters. By reducing the number of middlemen, both roaster and grower enjoy higher profits and roasters like PRC can add value to consumers by marketing the additional value they create for farmers. According to Leiva, "The long-term relationships that farmers are developing with buyers, like the one we have with PRC, act as a safety net for them and allows them to forecast their cash flow for more than one year. They know the markets are going to

come back since the roasters tend to be more loyal and less price sensitive, since they're more focused on quality." Jorge and Miguelina agree that mutually beneficial long-term relationships with buyers, especially buyers willing to pay a premium price, is one of the most valuable assets for a coffee farmer.

In addition to fluctuating coffee prices, farmers contend with many other challenges. The rising value of land for real estate development in many Central American countries, as well as competing crops, has pushed thousands of acres out of coffee production. In addition, the average age of coffee farmers is rising and the younger generation is often not interested in following in the footsteps of their predecessors. In Leiva's home country of Costa Rica this problem is growing, "Coffee has been great for the family and allowed farmers to send their kids to school and even university. But now that they have degrees, they want to go and work for Intel, not in the fields." Meanwhile, labor rates are also growing at an alarming rate, driving coffee production costs even higher. In Central America, the expansion of the Panama Canal is expected to drive up labor costs throughout the entire continent. It is hard to imagine that this one seemingly unrelated event will likely increase the cost of a cup a coffee for consumers all around the world.

History of the US Coffee Industry

America's demand for coffee grew exponentially following the War of 1812, when Britain cut off access to tea imports. By the turn of the 19th century, a small number of entrepreneurial coffee roasting companies achieved multi-state distribution facilitated by innovations in production technology, transportation and mass media. In 1864, the early pioneer John Arbuckle installed the newly patented Jabez Burns roasting machine in his Pittsburgh plant and later added automated packaging equipment. Arbuckle began selling one-pound packages of coffee in thin paper bags, under the brand name Ariosa. Sales and distribution on the East Coast soared and in 1913 the Arbuckle family launched the Yuban brand. Other brands gained regional and national prominence during this period including Folgers, Hills Brothers, MJB, Chase & Sanborn and Maxwell House. The larger of these companies were able to distribute nationally, maintaining freshness by shipping their coffee in vacuum-sealed cans. Consumers steadily moved away from purchasing coffee in bulk to buying branded coffee in small packages. By the 1950s the major US coffee producers were competing aggressively for market share and invested heavily in national radio and television advertising. American consumers favored convenience over quality, driving growth in the instant coffee market. To defend against increasing competition, the growing popularity of instant coffee and rising production costs, roasters began lowering prices and substituting lower quality Robusta beans in their blends. Meanwhile, a younger generation of consumers was choosing soft drinks over coffee. These industry forces were the catalyst for significant industry consolidation during the 1960s. The downward spiral of price-cutting and erosion of quality continued for decades and by the late 1970s, the stage was set for a new generation of coffee entrepreneurs[3].

[3] Pendergrast, Mark. *Uncommon Grounds: The History of Coffee & How it Transformed Our World.* 1999. Mark Pendergrast. Basic Books. New York, NY: Basic Books, 1999. Print.

The US Specialty Coffee Movement

Alfred Peet, an emigrant from The Netherlands, recognized the lack of quality coffee in the US and opened his first coffee house in Berkley in 1966. By using quality beans and roasting in small batches, Peet offered high quality coffee to local consumers and success followed. Peet's early success inspired three college friends, Jerry Baldwin, Gordon Bowker and Zev Siegl, to open a coffee shop in Seattle's Pike Place Market in 1971 selling whole beans and supplies. They named the store Starbucks. Many more entrepreneurs began to recognize the market opportunity for roasting and selling wholesale specialty coffees to gourmet grocers and serving premium beans and fresh brewed coffee in retail coffee houses. During the 1970s a small yet steadily increasing number of specialty coffee merchants opened businesses in cities along the East and West coasts and began making inroads into supermarket channels. The fledgling SCAA was formed in 1982 by 42 original charter members, at a time when specialty coffee accounted for less than 1% of total US coffee sales.

During a business trip to Milan, Starbucks Director of Marketing, Howard Schulz, observed the popularity of espresso bars and visualized bringing the Italian café experience to America using premium coffee. In 1984 Schulz convinced Starbucks' owners to add an espresso bar inside an existing store and the venture became an instant hit. Schulz left Starbucks the following year to open his own coffee shop, Il Giornale. With the backing of local investors, Il Giornale acquired Starbucks in 1987 and as CEO, Schulz immediately embarked on an aggressive growth strategy driven by new store openings in major US cities. Starbucks went public in 1992 and the IPO provided capital for rapid expansion both domestically and internationally (**Appendix 8**). Other large regional specialty coffee brands including Gloria Jean's, Brothers Gourmet Coffee, The Coffee Connection, Seattle's Best, Caribou Coffee and Coffee People also experienced rapid growth during this time.

Following more than a decade of growth and consolidation among large retail coffee brands, the specialty coffee industry remained fragmented. The number of businesses providing products and services in the specialty coffee industry doubled to more than 26,000 from 2001 to 2009. By then, the SCAA boasted 1,918 member businesses consisting of retailers, roasters, producers, exporters and importers, as well as manufacturers of coffee processing equipment involving more than 40 countries. Amongst members, the SCAA identified at least 369 independent roasters in 2009. The percentage of adults drinking specialty coffee had grown from 3.3% to more than 17% in the past 10 years (**Appendix 9**).

New Developments in the US Coffee Industry

The US had grown into the single largest consumer of coffee, buying close to 25% of total global output. Overall, US coffee sales had grown at an average rate of 23% every year since 2003 (adjusted for inflation) with retail coffee sales exceeding $6.5 billion in 2008[4]. According to the National Coffee Association, 49% of Americans 18 years old or older drank some type of coffee beverage, and roughly three of every four cups of coffee consumed was made at home[5]. Combined, Kraft Foods and Proctor & Gamble commanded greater than 50% share of all roasted coffee sold in the US and marketed numerous coffee brands covering a wide spectrum of price points within various segments. Yet these large companies were still

[4] Mintel reports.
[5] http://www.msnbc.msn.com/id/8841941/

losing share to smaller roasters. Starbucks had grown into the largest specialty coffee company, followed by Peet's Coffee and Caribou Coffee, but was increasingly competing against national fast food retailers interested in gaining market share. Both McDonalds and Dunkin' Donuts began selling their own brands of coffee and espresso drinks (**Appendix 10**).

Despite the growth in net sales, consumers were buying less coffee by volume and paying more per pound. In September 2007, the number of Starbucks customers fell in American stores for the first time in the history of the company, and in 2008 the company announced the closure of 600 stores. Consumers were increasingly paying premium prices with expectations of high quality, and given the economic downturn, it was anticipated that more consumers were brewing specialty coffee at home. Meanwhile, foreign markets with consumers who had historically preferred to drink tea, such as in England and much of Asia, represented the largest growing market segment for many US coffee companies.

In conjunction with the industry trend toward higher quality, coffee roasters and retailers were also promoting their coffees on the basis of sustainability. Walmart launched six coffees under the Sam's Choice™ brand as part of an expansion of eco-friendly and ethical products. Whole Foods sold its 365™ brand of coffee, noting fair trade practices and direct relationships with more than 40 growers. Kraft General Foods advertised that 30% of all the coffee beans that went into Yuban coffee were officially certified by the Rainforest Alliance. Starbucks promoted its Shared Planet™ program with stated goals for ethical sourcing, environmental stewardship and community involvement. Green Mountain Coffee Roasters, long recognized as an industry leader in environmentally friendly and socially responsible business practices, was ranked 11th on the Forbes 100 Fastest Growing Companies list in 2009. In Stell's opinion, "Most of the growth in the SCAA is around sustainability, so whether it's Fair Trade, Organic, Utz Certified or Rainforest Alliance, sustainability is what's really moving our industry."

Certified Coffee

There has been significant growth in the number of sustainability related certification and eco-labeling initiatives in response to globalization. An increasing number of corporations operate globally yet environmental, labor and human rights regulations in developing countries often lag behind developed country standards. Scrutiny has perhaps been most intense within the food sector, given concerns over health and safety. Within the coffee industry, the concept of sustainability was initially focused on concerns around the environmental and social impacts of large-scale coffee production. The International Coffee Agreement of 1962 established a quota system that withheld coffee supplies in excess of market demand and also established quality standards in an effort to maintain stable prices and production. However, the initial ICA did nothing to address environmental or social concerns related to coffee production. There have been various renewals of the ICA, with the latest agreements of 2001 and 2007 focused on stabilizing the coffee economy through the promotion of coffee consumption, raising the standard of living for growers by providing economic counseling, expanding research and conducting studies on sustainability.

To address some of the shortcomings of the ICA, a number of worldwide coffee certification initiatives have been established to address what are commonly referred to as the three pillars of sustainability, covering economic, social and environmental development

(**Appendix 11**). According to Ambrocio, "Quality and sustainability come first, for the farmer and the consumers. Once that is achieved, farmers can differentiate themselves in a number of different ways to reach a better market, and one way they can compete is using certifications." Although each certification has unique criteria, they rely on verification by independent third parties to maintain transparency. One of the challenges now facing coffee certifications is balancing the need to maintain reliability and credibility while also keeping certification costs to a minimum so that growers are able to reap economic benefits from the premium or stable prices paid for their coffees. By 2008, certified coffees amounted to more than 390,000 metric tonnes of coffee exports, or close to 4% of the worldwide green coffee market.

Fair Trade

The concept of fair trade emerged more than 40 years ago through alternative trade organizations that offered products purchased directly from small producers in developing countries to consumers in developed countries. The first Fair Trade certification initiative began in 1988, triggered by a sharp drop in world coffee prices when the ICA failed to renegotiate price quotas. It was branded "Max Havelaar," after a fictional Dutch character that opposed the exploitation of coffee pickers in Dutch colonies. In 1997, the Fair Trade Labeling Organizations International (FLO) united Max Havelaar with its counterparts in other countries and became the international umbrella organization for Fair Trade, representing 17 Fair Trade labeling organizations. Fair Trade's mission is focused on economic and environmental sustainability for farmers and their communities, while guaranteeing a minimum purchase price and social premium to cover costs of production and investments in the community. The base price paid for Fair Trade coffees was USD $1.26 in 2009, with an additional $0.15 added for organic coffees. The Fair Trade standards ensure that employees who work for Fair Trade farms are able to work with freedom of association, safe working conditions and fair wages; importers purchase from Fair Trade producer groups as directly as possible, eliminating the middle man and helping farmers to compete in the global market; Fair Trade farmers and farm workers decide how to invest Fair Trade revenues; and farmers and workers invest Fair Trade premiums in social and business development projects such as scholarship programs and healthcare services. However, Stell, as well as others in the sustainable coffee movement, was concerned that a sufficient percentage of the price premiums were not making it past the coops to the farmers. In addition, only cooperatives of small farmers can participate in Fair Trade, excluding both large and small individual farmers who cannot get the certification on their own. In 2008, close to 66,000 metric tonnes of Fair Trade coffee was sold.

