

Coffee Eco-Labeling: Profit, Prosperity and Healthy Nature?

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Part I: Introduction

Coffee is the second most traded commodity in the world, next to oil (VIDEA, 2004; Rodriguez and Epperson, 2001). According to the United Nations Food and Agriculture Organization, 5.3 millions tons of coffee was globally produced and exported in 2002 – up three percent from the previous year (UN FAO, 2003). The 80+ countries producing the largest quantities of coffee are typically found in the developing world. Many farmers are involved in the production of coffee, resulting in the creation of numerous jobs. Yet, the wealth produced by the coffee sector is not necessarily evenly distributed. For every \$2.00 cup of coffee purchased by the consumer, \$0.20 goes to the growers, \$0.20 goes to the exporters, \$1.10 goes to the roasters and shippers and the remaining \$0.50 to the retailers (VIDEA, 2004). In other words, on average the grower receives only ten percent of the ultimate revenue generated. The production of coffee also heavily impacts the environment. The technological transformations that occurred in the last decades, shifting traditional, shade-grown coffee systems into industrial plantations for a growing market, have increased environmental impacts. These impacts include increased necessity and application of chemical inputs, deforestation and consequential soil erosion, and habitat fragmentation. Due to the increase in degradation, growers and consumers alike have begun to seek out new methods to produce and trade coffee.

Eco-labeling has been proposed as an environmental strategy to address such concerns. In fact, eco-labeling is a market instrument used to provide consumers with information on the way a good is produced and/or traded. The three main coffee certification schemes, i.e., fair-trade, organic and shade-grown, relate to different sets of criteria: the first refers to the way it is traded, and the others to the production system (Rice, 2000). All three are based on the premise that there are consumers willing to pay for these services.

There are a few questions that arise when examining this topic: (1) Is coffee eco-labeling an effective way to promote environmentally friendly production methods? (2) Are those farmers, principally found in developing countries, which practice fair-trade schemes in fact better off economically than their counterparts? (3) Does eco-labeling have the potential to move from a niche market, which is the present trend, to being adopted by the larger population?

The following research brief intends to shed some light on these fundamental questions. First, we begin by examining the historical context of the coffee sector and its importance in the economy of producing countries. In addition, we also analyze the current coffee market and its trends. Eco-labeling will then be defined in the context of an environmental strategy with potential to address the growing impacts caused by this sector. Subsequently, the specific environmental concerns regarding the transformation of traditional coffee growing methods to sun-tolerant systems will be addressed. Thirdly, the socio-economic consequences of coffee trade are analyzed in relation to the expanding global marketplace. Then, in the final section, we present our perspective on the questions presented above, mainly the effectiveness of eco-labeling as a market incentive to promote ecologically friendly practices.

Part II: Historical Background

Around the world, hundreds of millions of people are waking up and heading straight for their morning need, that first cup of coffee. *Coffea sp.* was first discovered high on the mountainsides of Ethiopia under the canopy of the rainforest. It began as a medicinal drink for the elite, became part of a religious ceremony, and quickly moved into the sphere of everyday life. Ethiopian trade with Arab nations across the Red Sea began the spread and regular cultivation of coffee. The drink easily became an everyday commodity for it provided an

intellectual stimulant and increased energy with no apparent ill effects. Trade blossomed once widespread use was known throughout the world as it was in these regions. (Englhart, 2003)

Throughout the nineteenth century, non-native coffee took over much of Latin America. After declaring independence from the Spanish and the Portuguese in 1821 and 1822, the region became more and more reliant upon coffee and the plant began to dominate economies. Coffee played a significant role in shaping and creating huge plantations owned by the wealthy elite, social inequalities, and discrimination against the indigenous populations throughout much of the region. (Englehart, 2003)

Naturally, coffee is meant to be grown in the shade. It thrives there and interacts with other species in the forest community. Growers eventually moved the coffee bushes into deforested lands; however, in the 1970's this industry was struck by the trend of agricultural modernization. As a result, this became extremely taxing on the land and required a great deal of pesticide and fertilizer treatment. Such practices were expensive, degraded the land, and had an adverse effect on the ecosystem as a whole. (Pendergrast, 1999)

