ROBERT A. RICE

NOBLE GOALS AND CHALLENGING TERRAIN: ORGANIC AND FAIR TRADE COFFEE MOVEMENTS IN THE GLOBAL MARKETPLACE

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ABSTRACT. Social relations associated with conventional agricultural exports find their origins in long term associations based on business, family, and class alliances. Working outside these boundaries presents a host of challenges, especially where small producers with little economic or political power are concerned. Yet, in many developing countries, alternative trade organizations (ATOs) based on philosophies of social justice and/or environmental well-being are carving out spaces alongside traditional agricultural export sectors by establishing new channels of trade and marketing. Coffee provides a case in point, with the fair trade and certified organic movements making inroads into the market place. In their own ways, these movements represent a type of economic and social restructuring from below, drawing upon and developing linkages beyond the traditional boundaries of how coffee is produced and traded. An examination of the philosophies of the fair trade and organic coffee movements reveal that the philosophical underpinnings of both certified organic and fair-trade coffee run counter to the historical concerns of coffee production and trade. Associations of small producers involved in these coffees face stiff challenges – both internal and external to their groups. More work, especially in situ fieldwork aimed at uncovering the challenges, benefits, tensions, and successes, is needed to understand better the ways these networks operate in the dynamic agro-food complex.

KEY WORDS: Alternative trading organizations, certified organic, coffee, fair trade

Introduction

Coffee's role in generating foreign exchange ranks it as an important commodity, especially in those 85 countries producing it. Total production topped 6.4 million metric tons in 1998, with five million of those being exported. The value of coffee exports that year totaled \$12.1 billion (FAO, 1998). The alternative trade organizations (for purposes here, ATOs include grower groups involved in either fair trade (FT) or certified organic (CO) coffee) make up a minuscule portion of this production or trade.¹

¹ The conceptual bases of these coffees differ. One is trade-defined; the other production- or process-defined. Fair trade coffee, as the name implies, is coffee marketed with a price considered fair to the producer. Certified organic coffee refers to coffee grown in accordance with established standards for its production.

Fair trade products in aggregate, for instance, account for only 0.001% of global trade (McArthur, 1998). Yet, production of fair trade coffee weighed in at 98,718 MT in 1995/96 (ICR, 1996), or 1.7% of all coffee produced.² Fair trade coffee in Europe ranges from capturing less than one percent of the national coffee market in France to five percent in Switzerland, while its inroads in the North American market are just beginning (Waridel and Tietelbaum, 1999). Organic coffee accounts for about 3% of the specialty coffee imports in the United States, with similar numbers reported for Europe. While the current demand for organic coffee outstrips supply globally, fair trade coffee suffers from oversupply (Fuchs, 1997) – although recent events may counter this problem (see below).

A diverse cadre of small growers scattered across remote and rugged landscapes within the tropics forms the base for much of the world's production.³ They produce coffee on their own plots, and often work as day laborers on larger holdings. While the proportion of coffee produced by small growers in specific countries is sometimes dwarfed by that fraction generated on larger farms, smallholders dominate production of CO and FT coffees. And within these movements, Latin Americans produce the bulk of the coffee – especially certified organic. Moreover, production and marketing cooperatives form the backbone of production and trade in organic and fair trade coffee. In the span of some ten to fifteen years, these groups have carved out a small but potentially significant space within the coffee sector – a realm traditionally dominated by powerful interests (often processors, creditors, and/or exporters) within the producing countries (Paige, 1993; Williams, 1994; Roseberry, 1995; Samper, 1995).

There is an acknowledged need for "basic intelligence" on the organic sector to understand fully its "magnitude and potential" (FAO, 1998). In this paper, I explore the principles of production and trade within the certified organic and fair trade coffee movements, presenting their philosophical underpinnings. The geography of production and trade is examined next, drawing upon interviews and surveys I have conducted.

² This figure refers to that coffee produced by fair trade groups, not to the amount of coffee ultimately sold within the fair trade movement.