Organic

The organic movement began in 1973 as a farming and certification system, solely focused on environmental issues. The International Federation of Organic Agricultural Movements sets international organic standards while the US Department of Agriculture oversees the USDA National Organic Program that also sets guidelines for coffee roasters, who must be certified in order to market organic coffees. Organic certification is focused on regulating agricultural production practices with the aim of eliminating the use of synthetic chemicals that are common in pesticides, herbicides and fungicides. In order for coffee to be certified and labeled as organic in the U.S. it must be grown on land without synthetic pesticides or other prohibited substances for three years, have a sufficient buffer between the organic coffee and

the closest traditional crop, and include a sustainable crop rotation plan to prevent erosion and the depletion of soil nutrients. The initial amount of capital needed to grow an organic coffee crop is less than traditional coffee production since it does not require the purchase of synthetic fertilizers and pesticides, but it typically yields a smaller crop and thus the farms tend to make less money relative to the size of their farm. While there is no set premium for organic coffees, the average price is roughly 20% above non-organic coffees and is closely tied to the quality of the coffee. Many small, family-owned coffee farms are organic by necessity since they can't afford chemical pesticides and fertilizers. However, these small farms also cannot afford to pay for inspections to achieve the certification, and therefore are unable to benefit by selling their beans for higher prices. One common criticism of organic certification is that it focuses solely on environmental criteria while ignoring the social and economic aspects necessary for sustainable business. As Isabela Pascoal, marketing manager with Daterra Coffee explained, “It is important to have organic coffee, but that doesn’t mean that you can be sustainable.” Other certifications focus on sustainability by establishing criteria related to social and economic as well as environmental factors. In 2006, approximately 67,000 metric tonnes of organic coffee was sold throughout the world.

Rainforest Alliance

The Rainforest Alliance is a non-profit, tax-exempt organization whose mission is to conserve biodiversity through the promotion of sustainability in agriculture, forestry, tourism and other businesses. In order to be certified, coffee farms must maintain or restore enough natural forest cover to achieve 40% shade coverage and there must be a minimum of 70 trees per hectare and at least 12 native species. The Rainforest Alliance social criteria focus on fair pay, health and safety benefits, and schooling for local communities. If farms do not meet these standards, they can still be certified if they have a plan to meet the goals and are taking active steps to implement the plan. The certification program is managed by the Sustainable Agriculture Network (SAN), a coalition of leading conservation groups in Belize, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico and the US. The first coffee farms were certified through the Rainforest Alliance program in Guatemala in 1995. A common criticism of the Rainforest Alliance certification is that as little as 30% of the coffee in a container can be grown under Rainforest Alliance criteria and the coffee can still carry the certification seal.

According to Leiva, Rainforest Alliance has been growing in popularity with many of the farmers that he has been working with, but it does come with a cost. "Rainforest Alliance has a very strict set of standards in regards to the way you manage the farm, the environment, obviously, the forest, how you treat the employees, safety issues with the workers, and it’s getting very, very expensive to be certified. And every year, they want more and more and more changes in the farm, to a point that those changes are challenging the volume that the farm produces. If you cannot make significantly more money per pound of certified coffee, then the costs of meeting these standards are not worth the effort to the farmer.” Gaining market acceptance and building perceived value through certification is necessary before consumers will be willing to pay more certified coffee. If the consumer won't pay a price premium, farmers have little incentive to invest the extra effort and money required for certification. In Leiva’s opinion, "If you can see that the prices today are not as good, and the cost of certification is very high, the producers start questioning the real value of this

investment." In 2008, approximately 62,296 metric tonnes of Rainforest Alliance certified coffee was sold.

Bird Friendly®

The Bird Friendly certification was started in late 1996 by staff at the Smithsonian Migratory Bird Center (SMBC). The certification's criteria are based on research focused on biophysical aspects of shade on coffee plantations. The SMBC requires that producers meet the requirements for organic certification first, and then meet additional criteria including canopy height, foliage cover (40% shade coverage), diversity of woody species, total floristic diversity, structural diversity, leaf litter, herbs and forbs ground cover, living fences, vegetative buffer zones around waterways and visual characteristics. The Bird Friendly certification does not address labor conditions. As Robert Rice with the SMBC stated in regards to the Bird Friendly certification, "It's a seal that just has a lot of scientific rigor behind it." The biggest challenge to Bird Friendly certification is the cost of obtaining organic certification, which can require years of effort and expense. In 2008, approximately 2,916 metric tonnes of Bird Friendly coffee was sold.

Common Code for the Coffee Community (4C)

The Common Code for the Coffee Community, also known as 4C, was established by the German Coffee Association (DKV) and the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) with the goal of facilitating more sustainable coffee production. Building on best agricultural and management practices, the 4C code of conduct intends to eliminate the most unacceptable practices while encouraging ongoing improvement. 4C distinguishes itself from organic, Fair Trade, Rainforest Alliance and Utz certifications by relying on an internal monitoring system incorporated within the initiative's corporate business model, rather than certification of standards compliance by third parties. 4C has no set price premiums, allowing free negotiation between 4C members with price reflecting coffee quality and sustainable production practices and the standards it sets are the absolute minimum in all ecological, social and economic aspects. By December 2008, approximately 116,400 metric tonnes of 4C certified coffee was purchased by 4C members.

Utz Certified

Utz Certified, originally known as Utz Kapeh which means "good coffee" in the Mayan language, was founded in 1997 by Guatemalan coffee producers and the Dutch coffee roaster Ahold Coffee Company, and is one of the fastest-growing certification programs in the world. Utz Certified aims to implement a worldwide standard for socially and environmentally appropriate coffee growing practices, and efficient farm management. The program is focused on the mainstream market, and is open to all growers, traders, roasters and retailers across the entire supply chain. Utz Certified has a unique track-and-trace system, showing the buyers of Utz certified coffee exactly where their coffee comes from. As Illana Burk, Business Development Manager with Utz explained, a roaster can print a code on a bag, whereby the customers enter the code in and immediately track their coffee all the way back to the originating farm. The farm's story can be told and transparency ensured. The price for Utz certified coffee is determined in a negotiation process between buyer and seller, which the certification body does not interfere with. Utz certified has been criticized over weak environmental and social standards, the lack of pre-financing standards, and the lack of minimum guaranteed prices. Leiva says, "Utz was developed for European grocery chains.

That's the seal that they developed for their own marketing purpose basically." Although Utz certification is not recognized worldwide it has slowly been gaining recognition in more countries, particularly in Japan where certification not only yields a premium, but also is necessary to meet the exacting standards of the Japanese consumers. In 2008, 77,478 metric tonnes of Utz Certified coffee was sold.

Direct Trade and Farm Friendly Direct (FFD)

Direct trade is a general term for coffees that are imported directly from growers, rather than purchased through brokers at auction. Through a direct trade relationship, individual terms and prices can be negotiated and growers typically receive a higher price since there are no middlemen taking a share of the price. Stell and his team firmly believed in the FFD program that started in 2001 at the La Hilda Estate in Costa Rica. The program evolved to include direct trade arrangements with farmers in Tanzania, El Salvador, Costa Rica, Sumatra (Indonesia), India, Papua New Guinea, Guatemala and Ethiopia. Direct trade with farmers in developing countries is nothing new, but Stell wanted to create a program that embodied his commitment to community and sustainability. The FFD program was based on paying above market prices for premium coffee, then paying an additional premium to finance projects that help improve the lives of farmers and their communities (**Appendix 12**). Other direct trade models pay premiums above Fair Trade price to reward quality, but they may not have specifics on how that money is spent by the growers. In creating FFD, Stell strongly believed that direct trade not only resulted in higher quality coffee for customers, but also ensured long-term mutually beneficial business relationships between PRC and their farmers, as well as between the farmers and their community and natural environment. As the quality of coffee improved under direct trade, certain farmers were approached by other buyers, often offering higher prices. Stell and PRC never tied growers into exclusive sourcing contracts, believing that a variety of buyers benefited the growers in the long term. Farmers had the choice of selling to the highest bidders, but tended to stay loyal to PRC trusting that they were making a long-term commitment and paying stable prices over the long term.

Stell would typically sample different coffees from a broker until he found one that had the quality he desired. He would then patiently work on finding the original source of that coffee and begin establishing direct trade relationships with the grower. Each FFD project was then designed and implemented through a collaborative process between PRC employees, farmers and their communities to address some of the most pressing needs. Projects were evaluated by how closely they aligned with the United Nations Millennium Development Goals (Appendix 13), the potential for improving farmers' lives, overall costs and the visibility of each project with its direct trade relationship. Once a project was undertaken, PRC remained engaged to ensure that the farmers and communities had access to the assistance and materials needed to complete each project. Most FFD projects were short-term in nature and typically completed within a one to two year timeframe before the next project was developed and implemented. FFD projects included building a school, paying teachers' wages, constructing a water treatment facility (Appendix 14), installing water pumps, implementing a soil and leaf analysis program, supporting a local foundation to fund community needs and planting trees.

There were challenges to the direct trade model. It took time to work through coffee brokers to trace the source of high-quality beans back to the farm, begin a dialogue with those farmers and then begin developing a relationship that could become part of the FFD

program. Farmers were often skeptical of foreign companies, and tended to be more comfortable transacting business through local channels and coops. Stell also knew that his team was only able to travel to each farm at most once a year to meet with farmers and monitor ongoing FFD projects. Certain projects required expertise that was outside PRC's core business. In some cases, PRC collaborated with NGOs on FFD projects, relying on their experience, yet this option was not always available or feasible. Stakeholders began asking Stell for specifics on how much PRC invested in FFD projects. There were no internally mandated policies or formulas for determining how much money would be allocated to fund FFD projects. Likewise, PRC had no formal guidelines for selecting and structuring FFD projects nor any metrics defined for measuring the success or effectiveness of FFD projects. Kathleen Finn, a communications and marketing representative at PRC, believed that the FFD program should remain flexible and fluid, argued that "the program supports sustainability and in order to best do so, the program itself needs to be organic. Sometimes a farmer growing coffee in a developing country like Guatemala or in another part of the world may be doing very well in relation to the rest of their community that supports them, so as a result sometimes the funds from proceeds going to the FFD program are best spent with the community versus the farmer. At other times the farmer needs support to meet quality standards or to help become more environmentally and/or socially sustainable. As a result the program needs to be organic, flexible, transparent, and may need to change from crop-to-crop or farmer-to-farmer in order to meet local needs and be able to bring value to PRC and our clients."

Portland Roasting Coffee Company

Supply Chain

Through the FFD program, PRC worked to minimize the number of middlemen in the coffee supply chain. The broker and importer still played a role by assisting with the necessary functions of transporting, processing, storing, financing or importing. However, PRC negotiated a separate contract with these intermediaries, assuring that the price offered to the growers was not impacted. The containers carrying FFD Central American coffees were shipped into Oakland or Long Beach (California), FFD coffee from Papua New Guinea was shipped into the Port of Tacoma (Washington), and FFD Tanzanian coffees were shipped directly into the Port of Portland (Oregon). PRC coffee that was not part of the FFD program was typically purchased on the spot market through brokers who import coffee into various ports in the US and sell to roasters throughout the US. Since coffee crops ripen at different times throughout the year, roasters must source coffee from different growing regions throughout the year to secure a sufficient quantity of fresh beans to meet annual demand.