Over the past several years, the shortcomings of the modern system of coffee agriculture have become more apparent. For one, the current system does not provide for the economic well being of small, local farmers. As a result, they are forced to slash costs and farm in unsustainable ways, leading to environmental devastation. A great deal of valuable ecological land is lost when the area is deforested. Habitat for many species, especially migratory birds, is lost. Not only does the harsh farming of coffee grown in full sun damage the soil, but also the chemicals used to maintain these crops have a damaging effect on the landscape and its organisms. Additionally, these chemicals are expensive and the small farmers often cannot afford them. In such cases, the land is lost ecologically and does not function properly economically, because the unnatural sun-

grown coffee does not produce at as high a yield when not maintained through the expensive methods (Cappoza, 2002). It was clear that something needed to be done.

Eco-labeling is a strategy used to encourage strong environmental practices through incentives. These incentives can take many forms including providing a premium price due to a higher quality product. This premium can also be attained because consumers value the environment and reward the companies for its conservation efforts. Incentives do not necessarily have to come from the consumer. Practicing in a sustainable manner can give a company a competitive advantage because its products and methods are deemed superior. Lastly, and more abstractly, companies practice sustainably and will reap benefits in the future when resources are scarcer due to unsustainable practices by other firms. (Global Ecolabeling Network, 2004)

Eco-labeling is not a standard process. Many different firms create the labels. One important aspect of the process is that the labeler is a third party and creates a set of criteria the firm must abide by in production. As a result, standards are not uniform, so gaining certification by a reputable certifier is important. The idea is to gain the consumer advantage and using a certification that is not respected will not have the desired effect on consumers.

In the coffee industry, eco-labeling is being employed in respect to three different sets of criteria. The first is organically grown coffee which bans the use of chemicals and is processed in an environmentally friendly manner (Rodriguez, 2001). The second is shade-grown coffee, which is simply coffee grown through the natural practices, where coffee was a shade species. Lastly is fair trade. This is a label that regulates how a producer pays the full, fair cost of production. This intends to insure at least a reasonable living wage for small-scale growers. It is important to note that these labels are not mutually exclusive. It is very possible, and oftentimes probable, for these certified companies to simultaneously meet the standards of being organic

and shade grown, if not also fair trade certified. Often, certifiers will have criteria made up of aspects of all types of certification (Rainforest Alliance).

Part III: The Environmental Component of Coffee Eco-labeling

Environmental deterioration caused by coffee plantations constitutes one of the major problems in coffee growing countries. The following section will address the environmental concerns generated by modern coffee plantations, the characteristics and possible ecological benefits of the shade-grown and organic coffee systems.

Modern coffee plantations: Environmental impact

Beginning in the middle of the 21st century, coffee plantations, consisting of the two main species *Coffea arabica* and *C. canephora* var. *robusta*, began to be transformed from traditional, low-input and diverse agroecosystems to intensive, high-input monocultures throughout the world (ICO, 2004; Alberin and Nair, 2004; Larson, 2003). For example, in northern Latin America approximately half of the original area planted with coffee was converted to modern, shade-less production (Perfecto and Snelling, 1995). This transformation, commonly called “technological intensification”, involves dramatic and often damaging landscape changes (Paul, 2004; Perfecto and Snelling, 1995).

The traditional (shaded) system consists of coffee bushes grown in the under-story of several species of shade trees, many of which are nitrogen fixing, and a variety of fruit trees. Individual coffee bushes are pruned as they age, forming small light gaps into which annual crops are planted. When a whole group of coffee bushes are to be removed and replanted, a larger light gap is created and may receive a planting of corn, beans, or other light-demanding crops. Thus, traditional coffee farms share many structural and functional attributes normally

associated with forests. Figure 1, shown below, represents this comparison of diversity between traditional and modern coffee plantations.