³ The structure of coffee sectors in Latin America is often quite similar across countries, characterized by many small growers who, collectively, account for relatively little land compared to a small number of larger growers, who control a relatively large fraction of the coffee area. In Colombia, for instance, those coffee growers with fewer than 8 hectares of total farm area represent 52% of all producers and farm 27% of the coffee area. By contrast, growers with more than 50 hectares of total farm area account for 5.5% of all producers and cultivate 28% of the coffee land (Junguito and Pizano, 1991). Other coffee producing countries have displayed varying degrees of land concentration (Williams, 1994; Roseberry et al., 1995).

Finally, I explore some of the benefits and challenges associated with these movements. Whether internal or external in origin, the tensions inherent in a small producer cooperative enterprise operating in alternative global markets pose some of the stiffest challenges.

Data presented on CO coffee come from surveys completed by fifteen certification agencies around the world. Those data on FT coffee come from the International Coffee Register (ICR) in the Netherlands. Other data and information come from reports, guidelines, and articles produced by or focused upon the two movements. Interviews and conversations with individuals who have worked within organizations devoted to the certified organic and fair-trade movements provide a major source of information as well.

ATOS: A GROWING TREND⁴

The complex of connections and long distance relations that typically characterize these two movements echo aspects of the new "farmer politics." Consumer-driven shifts in appetites linked to "concerns over environment, health and safety, ethics and diet" (Watts and Goodman, 1997: 21–22) figure prominently into the growth and current success of these initiatives (Luttinger and Dicum, 1999; Dicum and Luttinger, 1999). The networks that connect extremely poor peasant producers and privileged gourmet coffee consumers across thousands of miles provide concrete examples of the "acting at a distance" process discussed by Whatmore and Thorne (1997). Moreover, these coffees represent inanimate objects or "actors" within a network of human and non-human participants (Murdoch, 1997) that have attained special status outside the conventional agro-food complex. They have become a "signifier for political, social, and ecological struggles," drawing consumers into "struggles that are otherwise easily ignored" (Goodman, 1999).

Although no centralized ledgers or historical databases allow for accurate monitoring of production or trade in CO and FT coffee, reports show alternative trade organizations to be growing globally, capturing an increasing fraction of the total sales in coffee (Adriance, 1995; Murphy, 1995). Both of these coffees fit squarely within the larger specialty coffee market in the US, which grew from \$45 million in retail sales in 1969

⁴ For the purposes of this paper, I lump certified organic coffee initiatives with fair trade in the larger category of alternative trade organization (ATO). While producers of CO coffee do not define their existence on alternative trade, much of their trade is conducted through more direct linkages with importers and roasters, creating challenges and consequences similar to those in the fair trade sector.

to \$1.9 billion in 1990. The specialty coffee retail sales projection for the year 2000 is \$3 billion (Gorman,1997). In the US, certified organic coffee volume accounts for about 3% of all specialty coffee imported. The market share for certified organic produce in general in Europe is about 2%, with an increase of some 15% per year. The market for CO coffee shows similar numbers within the coffee market, and may continue for years to come as eastern European countries become incorporated into the organic movement (Petra Heid, 1997). Hundreds of thousands of growers (no real estimate exists on the actual number) produce certified organic coffee on more than 205,000 hectares distributed throughout 15 countries. Data collected in 1996 and again in 1998 show substantial growth globally of 54% in certified organic coffee area. This growth and concern for certified organic production and its potential impact upon coffee trade in general has not escaped the notice of the International Coffee Organization in London (ICO, 1997).