PRC works with farmers to ensure their coffee is farmed following the best possible practices, and then takes on the responsibility of trying to maintain this high-quality coffee on its long voyage to Portland to be roasted. Storage and shipping conditions can make a big difference in the overall quality of a cup of coffee. Coffee may leave the processing mill at 12% moisture, but if the coffee isn't shipped right away, problems may result. Humidity is a critical variable, and if coffee absorbs too much moisture, particularly from exposure to humid environments when stored for long periods of time, it may take on a moldy overtone in the cup. The temperature of coffee during shipping can also have an impact on the quality of green coffee,

since quick changes in temperature cause condensation and fermentation of the beans. Good circulation is needed to keep humidity and temperature levels constant. PRC might receive Guatemalan coffee from the farm to the loading dock in as little as three weeks, while containers from other sourcing locations might take upwards of three to four months to arrive.

Upon arrival at PRC's facility, unroasted green coffee was stored in a climate controlled warehouse environment. Samples were taken from each lot and inspected for defects to ensure quality. Irregularities in quality can be attributed to the farm, the processing or shipping depending on the nature of the defects found. Having some defects in a lot is quite common and only becomes a concern if abnormally high. Such defective beans are set aside to help the PRC staff learn how to inspect coffee lots for quality. Although green coffee can last significantly longer than roasted coffee, for the same reasons encountered during shipping, it is important for sourced green coffee to be roasted in a reasonable amount of time. Coffee is stored in burlap bags marked with the necessary information about the coffee to keep coffees from being confused. Organic coffees are strictly kept separate from other coffees to conform to certification standards.

The coffee roasting process heats green beans to a specified temperature for a specified length of time. Roasting profiles for each coffee, designating target temperatures throughout the different time intervals in the roasting process, are carefully followed to highlight different flavors in the coffee and ensure consistency in the final product. PRC's roasting equipment is computer monitored so that roast profiles can be highly consistent while maintaining the uniqueness of each roast. However, even with all the metrics the computer records, skilled roasters would diligently oversee every stage of the roasting process. As subtle changes such as fluctuations in the ambient temperature or humidity can affect the final product, every roast is slightly different. Most machines maintain a temperature of about 550 degrees Fahrenheit. The beans are kept moving throughout the entire process to keep them from burning as they slowly roast. When the beans reach an internal temperature of about 400 degrees, they turn brown, sugars start to caramelize and the oils locked inside the beans begin to emerge. The hot roasted coffee beans are then quickly spilled out onto a tray where cooling fans return the coffee to room temperature.

Having been returned to a stable temperature, roasted coffee is then ready for bagging and distribution (**Appendix 15**). At PRC, whole bean coffee for grocery distribution was packaged in bulk to fill store containers where customers fill their own bags. Whole bean coffee for sale in small bags was simply packaged and stored for distribution. Ground coffee was crushed to a specific size increment depending on customer preferences and their method of making coffee, then bagged and stored. Bagged coffees are contained in a sealed package with a valve to release gasses produced by the coffee as it ages. The packaging keeps out air and slows the process wherein coffee ferments or goes stale, but as gasses are let off, the coffee also slowly loses its flavor.

Marketing and Product Differentiation

PRC used a number of different channels to market their coffee and services. They take leading roles in a wide range of industry trade shows, conferences and sampling events. Through these channels PRC showcased their wide range of coffee blends and supporting products and services. PRC also worked with retailers on cooperative marketing efforts

including customized labeling, storyboards, decorative packaging and colorful photography that highlighted the FFD program (**Appendix 16**). PRC also delivered their message to consumers through their website containing information on company history, products, blogs, their media outreach, the FFED program and PRC's other sustainable initiatives. Marie Franklin, the National Sales and Marketing Director, believed that beyond the overall focus on quality, customer service and a focus on sustainability were two attributes that helped to differentiate PRC from their competition.

Because PRC is a smaller company relative to large scale roasters, PRC made every effort to provide superior customer service. PRC offered a wide range of training programs for the café staff that prepare coffee beverages, or baristas, along with technical support services for clients using PRC espresso and drip coffee equipment. PRC also offered a range of online training videos available to anyone interested in the art of coffee making. According to Franklin, "Staying close to your clients is the best way to make sure that you are meeting their needs." In the PRC tasting room, PRC educated clients on the flavor spectrum of different coffee varietals and provided hands on experience and training with equipment available for purchase. This ensured that PRC clients were experienced with the technology used to make coffee and equipped to deliver the highest quality product to the end consumer. The training sessions also provided PRC with a valuable opportunity to build personal relationships with café owners. Nick Doughty, general manager for Elephants Delicatessen in NW Portland, emphasized that his business was about good coffee and good people. By doing business with PRC, he was able to bypass the hype of some bigger name competitors, get high-quality coffee and the training and equipment that his business needed, all while working with people he enjoys.

One of the most important differentiators, according to Franklin, was the company focus on social and environmental responsibility. PRC was the first company to create a sustainability-based direct trade program, even though competitors have introduced direct trade programs. Paul Tostberg, owner of Coffee Culture in Corvallis, Oregon, stated that sustainability, quality and proximity were at the top of his list of reasons he chose to work with PRC. Paul believed that being a local company working closely with customers, providing thorough customer support services and creating special blends that his customers were looking for, were all qualities that set PRC apart from other coffee roasters. Telling the story of the FFD program, raising customer awareness and being recognized for sustainable practices that exceed the standards of conventional certifications was integral to PRC's marketing strategy.

Distribution Channels

Coffee Houses

PRC targeted small specialty coffee houses in hopes that they would serve PRC coffee to the increasingly sophisticated palettes of their clients, who are demanding high-quality coffee. However, these coffee houses were not an easy sell. Many of them purchased coffee in low volumes yet had high expectations. Not all coffee house customers choose suppliers for the same reasons. Quality was important to Diana Benting, purchasing manager for Portland Community College, who performed a blind taste test every five years to determine whom they will purchase from. Although she appreciated local businesses promoting sustainable practices, if a new coffee didn't pass her taste test, it would not be considered. Although Benting had her own criteria for selecting companies to purchase coffee from, her students

had a whole separate set of motives. According to Benting, many college students don't care so much about the brand or company policy, instead it is all about location. Time is always a premium, especially on campus. If the campus coffee house is the most conveniently located place to purchase a cup of coffee between classes, then that is where students will go, regardless of brand.

Customer service was also important to small coffee houses. Rico from the Coffee Lounge in Portland, purchased coffee from PRC for four years before he decided to switch to another roaster. As with any small business, an entrepreneur's time is money, and there is never enough. The additional support in customer service offered by the new roaster, at a minor cost difference and with similar quality, was enough to lure him away from PRC's business. That is not to say all of PRC's clients feel the same. Most of PRC's clients opt to do business with them because of the additional services they get. Doughty stated that one of his driving motives for selecting PRC was the additional training, sales and technical support the company offered him. As a small company, it was easier for PRC to maintain a personal touch with their clients, reacting quickly to and anticipating customer needs. Cooperative marketing, on-site training, custom labeling and personal attention are all valuable services for small businesses. These services do not come cheap however. One of the disadvantages to being a smaller roasting company is having less capital to work with. Every minute spent with an existing customer, no matter how important, is a minute that could have been spent looking for new customers and building new relationships.

Hotels & Restaurants

Many high-end hotels provided specialty coffee in rooms and restaurants as a way to enhance their visitors' experiences. PRC targets boutique hotels across the country. These boutique hotels believe that the quality of the coffee they offer their guests is just one reflection of a high quality experience. Given the plethora of specialty roasters now in the business, and the dispersed nature of these hotels, it is not an easy market to penetrate. Franklin targets several larger boutique chains to reduce the cost of cultivating clients, lower costs of goods sold, and increase the volume of sales per client, while also seeking one-of-a-kind bed and breakfast establishments.

Portland Roasting recently won the account for supplying coffee to the Burgerville fast food restaurant chain across the NW. This is a very high profile and high volume account for PRC. PRC supplies coffee to a number of other restaurants in the NW, and are actively pursuing accounts with boutique restaurants committed to supplying their customers with local, sustainable, and/or high quality products, as well as higher volume accounts with chain restaurants who are also becoming more interested in providing quality, sustainable produced coffee.

Institutions

From the beginning, local institutions throughout Oregon were a strategically important market segment for PRC. The company created key relationships with several of the largest universities in Oregon including Portland State University, Portland Community College and Oregon State University. These clients purchased large volumes of coffee from PRC, but also put their products in front of a high-priority market — young and conscientious consumers. In addition, PRC also sold coffee and services to churches, large food distributors such as Food Services of America, casinos and medical centers such as Oregon Health and Science

University. These clients were generally consistent, reliable and advertised the PRC brand in highly visible markets, providing exposure and marketing value beyond the direct purchasing of coffee and other products.

Grocers

PRC also sold a high volume of coffee to supermarkets and grocery stores. PRC had created a pilot marketing and sales campaign in partnership with Fred Meyer (a division of Kroger), one of Oregon's largest supermarket chains. This gained PRC an unprecedented amount of floor space to create a unique shopping experience for the coffee consumer (Appendix 17) and provide consumer education about PRC's coffees and the FFD program. PRC hoped that Fred Meyer would expand this program, along with PRC's shelf space, into hundreds of stores across the Pacific Northwest. PRC also worked with other smaller, gourmet food markets and grocers including Zupan's Market and New Seasons, both of which had great potential for expansion.

Competitors

Wholesale Roasters

Although PRC had an innovative business model, they were certainly not the only specialty coffee company to purchase directly from farmers, roast beans to exacting standards and sell to a variety of retailers. Wholesale roasters represented the largest segment of specialty coffee providers in the industry. Unlike PRC, many wholesale roasters also opened retail storefronts which helped to introduce the public to their coffee, build strong brand recognition and provide an otherwise unavailable opportunity to have direct interaction with their consumers. Within Portland, PRC was competing against numerous other roasting companies including Stumptown Coffee Roasters, which also sourced single origin coffees from farmers around the globe and roasted the beans locally.

Retailer Roasters

There had been a recent rise in the number of small specialty and boutique coffee roasters. These micro roasters were often purchasing direct coffee either from farmers or coffee importers and then creating specialty roasts to meet the selective and demanding standards of their customers. Mike Ferguson from the SCAA noted, "This is one way for retailers to differentiate themselves from the competition, by having a wider variety of freshly roasted coffee." The SCAA estimates that there were well over 2,000 of these small specialty retail roasters, and they estimated that their numbers would continue to grow as consumers became more educated on the wide range of contributing factors that all come together to make a great cup of coffee. With a new generation of coffee loving students and young professionals joining the aging baby boomers, the market was strong enough to support a wide range of small niche retailers, as well as franchises. Some of the more successful retailer roasters had even been able to branch out their operations locally, regionally and even nationally.

Franchised Roasters

Some of the biggest players in the specialty coffee industry have been successful at not only directly sourcing their coffee, but also tapping into both the retail and wholesale markets across the country. Starbucks had been very successful in penetrating the institutional and

wholesale markets by creating relationships with hotel chains, airlines and other large franchises like Barnes & Noble. The combination of these markets saw Starbucks capture more than 40% of the specialty coffee market[6]. Starbucks was not alone in trying to control this franchised market space, and any competitor to Starbucks was a competitor to PRC. Although not a roaster, McDonalds had recently added specialty coffee to their menu, and with thousands of locations across the country, massive economies of scale and a reputation for affordable convenience, McDonalds became a threat to the specialty coffee industry.