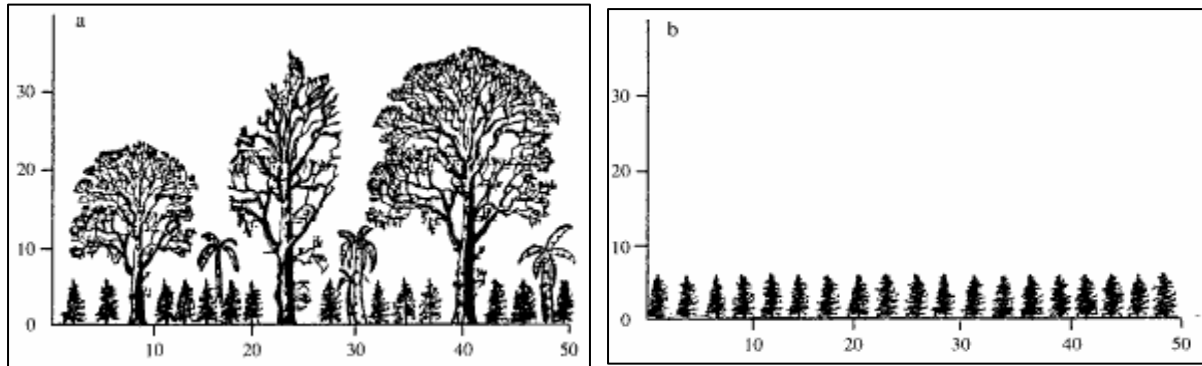


Fig. 1: A) Shade-grown coffee plantation with multi-level canopy and under-story; B) Non-shade coffee monoculture with single level tree height (Perfecto and Snelling, 2001)

The technological intensification of coffee plantations led to the elimination of all the shade trees and the substitution of traditional coffee varieties with new sun-tolerant and genetically homogenous varieties. These varieties are pruned either by row or by plot, and are heavily dependent on agrochemicals – especially herbicides and fertilizers. The negative environmental consequences of sun-grown coffee are:

- A general loss of biodiversity. (Paul, 2004) For example, sun coffee plantations have 94 - 97% fewer bird species than shade coffee areas. This includes not only native species, but also a large numbers of seasonal visitors (Perfecto et al, 1996; Gobbi, 2000; Moguel and Toledo, 1999; Smithsonian, 2004);
- Invasive species and weeds move into the disturbed habitats created by sun-grown coffee plantations and occupy the areas in which biodiversity is the most threatened;
- There is a high energy demand in the sun-grown coffee plantations due to the labor, money any other forms of capital (tractors, gasoline) to take care of pest control, weed control, fertilizer application and the like;
- Agrochemical pollution of soil and groundwater. Modern farmers intensively use pesticides and fertilizers;
- Deforestation (Coffee and Environment, 1997)
- Natural habitat fragmentation appears in the modern farms, while many organic and shade-grown coffee plantations remain undisturbed peaces of wild areas, where endangered species may survive.

- Soil erosion, a consequence of deforestation;
- Reduced soil fertility, a consequence of soil erosion; and
- The introduced genetically modified coffee plants threaten local biodiversity and health of consumers (Café Unidos, 2003)

Shade grown and organic coffee: advantages and disadvantages

The two methods of growing environmental friendly coffee are shade-grown, and organic. All organic coffee is shade-grown; however, it is not required that all shade-grown coffee is organic as well. Interest in shade-grown coffee is presently increasing due to declining coffee prices in the world market and an increasing trend toward “*green consumerism*” (Albertin and Nair, 2004), which includes concern about the human health (organic products) and/or concern about the health of ecosystems (shade coffee plantations). Organic and shade are different characteristics of the product; coffee may have two types of labels, or only one of those.