Volume Roasters

A small number of very large corporations dominated the coffee roasting industry for decades, creating some of the most recognized brands in the US. These large-scale roasters include J.M. Smucker Company (Folgers and Millstone), Nestlé (Nescafe and Taster's Choice), and Kraft Foods (Yuban, Maxwell House, Brim, General Foods International Coffee, Gevalia, Kenco, Maxim and Sanka). Not nearly as demanding in the quality of the coffee they source, these large roasters often sourced their coffee from very large producers in Mexico, Brazil, Columbia and other countries. Many of these companies also purchased the lower quality portions of a crop from high-end producers. Sales of conventional ground and whole bean coffee have been concentrated amongst these very few brands. Folgers controlled 38% and Maxwell House controlled 33% of ground coffee sales in 2007[7]. Historically, these volume producers have held the largest share of the market, but their growth had been slowing as consumers moved toward higher quality. Yet these volume producers exerted huge influence on the coffee industry due to their tremendous purchasing power, and were slowly implementing more sustainable practices.

Substitutions

The most obvious substitute for coffee is tea. According to the Tea Association of the United States, in 2007 the wholesale US industry value for tea was $6.85 billion. In many parts of the world tea is not only has a larger market but also has maintained stronger cultural roots making it very difficult to supplant. Despite this fact specialty coffee began to make some inroads into well-known tea drinking countries including England, China, and Japan. There has also been a rapidly growing market in highly caffeinated sodas and energy drinks, often referred to as functional beverages. From 2004-07, sales of energy drinks more than doubled from $1.1 billion to $2.5 billion[8].

PRC's Commitment to Sustainability

Sustainable values played a part in every decision at PRC with regard to its customers, farmers, products and employees even going beyond the FFD program. Beginning in 2006, an in-house environmental team was tasked with finding environmentally friendly alternatives for all of its operations. As a result, PRC encouraged composting, recycling, using post-consumer office paper and the company-wide use of earth-friendly cleaning products. Employees were encouraged to ride bikes to work and PRC had even contracted with B-Line, a sustainable urban delivery service, to offer bicycle deliveries of coffee beans and supplies to Portland clients (**Appendix 18**). One of PRC's two delivery vans ran on biodiesel and the

[6] Wikinvest, 2009 http://www.wikinvest.com/stock/Starbucks_%28SBUX%29
[7] USDA
[8] Mintel's Energy Drinks—U.S., July 2008

company had declared that all new vehicle purchases would also be powered by biodiesel. The company began working with Trees for the Future with the aim of becoming a carbon neutral company through the purchase and planting of 16,900 trees.

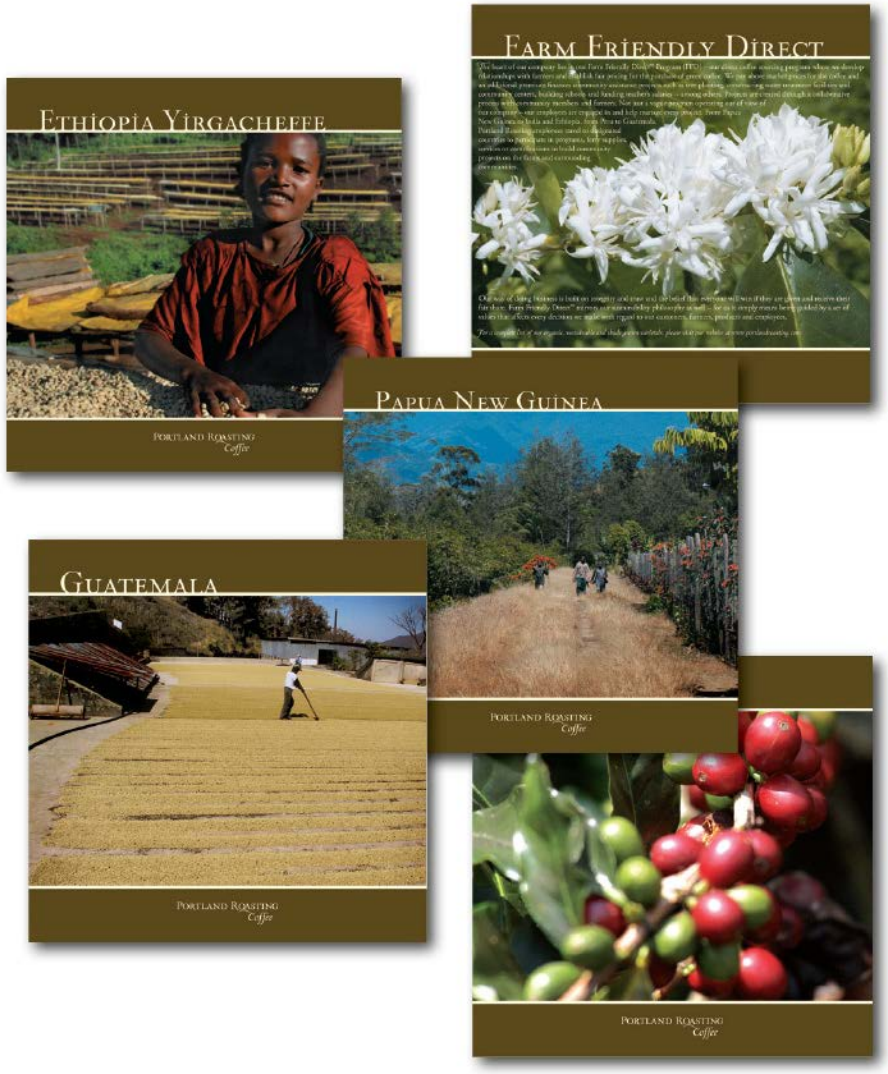
But Stell wanted to have an even larger impact on the environment, and in 2007 began distributing Ecotainer to-go cups. These cups had an inside lining of bio-plastic made from corn, and an outer layer of paper harvested from trees managed in accordance with Sustainable Forestry Initiative guidelines[9]. All of the bulk coffee the company sold to groceries and all of the consumer bulk bags were 100% compostable. Under the proper conditions, these cups and bags can break down into water, carbon dioxide and organic matter. Finally, in 2009, PRC sponsored a Walk for Water, which raised funds to benefit Water for All, a non-profit organization dedicated to bringing clean water to families in sub-Saharan Africa. The inaugural event raised $28,000 to fund two wells in Yirgacheffe, Ethiopia, a coffee-growing region in Eastern Africa. Such efforts led to the company receiving the 2005 SCAA Sustainability Award and recognition from the City of Portland with the 2007-2009 RecycleWorks Award. PRC signed the Global Compact in 2005 and since then consistently promoted the Millennium Development Goals on cups, product packaging and the company website.

The Future of Farm Friendly Direct

As the pilot announced the final approach into Bujumbura, Stell glanced out of the window and down at the city on the shore of Lake Tanganyika. He was confident that the next direct trade relationship would be established in Burundi, and had no doubt that the FFD program could positively impact the quality of life for farmers and their surrounding community. However, he was less confident that the FFD program in its current form would provide PRC with the necessary competitive edge needed to secure regional accounts with large retailers in the US. Although Stell believed that the FFD program was unique to the coffee industry and superior to mainstream certification programs in many ways, consumer awareness of FFD was relatively low compared with Fair Trade, Organic, Rainforest Alliance and Bird Friendly labels. FFD lacked the credibility that certification provided as there were no established criteria for FFD projects and the impacts were not verified by an independent third-party. Stell had considered building more structure into the FFD program by implementing written guidelines and creating a proprietary FFD label. If PRC decided to go this direction, what criteria should be used to verify compliance, measure results and ensure credibility? Should PRC also invest the resources necessary to implement some form of verification, or rely on messaging to reassure consumers of the positive impacts of FFD programs on sustainability? From a marketing standpoint, in what other ways could the FFD program be leveraged to build the PRC brand and compel quality conscious coffee consumers to seek out and purchase FFD coffees versus other direct trade options? Stell unbuckled and prepared to exit the small plane. He had some tough decisions to make when he returned to Portland although any revisions to the FFD program would have to wait. The immediate priority for Stell and his team was to win the Fred Meyer account.

[9] http://www.portlandroasting.com/sustainability/ecotainer

Appendix 1 – Portland Roasting Company Product Packaging



Ecotainer Other Eco-efforts E-Team World Water Day

Sustainability Initiatives

Whether it's a commitment to a business partnership with a small, organic coffee farmer or a decision to purchase eco-friendly materials for our office, our company has never veered from its pledge to doing the right thing for the environment and the community – near and far.

You'll see Portland Roasting's employees toting their own ceramic mugs to work and riding their bikes or using public transportation to get to work. But we know the important changes are the ones that not everyone sees – the biodiesel in our vans or the windpower we purchase or our decision to spend more money on an eco-friendly cup. We continually make changes – big and small -- to our business operations and are always on the lookout for ways to refine our processes in order to save more energy and resources.


Trees for the Future
Thanks
Portland Roasting
TREES for the FUTURE
For
Becoming a Global Cooling PARTNER
A project to effectively address environmental degradation is being implemented
This tree planting project is being implemented in **El Salvador**, a country devastated by deforestation, land degradation and, increasingly, global climate change. This certifies the total planting of 16,912 trees to offset the carbon emissions of **Portland Roasting**. These multi-purpose, beneficial shade trees will be integrated with coffee plants to protect these fragile lands, promote sustained coffee production, and encourage biodiversity. Moreover, these trees will help to combat climate change by removing over four hundred tons of carbon dioxide from the global atmosphere each year, replacing it with life-giving oxygen.
Executive Director
November 10, 2008
Date
9000 16th St., Silver Spring, MD 20910 www.plant-trees.org

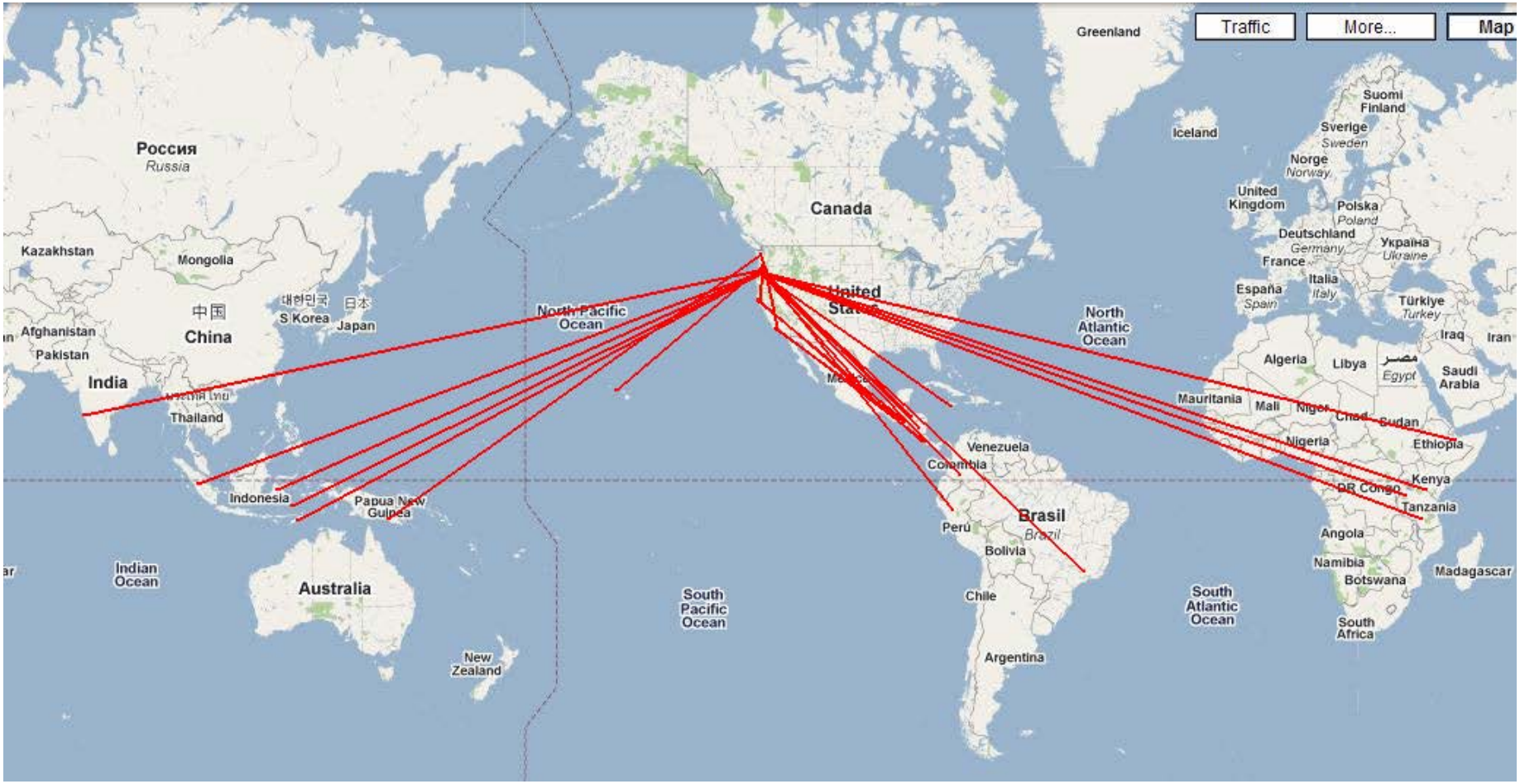
http://www.portlandroasting.com/sustainability/