In the following table we explore the main features of shade coffee system compared with modern farms (Perfecto et al., 1996):

Table 1. Distinguishing characteristics of traditional and modern coffee production technologies.		
Characteristic	Traditional	Modern
Coffee variety	Typica, bourbon, maragogipe	Caturra, catuai, Colombia, Guarnica catimor
Coffee height	3–5 m	2–3 m
Shade cover	Moderate to heavy, 60%–90% coverage	None to moderate, up to 50% coverage
Shade trees used	Tall (15–25 m), mixed forest trees, legumes, fruit trees, bananas	Short (5–8 m), legumes; often monocultures
Density of coffee plants	1000–2000/ha	3000–10,000/ha
Years to first harvest	4–6	3–4
Plantation life span	30+ years	12–15 years
Agrochemical use	None to low	High, particularly fertilizers, herbicides, fungicides, nematocides
Pruning of coffee	Individualized pruning or no pruning	Standardized stumping back after first or second year of full production
Labor requirements	Seasonal for harvest or pruning	Year-round maintenance with higher demands at harvest
Soil erosion	Low	High (particularly on slopes)

From this table, it can be seen that traditional coffee plantations are generally more energy intensive, necessitating additional manpower as well as time to allow for appropriate maturation

before harvest; however, traditional plantations produce more in the long term due to their longer average life span (15+ years).

There are five main environment-related advantages of shade coffee systems (Baggio and Caramoni, 1997; Beer and Muschler, 1998; Perfecto et al., 1996). These are:

- Shade-coffee requires less non-harvest labor, whereas modernized demands intense cultivation practices such as standardized pruning, fertilization, and insecticide, fungicide, and nematicide applications to individual plants.
- Natural Pest control is provided by presence of shade trees (Staver et al., 2001).
- Timber and fruit production from *shade trees* used in coffee plantations *can provide significant income*, which may equal or exceed that of coffee when coffee prices are low (Albertin and Nair, 2004).
- The quality and size of coffee beans, and the taste of the finished product, are better under shade system than under system without trees.
- On average there is less expenditure for chemical input. Traditional production devotes about 2% of its expenditures to chemical inputs, whereas modern production spends 25% on chemical inputs (Paul, 2004).

The main advantages of organic farms are very similar, and these productions systems do not use any chemical fertilizers and/or biocides.

Looking at the advantages of shade-grown coffee systems, the question arises why are more farmers establishing sun-grown coffee plantations? There are two major reasons. First, on good soils and in favorable climates the sun method produces *higher production*. On average, organic and shade plantations *yield 22% less* coffee beans per hectare than sun grown (Lyngbæk et al., 2001; Romero-Alvarado, 2002). Second, for large farms it is much more convenient to use agricultural machines on the territories without any big trees. Mechanization of the growing process results lower price of product. However, intensive production has led to increased pest problems and secondary pesticide problems.

Ecological integrity in the shade coffee system

All this information demonstrates that the traditional coffee system is competitive with the modernized system. Its production is just slightly lower. But, other important parameters of shade grown production are more beneficial: better taste of coffee, larger beans, less non-harvest labor, fruit harvest, higher environmental sustainability, and natural pest control. In addition, organic systems insure safety for environment and health. The composition of shade coffee plantations is very similar to pristine ecosystems, and provide habitat for wild animals, including birds. Traditional system provide not only coffee itself, but also other forest products and safe environment for nature and people.

Part IV: Socio-Economic Dimensions of the Coffee Sector

This section will selectively focus on the economics of eco-labeling in coffee production – if it will provide incentives to promote more environmentally friendly farming and provide financial gains – first at the level of the grower/producer and second at the level of the consumer. However, it is important to note that these two groups are not mutually exclusive in terms of their effect on the coffee market or the market's effect on them – the two are highly interrelated. There are varying opinions on the success of eco-labeling as a method of incentive to produce better production methods. Some point to eco-labeling as highly beneficial in the process of providing incentives to promote environmentally friendly practice, while others state the opposite – eco-labeling is instead damaging to those efforts. Additional research will be necessary to truly understand the economic consequences for all parties involved with eco-labeling on a local, national and global scale.

Growers

Globalism, a market ideology that has gain strength since the fall of the Communist regime in the latter half of the 20th century, is today resulting in a strong Western push toward

the neo-liberalist policies: the integration of global markets and the abandonment of government intervention and regulation. This process, more often known as globalization, is further enhancing the strong desire for the everlasting profit. Coffee, being the second most traded commodity in the United States next to oil, is being affected by these global trends more and more every day. But, developing countries like Colombia, Brazil, Mexico, Guatemala and Vietnam – the 5 countries that provide over 80% of the United State’s coffee (Larson, 2003) – are inherently disadvantaged in the global game due to numerous reasons ranging from poverty, low quality education, overpopulation, limited access to natural and modern technological resources, and also from the consequences of damaging economic and political policies of the Western countries.