Costa Rica
El Salvador
Ethiopia
Guatemala
India
Papua New Guinea
Sumatra
Tanzania

The goals of Farm Friendly Direct are two-fold, acquiring quality coffee while adding to the lives of farmers and their communities. Our vested interest in our growers, and their farming methods, secures a healthy future for the farmers' land and livelihood, while producing memorable coffee.

Our efforts are making strides toward the United Nations Millennium Development Goals, a set of attainable and quantifiable benchmarks the organization has laid out to eradicate worldwide poverty by 2015.

Appendix 2 - Portland Roasting Company Sourcing



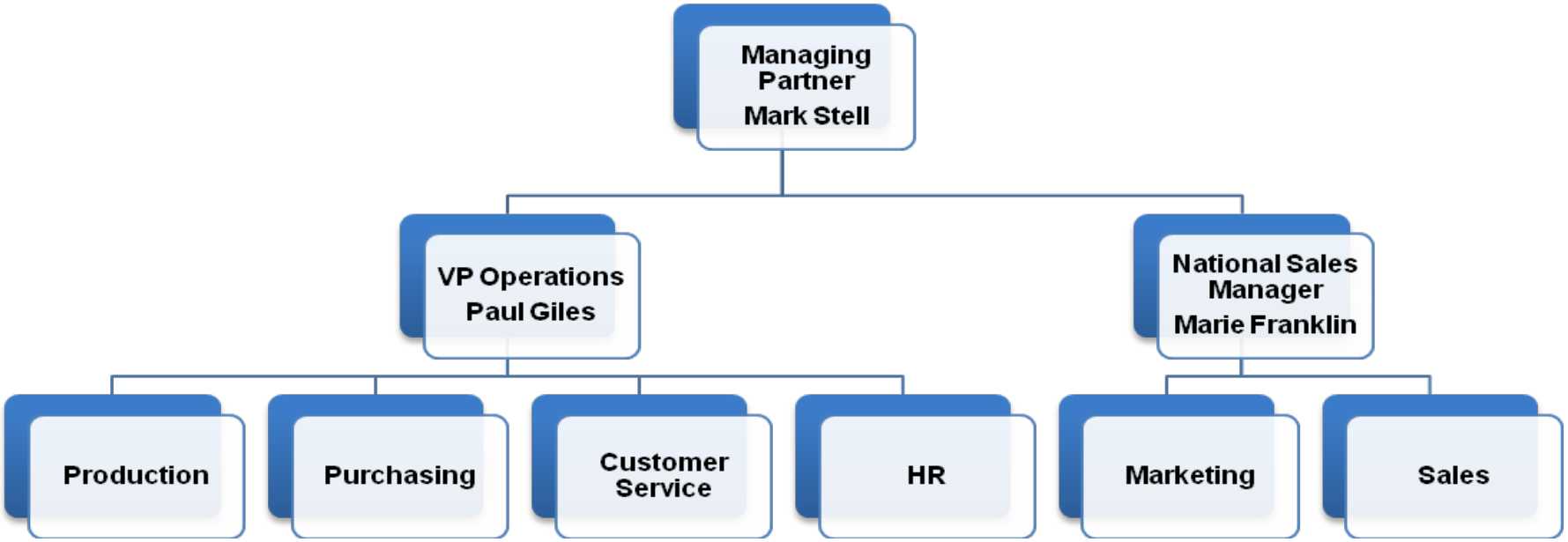
Appendix 3 – Portland Roasting Company Sourcing Data

Portland Roasting Coffee Imports in Pounds per Year

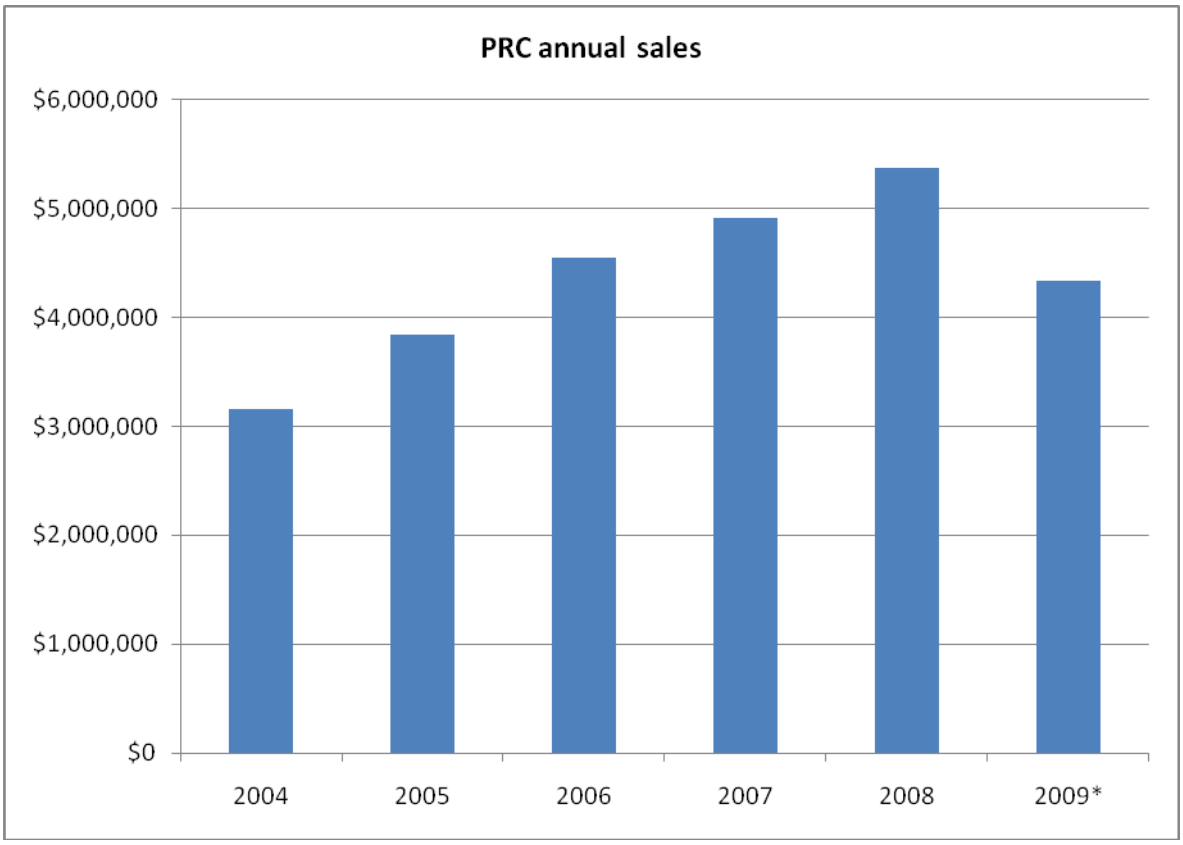
Farm Friendly Direct Coffee	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**
Costa Rica FFD	36836	39716	49389	58361	79053	87,207
Ethiopian FFD	28859	35776	42309	57990	74,649	31,407
Guatemala FFD	61173	72753	88746	109023	145,795	171,353
New Guinea Madan Estate FFD	0	0	0	24800	102,051	153,499
Sumatra Organic FFD	8437	15399	24524	25452	24777	31,963
Swiss Water Processed FFD	0	0	0	16,236	60,125	74982
Non Farm Friendly Direct Coffee	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**
Bolivian Organic	39	836	0	0	0	0
Brazil	1902	4039	8127	10061	15128	21,185
Brazil Top Sky	0	0	0	411	1478	621
Colombian	8988	8527	10574	15185	17145	18,711
Colombian Decaf	19831	20320	19453	16026	2905	2509
Costa Rica Organic	281	5146	7073	5333	5798	7893
Costa Rica Decaf	46	0	0	0	0	0
El Salvador	1854	2410	5186	3011	2263	1625
Cup of Excellence - El Salvador	0	0	0	0	0	22
El Salvador Organic	0	0	0	0	0	989
Ethiopian Organic	732	1956	2282	5310	4592	3106
Guatemala Decaf	0	0	0	0	0	111
Guatemala Organic	6805	9233	12660	4862	0	0
India Monsooned Malabar	46	656	29	23	0	0
India Arabica	0	0	0	0	2778	3752
India Robusta	0	0	0	0	0	3154
Indonesian Robusta	4419	697	3774	1424	0	0
Jamaica Blue Mountain	54	86	105	47	15	21
Kauii	237	497	258	179	0	0
Kenyan AA	297	504	616	317	0	33
Kenyan PB	0	0	0	0	0	18
Kona	77	122	163	111	385	396
Mexican Chiapas	8935	9948	1091	0	0	0
Mexican Organic	431	1179	979	132	0	0
New Guinea Amuliba	8197	65	0	0	0	0
New Guinea Kinjibi	16620	27,275	50348	37714	185	0
New Guinea Red Mtn	0	0	0	8268	0	0
New Guinea Organic	3980	11478	12729	13108	9960	11966
New Guinea Peaberry	0	0	0	0	0	1984

Peru Selvanica	1642	8790	2411	5599	0	0
Peru Inkaico	0	0	0	462	241	0
Peru Organic	1601	4314	5453	12982	16,061	19566
Red Sea	344	491	0	0	0	0
Sumatra	68638	76289	53370	59021	66,325	85,566
Sumatra Decaf	12067	15780	18202	15159	1607	2035
Swiss Water Processed Colombian	486	1875	1430	1248	462	0
Swiss Water Processed Espresso Decaf	1280	1470	2478	2105	0	0
Swiss Water Processed Komodo Organic	264	132	0	0	0	0
Swiss Water Processed Mexican Organic	1764	3512	5512	3168	0	0
Swiss Water Processed Peru Organic	1905	1053	0	0	0	0
Swiss Water Processed Sumatra	1683	5335	3728	2376	1703	1,868
Swiss Water Processed Guatemala	0	0	0	0	1010	1870
Swiss Water Processed Ethiopian	0	0	0	702	264	0
Timor Organic	493	2074	228	0	0	132
Ugandan AA	25230	30262	28139	18109	38062	4950
Cascadia Blend Swiss Water Processed	0	240	948	1386	0	0
Celebes Toraja/Sulawesi	0	126	988	175	1307	1230
Tanzanian	0	0	4983	33831	0	34,063
Tanzanian PB	0	0	0	0	0	1,352
Honduras Organic	0	0	195	0	0	152
Cup of Excellence - Honduras	0	0	0	0	0	13
Salvador Organic	0	0	1560	66	0	0
Nicaragua Organic	0	0	0	15814	21,103	26,619
Cup of Excellence - Nicaragua	0	0	0	0	0	17
Rwanda	0	0	0	0	9867	18,500
Total Green Beans Processed (lbs)	**338,476**	**422,365**	**472,045**	**587,593**	**709,101**	**828,448**
% of total FFD	**40%**	**39%**	**43%**	**50%**	**69%**	**66%**
% of total organic	**8%**	**13%**	**15%**	**15%**	**12%**	**12%**

Appendix 4 – Portland Roasting Company Organization



Appendix 5 – Portland Roasting Company Revenues

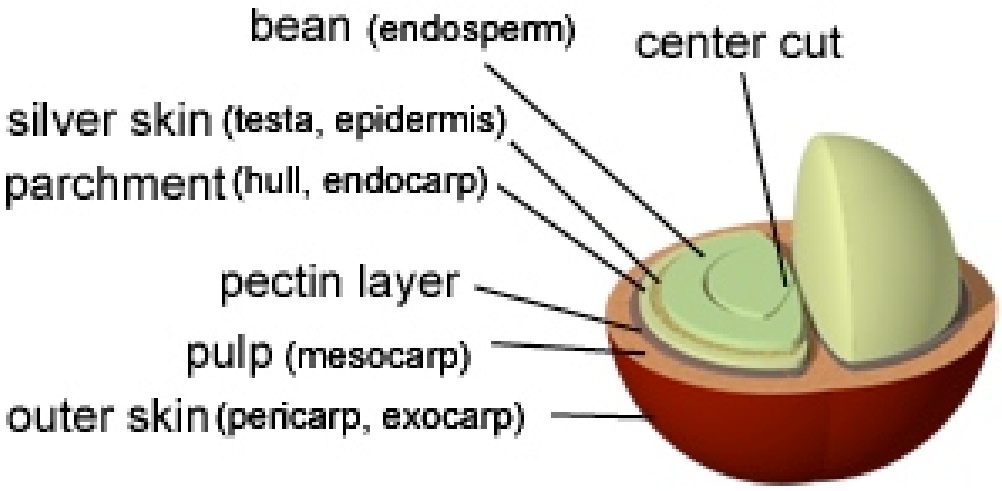


*sales figures as of October 27, 2009

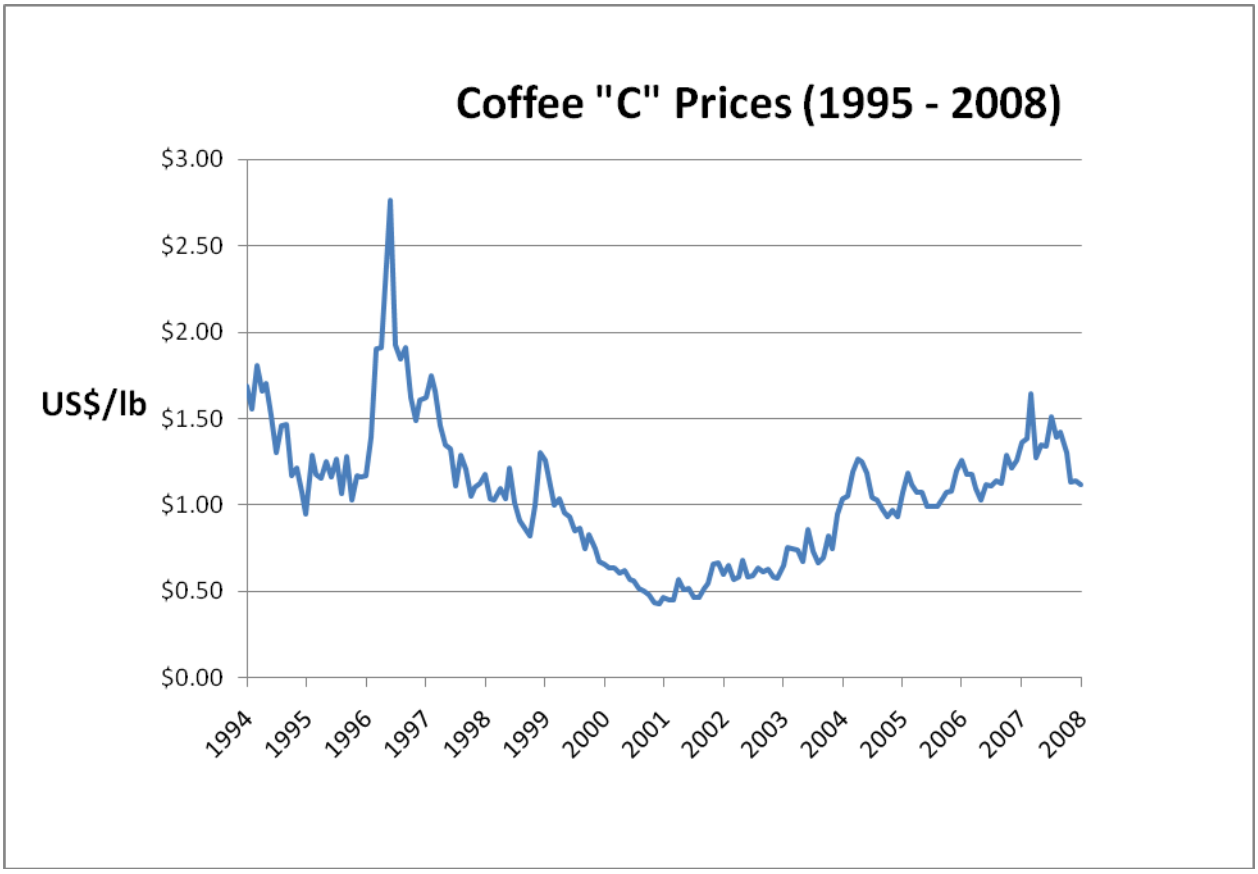
Year	Sales (USD)
2004	$3,160,070.04
2005	$3,842,704.08
2006	$4,548,318.39
2007	$4,910,049.78
2008	$5,368,632.85
2009	$4,333,022.32*

*sales figures as of October 27, 2009

Appendix 6 – Coffee Cherry Cutout

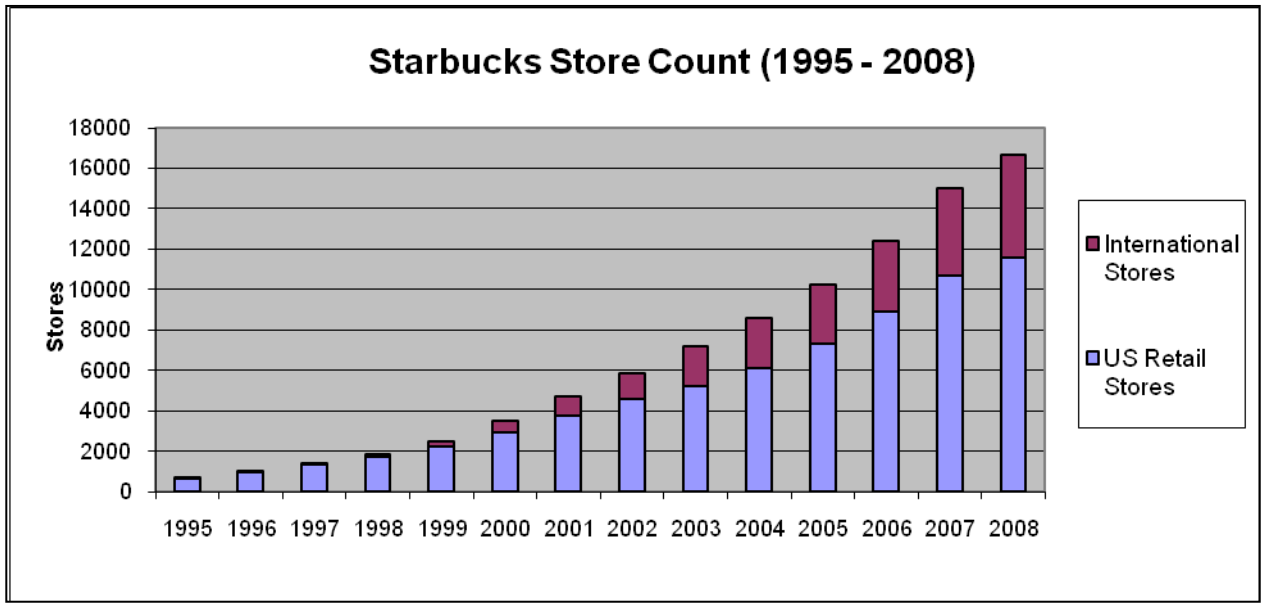


Appendix 7 – Coffee "C" Price History



Appendix 8 – Growth of Starbucks Stores

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total US Retail Stores	676	1004	1364	1755	2217	2976	3780	4574	5201	6132	7302	8896	10684	11567
Company Operated	627	929	1270	1622	2038	2446	2971	3496	3779	4293	4867	5278	6793	7238
Licensed	49	75	94	133	179	530	809	1078	1422	1839	2435	3168	3891	4329
Total International Retail Stores	1	11	48	131	281	525	929	1312	2024	2437	2939	3544	4327	5113
Company Operated	1	9	31	66	97	173	295	384	767	922	1133	1374	1712	1979
Licensed	0	2	17	65	184	352	634	928	1257	1515	1806	2170	2615	3134
Total Stores Open at Fiscal Year End	677	1015	1412	1886	2498	3501	4709	5886	7255	8569	10241	12440	15011	16680



Appendix 9 – Coffee Market Historical Data (SCAA Market Data)

Specialty Coffee in the USA 2008

SPECIALTY COFFEE ASSOCIATION

CONSUMPTION
Percentage of adults drinking specialty coffee:

DAILY

1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
2.7%	2.9%	3.0%	3.3%	4.9%	N/A	14%	13%	12%	16%	15%	16%	14%	17%

WEEKLY

2001	2002	2003	2004	2005	2006	2007	2008
30%	28%	27%	36%	35%	36%	37%	34%

OCCASIONALLY

2001	2002	2003	2004	2005	2006	2007	2008
62%	59%	54%	56%	60%	63%	68%	62%

Cups per day, specialty coffee drinkers:

2001	2002	2003	2004	2005	2006	2007	2008
2 .45	2.49	2.29	2.27	2.55	2.34	2.49	2.63

*Source: **National Coffee Association** Annual Drinking Trends Study. Visit www.ncausa.org*

DOLLAR SIZE OF MARKET (in Billions)
Total sales of specialty coffee, beverage, whole bean and ground at retail (YE07)