One result of this fundamental disadvantage on the part of developing countries is those producing view the end profit as the ultimate goal, possibly compromising working conditions, wages and the surrounding environment in the process. A prime example of this comes from coffee: as mentioned earlier, when sun-tolerant varieties of coffee proved to (at least in the short term) produces greater yields than the traditional shade-grown varieties, farmers made the switch to the more productive and more input intensive (read: environmentally degrading) forms of cultivation. It must be recognized that for a great majority of the producers, the drive is not for ultimately a better environment, but for a better profit (c). The question then arises, what strategy can we adopt that would provide benefits to the growers without damaging the environment? The answer, at least for the purposes of this research brief, is eco-labeling.

Gobbi researched the financial feasibility of investing in certification to become labeled “bio-diversity friendly” coffee in El Salvador (2000). The category of “biodiversity friendly” coffee can be considered slightly broader than the categories that this brief focuses on (organic and shade grown); however, the main ideas apply to both cases. The factors taken into

consideration were those that would affect an actual farming system of any kind, not just coffee. The model used estimated the financial feasibility over a 20-year period, utilizing “production costs, production per hectare, replanting costs, investment costs and sale prices” to compare a non-biodiversity friendly farm with a biodiversity friendly farm. (Gobbi, 2000)

His results, after examining five different kinds of coffee farming systems (traditional polycultures, convention polycultures, technified shade of varying elevations, and unshaded monocultures), lead him to conclude that in fact the movement to shade-grown, biodiversity friendly, coffee production system was possible for all of the systems (including the system most divergent from traditional methods of growing: the unshaded monoculture). However, these results come with a large disclaimer – the financial success of converting and marinating an ecologically benign method of cultivation rests on support for the farmers from key outside players, particularly the government. Gobbi writes:

“In practice, small farmers may need additional help and incentives to adopt the [bio-diversity friendly] certification criteria. Small, cash-poor farmers with [traditional polyculture] coffee plantations may not participate in the project if assistance is not provided to cover up-front costs of the certifying team. Small farmers with [conventionally polyculture] farms need to be presented with strategies to lower the risk of the investment, like choosing timber species as additional shade trees or any other combination aimed at maximizing net present values.” (2000)

The implication of this statement is that, although the system of certification for eco-labeling is financially feasible, the initial start up costs and long-term successes are questionable if farmers are required to switch over to and maintain these traditional, typically more labor intensive, forms of agriculture.

D.B. Bray et al. found in an examination of Mexico’s organic coffee production industry that “organic coffee production is an important production alternative for those who are able to take advantage of it (making the assumption that these organically produced beans will be labeled so) (2002).” But, Bray, like Gobbi, goes on to point out that the organic production and

labeling associated with coffee is not a perfect solution. “The entry costs to organic production,” Bray writes, “even subsidized, appear to be too high for the smallest producers, but organic production is a significant option for the slightly larger producers (2002).” The emphasis to extending the limitations to organic production and labeling in this report is placed not on the government, but on subsidies provided by third party, small-farmer organizations (typically non-governmental organizations).

Box 1 - The case of AFAORCA – Costa Rica¹

CEDECO – Corporación Educativa para el Desarrollo Costarricense (Educational Corporation for The Costa Rican Development) is a civil society, non-profit organization that has been working with small and medium farmers since 1984. Its mission is to facilitate processes of organic production and commercialization, with a perspective of a fair and participatory development among persons, society, and the environment. Their objective is to contribute to the economic, social, and organizational development for the historically excluded sectors of society².

The work of CEDECO with organic coffee production started in 1994, through supporting efforts of peasants’ experimentation in the region of Carraigres, with some families cultivating coffee using the shaded system. As a result of these initial efforts, in 1997 a pioneering organization called AFAORCA – Asociación de Familias Agricultoras Orgánicas de la Subregión Carraigres (Sub-region Carraigres Organic Farmers Families Association) was organized. Their orientation was the production, processing and commercialization of organic coffee in local and international markets.

This experience was not solely concentrated in coffee production, but their perspective was to diversify the farm activities in order to produce food for home consumption, and also for local markets. Another pioneering aspect was the effort to develop a processing system for coffee adapted to small-scale conditions (humid processing system), which was a novelty in the country, since this process was historically in the hands of big corporations and cooperatives. In addition, another important element is their commercial strategy to market coffee locally and internationally. In order to successfully accomplish this objective, new organizational and operational skills had to be developed.

The AFAORCA experience motivated other similar initiatives in several regions of the country. In 2001, CEDECO promoted the establishment of an umbrella association comprising eight of

¹ The information is based on a personal communication provided by Carlos Solano, a technician at CEDECO and coordinator of the coffee program on this organization.

² For more information about CEDECO see <http://www.cedeco.or.cr/>

these small-holders groups, founding the Asociación Alianza de Familias Productoras Orgánicas de Costa Rica (Costa Rican Association of Organically Producing Families).

Asociación Alianza works with commercialization, production, and processing. Moreover, they have been struggling in the political arena to change the rules and norms of processing coffee from the perspective of large-scale corporations down to the small-scale reality.

This alliance is a positive example for families and organizations of small and medium coffee producers, as it demonstrates that there are opportunities to change the dominant paradigm of production and marketing in the agricultural sector. To some extent, the organization has achieved important connections and recognition. They are certified by FLO, an umbrella organization of fair trade companies, and more recently they are part of a North-South cooperation initiative called Cooperativa Sin Fronteras (Cooperative without Frontiers), which is based in Italy but compounded by several organizations.

It seems from the available research that eco-labeling shade-grown and organic coffee is in fact possible and beneficial for the growers and producers; however, it is not a completely flawless incentive to reducing environmental damage. There is a serious need for support from some sort of outside party, whether that is a government or an organization, to support the farmers – especially because many of the farmers producing coffee in sun-grown plantations are interested in profit, and not environment.

Consumers

Consumers can be viewed as the "Key Players" in the coffee trade. The consumer must be willing to purchase coffee at prices that offer the ability to pass on sustainable payments to the growers. In most cases, certified coffee comes with a high market premium. Thus, the price a consumer is willing to pay for their coffee is the vital link in the chain of sustainable trade actions between themselves and the growers. As the consumers have a key role to play through the economical support they render, they can make or break the market for certified products. In order to help them make informed decisions, it is essential for them to be aware and have a clear understanding of the desired outcomes of certification.

A coffee consumer's forum for discussion on coffee, set up by a coffee company earlier this year (Thanksgiving Coffee), shows that although the consumers want some sort of certification to assure them of their choice, they are still unsettled with the structure of the certifications currently available. The following is the crux of the exchange of opinions that took place (Thanksgiving Coffee, 2004):

Pro-Certification Arguments:

- Without certification, growers cannot get a premium for shade-grown coffee. Labels without verification eliminate the possibility of a premium to make up for the reduced yields.
- Without certification, consumers can't be confident that what they are getting is really shade coffee. Even if consumers barely know shade coffee exists right now, eventually the question, "How do I know that this coffee is really shade-grown?" will arise.
- There is no basis for holding companies accountable for their claims. Consumers can't confront companies that they suspect are making fraudulent claims. Big companies such as Starbucks point out that they can't ask the market to trust them the way a small company might. They have to have certification.
- Some companies tell the public, "Most of our coffee is shade grown," and that lulls the consumer into thinking they are helping the environment by buying that coffee. In reality, most of the coffee probably is shade grown. But, it is not helping anyone, especially not the grower. It does nothing to save shade coffee plantations from conversion. Certification could ensure good scientific criteria, in place of subjective judgments by people who aren't necessarily educated in the requirements for viable habitats.