2001	2002	2003	2004	2005	2006	2007
$8.30	$8.40	$8.96	$9.62	$11.05	$12.27	$13.50

Source: SCAA, Mintel Group (excludes Walmart)

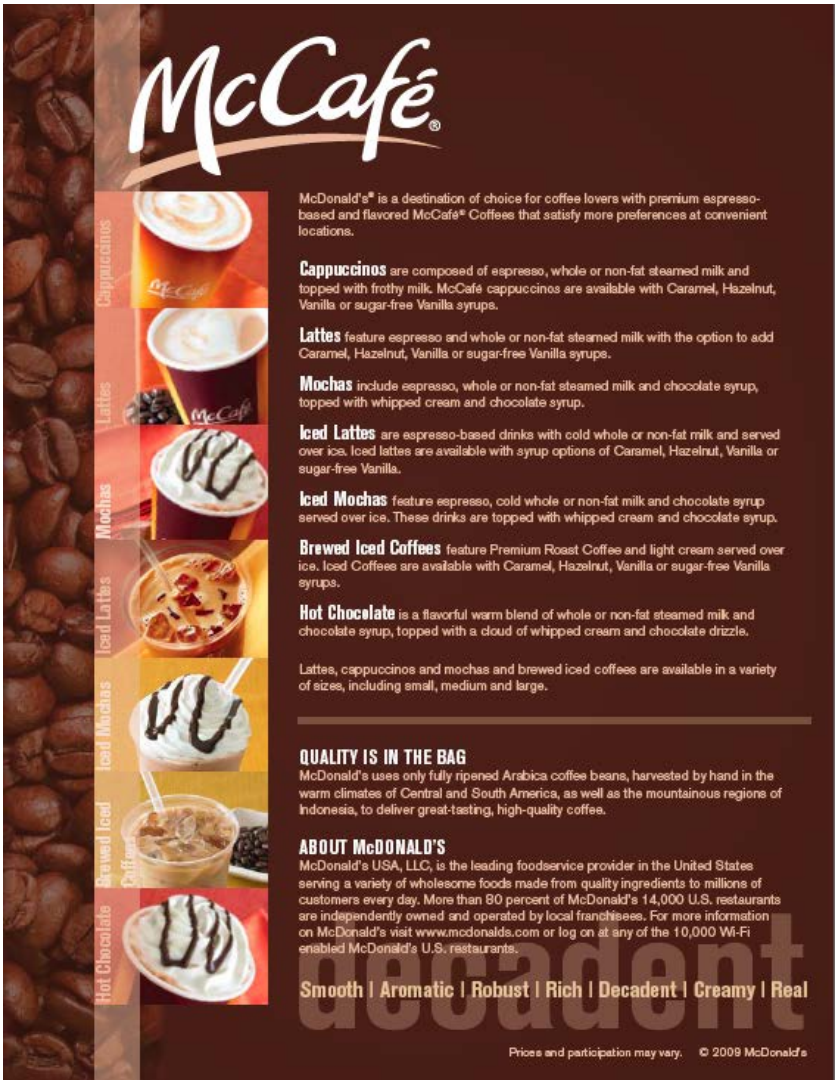
ESTIMATED NUMBER OF OPERATING UNITS

1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1,650	2,250	2,850	3,600	5,000	6,700	8,400	10,000	12,000	12,600

2001	2002	2003	2004	2005	2006	2007
13,800	15,400	17,400	19,200	21,400	23,900	25,700

Source: SCAA, Mintel Group

Appendix 10 – Competitive Advertising from McDonalds and Dunkin' Donuts



Appendix 11 – Coffee Certification Comparisons

Initiative	Fair Trade	Organic	Utz Certification	Rainforest Alliance	Bird Friendly	4C
Mission	Ensure equitable trading arrangements for disadvantaged smallholders who are organized into cooperatives.	Create a verified sustainable agriculture system that produces food in harmony with nature, supports biodiversity and enhances soil health.	Set the world standard for socially and environmentally responsible coffee production and sourcing.	Integrate productive agriculture, biodiversity conservation and human development.	Conduct research and education around issues of neo-tropical migratory bird populations, promoting certified shade coffee as a viable supplemental habitat for birds and other organisms.	To achieve global leadership as the baseline initiative that enhances economic, social and environmental production, processing and trading conditions to all who make a living in the coffee sector.
Year Established	1970s	1973	1997, 2001 - 1st cert.	1992, 1996 - 1st cert.	1997	2007 1st cert.
History & Development	Began as "Max Havelaar" in The Netherlands in the 1970s. Now there are several national Fair Trade chapters organized by the Fairtrade Labeling Organization (FLO) in Germany. TransFair is the US chapter.	Begun around 1973 as a farming movement and certification system. Developed into internationally recognized system with production throughout the world and annual sales above $20 billion.	Begun in 1997 as initiative from industry and producers in Guatemala, became an independent NGO in 2000. First certified farms in 2001.	Begun in 1992 by Rainforest Alliance and a coalition of Latin American NGOs, the Sustainable Agriculture Network (SAN). First coffee farm certification in 1996.	Founded in 1997 with criteria based on scientific fieldwork. Operated out of the SMBC office initially, it currently involves 10 organic certification agencies as the eventual managers of the program.	Begun in 2003 by GTZ and DKA. Certified first farms in 2007.
Market Focus	All markets	All markets	All markets	All markets	All markets	Mainstream Markets
Scope of Program	Economic and environmental sustainability for farmers and their communities. Minimum price and social premium to cover costs of production and investments in the community. Organic premium for organic coffees. Small-producer organization's empowerment.	Organic farming and processing practices.	Sustainability; economics, ethics and environment. Worker safety.	Sustainability; economic, ethics and environment.	Certification aimed at the production of the coffee agro ecosystem.	Sustainability; economic, ethics, and environment.
Code Elements for Coffee Production	Social, economic, environmental, democratic organization of cooperatives.	Environmental, farm production and processing standards.	Social, environmental, and efficient farm management.	Social, environmental, worker safety and efficient farm. management.	Biophysical criteria of the shade component, provided that the farm is certified organic.	Social and environmental.
Scope of the Code	Baseline and progress criteria. Continuous improvement required through progress requirements. Applies to democratically organized cooperatives formed by small scale	Federal standard with practices for producers and handlers applies to all organic product sold in the US.	Baseline criteria with field-tested indicators. Applies to farms and coops of all sizes. All countries possible.	Baseline and advanced criteria with field-tested indicators. Applies to farms and coops of all sizes. Continuous improvement	Organic certification as a condition for BF certification. Certification applicable to estate farms and cooperatives. Annual inspections linked to organic inspection.	Baseline criteria; indicators under development. Applies to farms and coops of all sizes. Every country. Continuous improvement

	farmers.		Continuous improvement required.	required.		expected.
Standard Setting Body	Fairtrade Labeling Organizations International	International Federation of Organic Agricultural Movements	Utz Certified	Sustainable Agricultural Network	Smithsonian Migratory Bird Center	Common Code for Coffee Community Association
Monitoring Body	Autonomous non-profit certifier.	Private certifiers regulated by state and accredited by NGO.	Private third-party certifiers approved by Utz Certified.	Certification by member organizations.	Private certifiers approved by initiative.	Private certifiers approved by initiative.
Inspection Frequency and Accuracy	Annual inspections by independent and annually trained Fair Trade inspectors.	Annual inspections for certified entities. USDA accreditation required for certifiers of organic product sold in US.	Independent auditors accredited to ISO 65 standard. Annual audits.	At least annual audits by teams of biologists, agronomists, sociologists and other specialists trained, authorized and monitored by the Rainforest Alliance.	Annual, linked to organic inspection. Inspection/certification arranged/provided by a USDA-accredited organic certification agency.	
Traceability/ Chain of Custody	Yes, traceability from roaster to producer.	Yes, required by federal statute and historic standards. Organic products traceable from retailer to producer.	Yes, traceability from roaster to producer. Traceable to retailer via internet-based system.	Yes, traceability from roaster to producer.	Yes, traceability from roaster to producer.	
Production Strategy	Small farmers	Mostly small farmers, some plantations	Mostly plantations, some small farmers	Mostly plantations, some small farmers	Mostly small farmers, some plantations	
Environmental Standards	Standards regarding reduction in agrochemical use, reduction and composting of wastes, promotion of soil fertility, avoidance of GMOs.	Standards that bar the use of synthetic herbicides, fungicides, pesticides, GMOs and chemically treated plants.	Standards for protection of primary and secondary forests.	Standards for ecosystem and wildlife conservation, integrated crop management, and integrated management of wastes.	Requires organic certification. Additional standards for shade cover, canopy structure, secondary plant diversity, stream buffers.	Bans use of pesticides under Stockholm convention, bans destruction of primary forest or other protected areas.
Price Differential to Farmers	Yes. All purchases must be at or above the floor price.	Yes. Differential set by the market.	Yes. Differential set by the market.	Yes. Differential set by the market.	Yes. Differential set by the market.	
Price Premium Associated with Code.	Price floor of $1.21/lb and social premium of $0.10. Additional $0.20/lb for organic coffee.	US $0.015-0.20/lb	US $0.01-0.12/lb	Estimated at US $0.10-0.20/lb	US $0.05-0.10/lb	None specified. Prices reflect the quality, including the quality of the product and the Common Code quality of sustainable production and processing practices.

Fees to Buyers	Licensed roasters pay US $0.05-$0.10/lb. Importers must provide pre-harvest financing when requested by coop.	Vary by certifier from $700-$3,000/year.	US $0.01/lb	None	Importers pay $100/year. Roasters pay US $0.25/lb	Annual membership fee dependent on import levels.
Fees to Producers	Cost of auditing and reinspection fee.	Vary by certifier.	Auditing costs.	Auditing costs plus annual fee based on size of farm.	Cost of added days at inspection.	Annual membership fee dependent on production levels.

Source - SCAA

Appendix 12 – Farm Friendly Direct Projects

Year	Country	Amount(USD)	
2009	World Water Day Tanzania	$28,000.00	Internship and pump donated
2009	Costa Rica	$4,200.00	Teacher's salary
2009	Papua New Guinea	$8,000.00	Women's literacy and book drive
2008	World Water Day	$16,000.00	Pump sponsor Ethiopia
2008	Costa Rica	$4,200.00	Teacher
2008	Carbon Neutral El Salvador	$2,000.00	Planted trees
2008	Guatemala	$3,000.00	Yield project with Andres
2008	Sumatra(Indonesia)	$500.00	School uniforms
2007	Guatemala	$3,000.00	Yield project Andres
2007	Tanzania	$2,000.00	Agronomy Kit
2007	Costa Rica	$4,200.00	Teacher
2006	Costa Rica	$4,200.00	Teacher
2005	Costa Rica	$1,000.00	Internet setup and computer donated
2005	India	$500.00	School for the blind in Karnataka
2004	Papua New Guinea	$5,000.00	School built
2003	Guatemala	$12,000.00	Built water treatment for farm
	Total	$97,800.00	

Appendix 13 – United Nations Millennium Goals

The Millennium development goals are an UN initiative to address eight international development issues with a total of 21 target goals by 2015. They were adopted in 2000 by UN member states in recognition of the need to assist developing world nations in terms social, environmental and economic issues.

Goal 1: Eradicate extreme poverty and hunger

- Halve the proportion of people living on less than $1 a day (ppp).
- Achieve increased employment for women, men and young people.
- Halve the proportion of people who suffer from hunger.