Anti-Certification Arguments:

- Certification will make the retail price too high.
- Given the political instability and endemic corruption of coffee growing countries, there is no way to hold certifiers accountable or to enforce truth in labeling. Certification does not eliminate the possibility of fraud. Even if certifiers are on the up-and-up, who knows what happens to the coffee itself? Sun coffee could still be put into bags labeled "shade."
- Brokers who actually visit the farms and are trusted in the coffee industry are more reliable than any form of certification. Some brokers do far more for the growers than certification demands. They provide market access and technical assistance, and pay well above market prices. If we certify anyone, it should be brokers, not growers, since brokers provide a trail.

There appears to be three camps of opinions on eco-labeling. The first camp consists of those who espouse a form of third party certification. For any form of shade certification to be

successful, it should accomplish three things. First, not increase the financial burden on farmers, who are already impacted by low coffee prices. Second, involve the farmers in the process of development; and third, certification should give some scientific evidence that the ecology does benefit from fair trade certification by showing for instance increase in native song bird population in a certain region of coffee growth.

Within this camp is found the second group, who believe that having many labels indicating different causes only make decisions more difficult to make for consumers. Instead of allowing consumers to decide which of the labels – shade grown (ecological benefits), fair trade (social benefits), Song bird (ecological benefits) or organic (health benefits) – is superior, integrating them all into one label (ethical) would be more beneficial. This would ascertain ecological, social and health benefits.

And finally, there are those who espouse the concept that some call "relationship coffee," where the source of the coffee is verified through relationships of trust within the coffee industry and a radial camp of those who believe that if fair Trade coffee can focus on improving and maintaining a certain quality, people would buy it for its quality even if it has a premium just as how they patronize gourmet coffee.

In spite of all the skepticism, a survey conducted by the National Coffee Association shows an obvious increase in awareness and purchase of cause-related coffee products since last year. Annual sales of organic coffee are projected to increase from current levels of \$25 million up to approximately \$120 million in the next few years, according to a NCA Board Member. This idea of awareness is represented through figure 2, presented below.

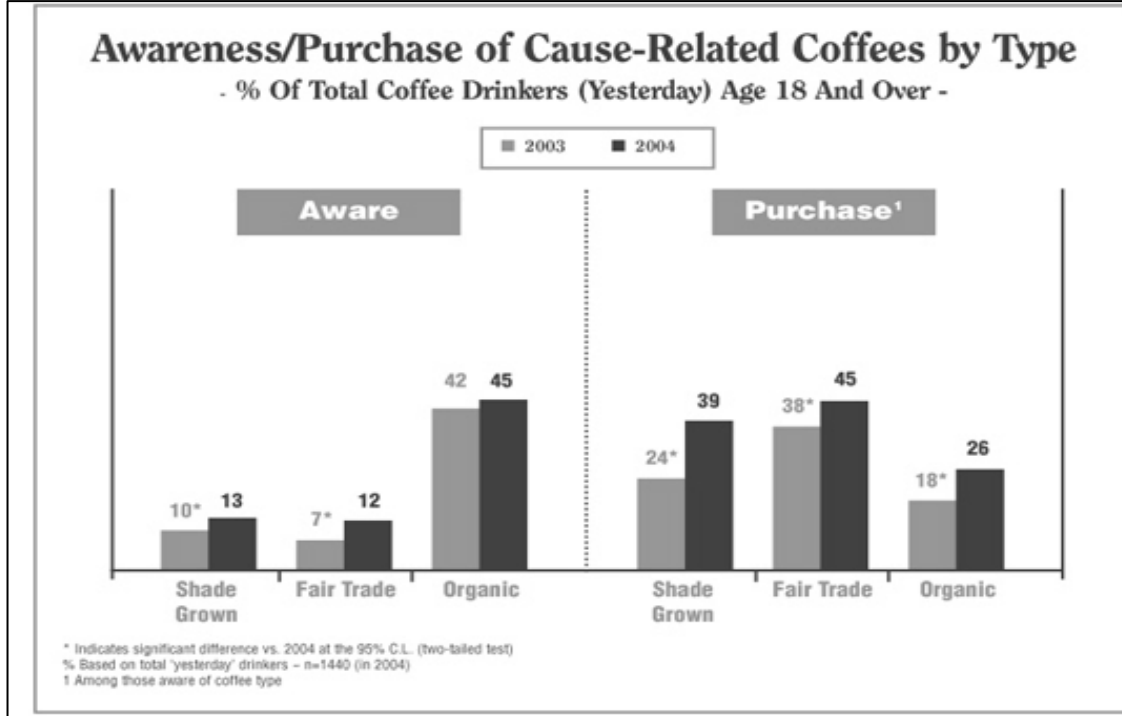


Figure 2: (National Coffee Association) Percentages of both awareness and total purchase of eco-labeled coffee increased from 2003 to 2004.

Part V: Conclusion

The Limits of Eco-labeling

The differentiation of agricultural products through the use of eco-labels is based on consumers' demand, mainly in developed countries, for products which incorporate environmental or/and social attributes. It is also, for some extent, a desire of farmers and their representative organizations to make a distinction of their products to have their work valued³ (Meirelles, 2003). In spite of the benefits promoted by eco-labeling, which indeed has been contributing to social and environmental improvements, there are some drawbacks and failures to such an approach.

The first one represents an inversion of values. Labeling products that incorporate social and environmental benefits is, to a degree, the recognition that production and trade systems that do not comply with such values are acceptable. The concept of eco-labeling also brings the

³ Valuation of the work in this case does not necessarily refer exclusively to monetary value. We are also referring to valuation as recognition of the work done by farmers as conservationists.

notion that such differentiated products are exclusively oriented for a niche market, accessed by those who have the proper information or are concerned for social and environmental issues.

The second consideration regarding certification schemes, particularly for organic products, is related to the cost. In general poor farmers in developing countries cannot afford to pay for this service of having their products certified. In addition, farmers who are connected to international markets have to comply with different exigencies, as most of importers have their own preferences for certification brands. Instead of including more farmers, such processes can even discriminate and preclude those who are producing organically from market access.

The certification methodology is also another concern. The whole process is based on the assumption that farmers are suspicious of dishonesty, and they need inspection⁴ of some third party. A third party, which in general comes from a completely different context, most of the times from northern countries, is necessary to check if she or he is complying with all the rules. Generally this process also involves complex documentation and a considerable amount of paperwork, which most of the times is very difficult for farmers fill up or even understand. Such methodology is also concentrated exclusively in the supposed quality of the product, but neglects social relations and that lies behind the production process.

Finally, another point refers to the norms and regulations that farmers in completely different contexts must obey to be considered organic. These rules in general are the same for farmers in very diverse realities as Indonesia, Kenya, Vietnam or Peru, not respecting the local peculiarities and circumstances. Since such systems are based on the obedience of pre-established rules, it contributes to pasteurize and bureaucratize the relations, preventing farmers from developing more creative ways to become organized. (Meirelles, 2003)

⁴ The own term “inspection” presupposes a hierarchical relationship between one party that has the right to check if the rules have been followed, and the other party that has to obey the regulations.

Around the world, alternative systems have been developed that are most often parallel to the legal obligations ruled by the state, and in general involve several stakeholders. In addition, these systems do not rely on pre-fixed rules, but are based on negotiated standards which frequently are much more rigorous and complex than those found in mainstream certification schemes. (IFOAM/MAELA, 2003)

One of the main characteristics of these alternative systems is the concept of building up trustworthy relationships based on values of solidarity and responsibility. Each agent involved in the process, i.e., farmers, processors, and consumers, is committed to the whole system. In this regard, the case of Alianza constitutes a concrete example which indicates that there are other effective ways to build credibility in coffee production beyond labels.

Eco-labeling as a market incentive to promote ecologically friendly coffee farming has been shown to be presently having socio-economic and environmental benefits. Nonetheless, for complex problems, like those generated by modern agriculture in a context of globalization, there can be no single solution. The performance of the eco-labeling system will be improved if this strategy is combined with other participatory methods, such as the presence of a third party in the form of governmental assistance, NGOs, or cooperatives, and will ultimately be a driving force in changing the way that coffee is grown, sold and consumed.

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