Goal 2: Achieve universal primary education

- Provide primary education for all children by 2015. Increase enrollment. Increase completion of primary education. Increase literacy.

Goal 3: Promote gender equality and empower women

- Eliminate gender disparity in education. Equalize men/women rations in education. Equalize men/women wage disparity. Equalize men/women representation national political assemblies.

Goal 4: Reduce child mortality

- Reduce mortality rates of children under 5 by two-thirds. Increase proportion of 1-year-olds immunized against measles.

Goal 5: Improve maternal health

- Reduce maternal mortality ration by three-fourths. Increase proportion of births attended by health professionals.
- Achieve universal access to reproductive health.

Goal 6: Combat HIV/AIDS, malaria and other diseases

a) Halt and reverse the spread of HIV/AIDS. Increase knowledge about HIV/AIDS. Increase condom use for high-risk populations. Increase orphan/non-orphan school attendance ratio.
b) Achieve by 2010 universal access to treatment for HIV/AIDS.
c) Halt and reverse the incidence of malaria and other major diseases. Increase preventative care and treatment. Decrease malaria and tuberculosis death rates.

Goal 7: Ensure environmental sustainability

- Reverse loss of environmental resources. Integrate principles of sustainable development into national policies and programs.
- Reduce biodiversity loss. Reduce CO2 emissions. Reduce consumption of ozone depleting substances. Reduce percentage of water resources used. Reduce number of species

endangered. Increase percentage of protected areas. Increases percentage of land covered by forest.
- Halve the proportion of people with sustainable access to water and sanitation.
- Achieve a significant improvement in the lives of slum dwellers. Decrease percentage of urban populations living in slums.

Goal 8: Develop a global partnership for development

- Further develop an open and fair, rule based and regulated trading and financial system.
- Address the special needs of less developed nations through debt relief development assistance, and financial policies.
- Address the needs of both landlocked and small island developing countries.
- Address the need to deal with the debt problems of developing countries. Make debt sustainable through national and international measures.
- Provide access to affordable essential medicine in developing countries.
- Make available access to new technology, especially information and communication technology.

Appendix 14 - Farm Friendly Direct in Action

The Clean Water and Balanced Plant Nutrition Project in Guatemala

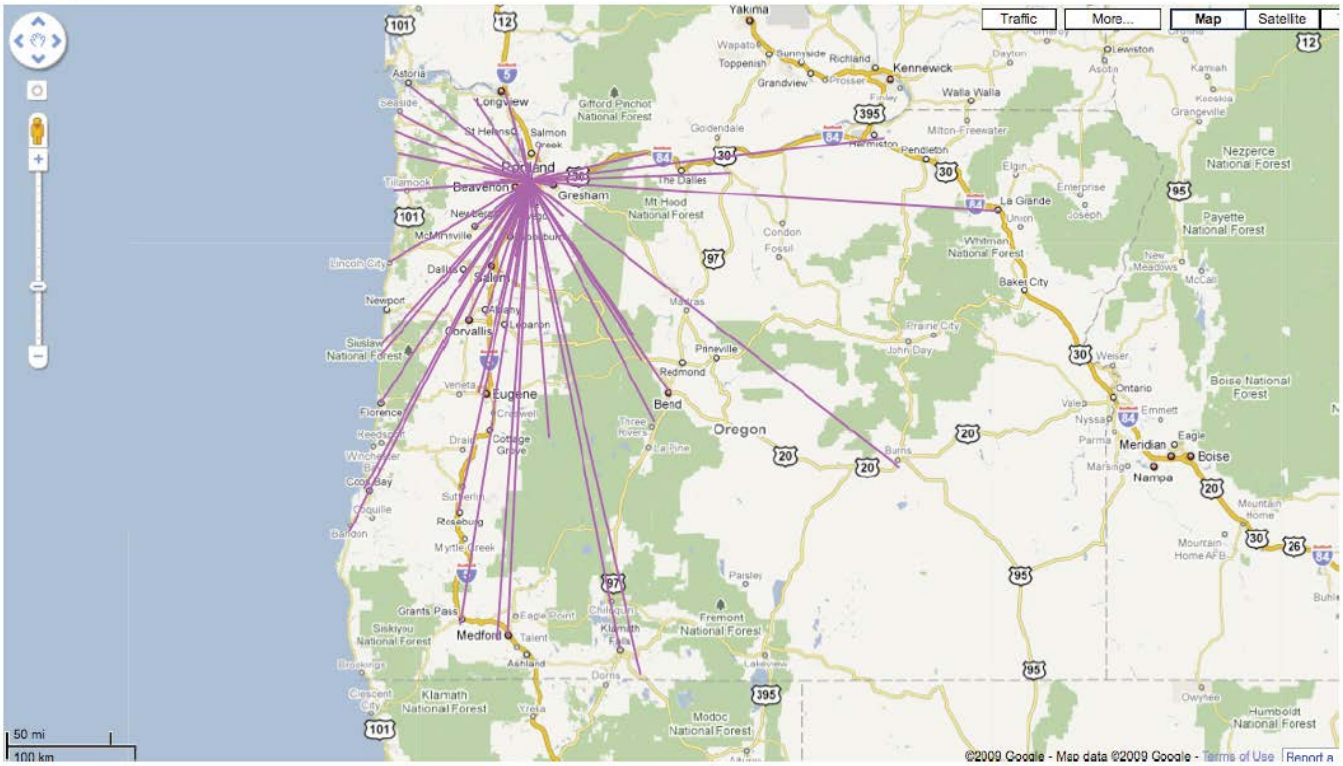
At the urging of respected plantation owner and grower, Miguelina Villatoro del Merida, PRC invested proceeds from the Farm Family Direct pogram in a much needed water treatment facility at her Finca El Paternal farm. The fermentation process is important in the development of the flavor of the coffee, due in part to the microbiological processes that take place, but it results in wastewater containing organic matter like pectin, proteins and sugars that result in a decrease in pH. The high acidity of this effluent may deplete the life supporting oxygen of the water as it then flows into streams or other bodies of water, potentially impacting human health and aquatic life if discharged directly into surface waters.

The facility that PRC built for Miguelina sends leftover water from coffee production through a series of filtering tanks that removes much of the organic matter. The water can be reused several times, and then clean water is returned to the river free of contaminants. Other growers throughout the region now tour the state-of-the-art facility in order to learn about the benefits of water treatment and conservation. According to Miguelina the clean water facility has not only saved the farm thousands of gallons of water that they can now reuse for other agriculture, it has also helped them comply with the very rigid standards of the Rainforest Alliance.

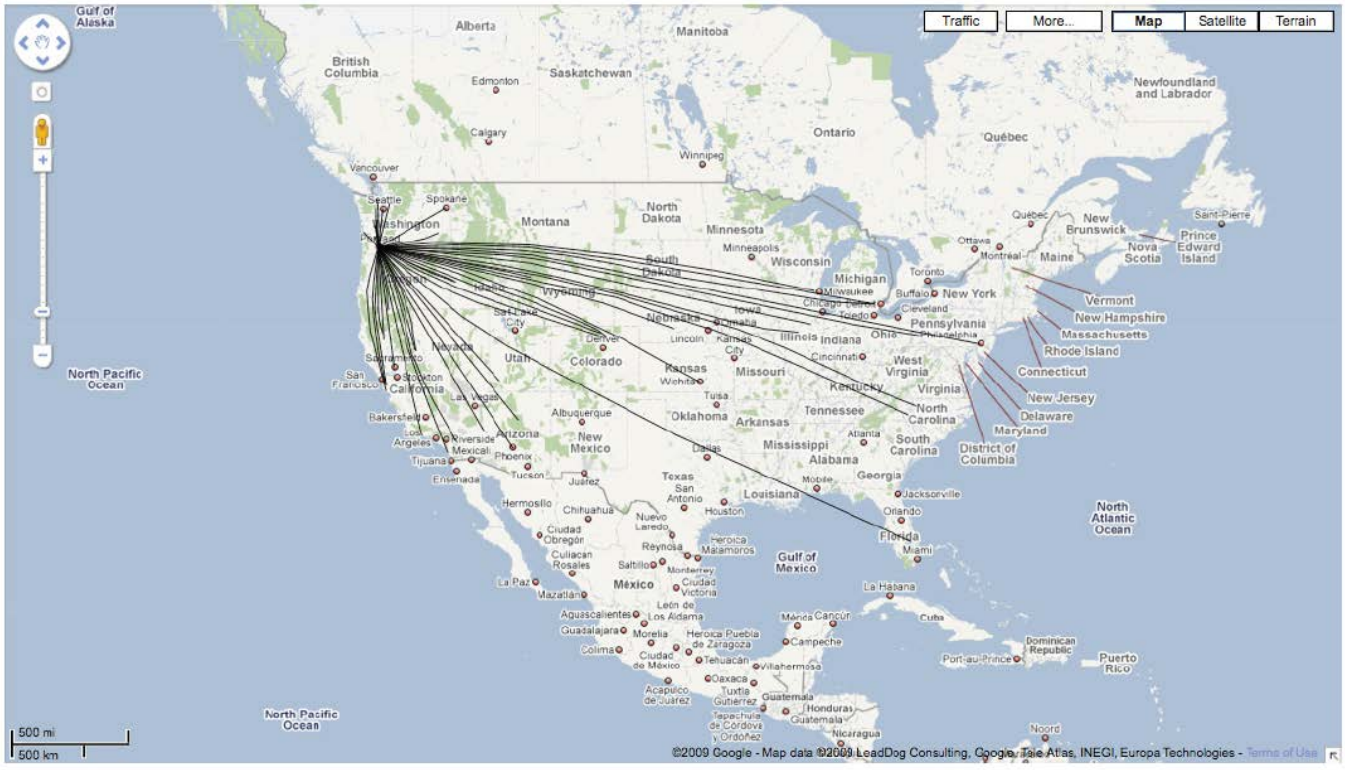
Since completing the wastewater treatment facility, PRC has begun another project to improve plant health and yield at Finca El Paternal, working in collaboration with Karnataka Coffee Estates and Ramaday Micronutrients in India who have used micronutrient applications successfully in many other locations.

Appendix 15 – Portland Roasting Company Coffee Distribution

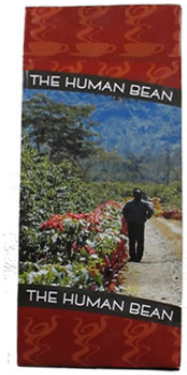
Oregon Network

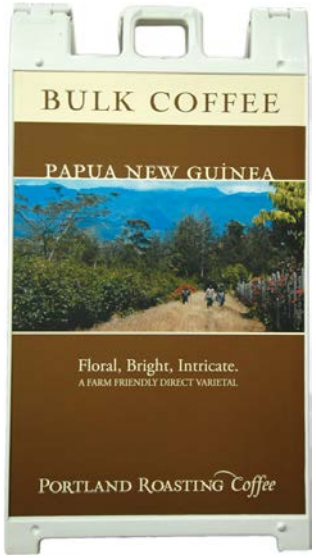


Nationwide Network



Appendix 16 – Farm Friendly Direct Marketing Images





Appendix 17 – Portland Roasting Company Coffee Display (Fred Meyer)

Appendix 18 – Portland Roasting Company Local Distribution (B-Line Sustainable Urban Delivery)