During the first half of the 1990s, we find substantial growth for certified organic coffee in the US market. An informal survey of six to eight coffee importers and an equal number of roasters of organic coffee identified those companies responsible for importing organic coffee into the US. A subsequent structured survey focused on the eleven coffee importers who handle organic coffee (most also import conventional coffee), gathering data on volume and sales of certified organic coffee channeled through the company.⁵ The data show that between 1991 and 1996, the average increase in the proportion of sales attributed to organic coffee was 136%. Total volume imported by all importers combined climbed from 2.1 million pounds in 1991 to 7.2 million pounds in 1996, reflecting a 245% increase. In a testament to the growing demand (and better quality control) associated with certified organic coffee, these data reveal that in 1991, CO coffee accounted for 23% of the volume and brought in 17% of the total sales for these importers, whereas by 1996, the sales and volume accounted for by CO coffee were both 34%.

Japan also imports significant amounts of organic coffee, with about a dozen importers of conventional coffee – such as Mitsubishi Corporation, Mitsui & Co., LTD, Sumitomo Corporation, etc. – involved. At present, estimates put the annual volume imported at about 35,000 sixty-kilogram bags (Hidetaka Hayashi, 2000), which represents only 0.7% of all coffee imports. "Organic" coffee – a much abused term in Japan – enters with

⁵ The survey – given to and answered by all importers (and one large roaster) involved in US CO coffee imports at the time – included questions about the length of time importers had been involved with CO coffee, the volume of CO handled at the time of the survey and five years before, what proportion of total imports were represented by CO coffee, etc.

and without certificates, and the papers lining the audit trail can be official or non-official (Hidetaka Hayashi, 2000; Hideki Yoshida, 2000). The Japanese Agricultural Standards Law in Spring/Summer of 2000 introduced regulatory definitions for what constitutes organic (USDA, 1999; 2000).

Fair trade coffee has more than 433,000 growers representing around 240 producer organizations worldwide. In 1995, they produced more than 98,000 metric tons of coffee in 17 countries (ICR, 1996). The actual amount traded is far less, but still shows growth over the past several years. The US FT coffee market, while only a "dribble" of total coffee consumption, accounts for less than one-tenth of one percent of what people drink. TransFair USA, the California-based organization responsible for fostering the movement nationally, have (as of mid-2000) a total of 50 licensed roasters distributed throughout 17 states. Recent efforts by TransFair USA and activist groups Global Exchange, spurred specialty coffee giant Starbucks to test the Fall, 2000 market with a fair trade offering (Burgess, 2000; Salter, 2000; Lee, 2000).

The European market for fair trade coffee brands currently stands at \$250 to \$300 million annually (Collier, 1999; Carlton, 1999). Data recently compiled by the Max Havelaar office in the Netherlands show that FT coffee sales in Europe grew from 8,975 metric tons in 1994 to 11,370 metric tons in 1997 (Reina Foppen, 1998). In Europe, where fair trade commerce is known and understood by a substantial portion of the public, national coffee sectors see between 1 and 5% market penetration by FT coffee. Fair trade labels now appear in 35,000 supermarkets in Europe (Fair TradeMark Canada, N.D.) If all outlets for FT coffee are counted, the total reaches 55,000 (Reina Foppen, 1998). The national market share for FT coffee in Europe averages 1.4% (EFTA, 1994). There are no data for the area devoted to FT coffee, but a conservative estimate puts total area worldwide at about 375,000 hectares.⁶

One might be tempted to attribute the trend in ATO growth to "business as usual," with the south dancing to only a northern song. Instead of a grassroots movement building a structure from below, the growers' actions might be seen as a mere response to the latest fad in cause-related dietary tastes in developed countries. While such an assessment could undoubtedly be valid in some cases, extrapolating to the movements as a whole is naïve and far too facile for the nuanced decisions involved in peasant producers' operations. For one, small growers have been involved in production for years, surviving beneath the burden of large exporters, local moneylenders,

⁶ This figure is obtained from assuming 260-kg/ha yield, which is half the global average reported by FAO.

and *coyotes* (intermediaries). The ATO approach provides an example of these growers as protagonists, taking advantage of opportunities within the larger specialty coffee market (Bray, interview). Moreover (as discussed below), there is social capital being accumulated, part of the "basket of benefits" derived from the organizational aspects of the cooperative enterprise (Sanchéz et al., in review). Far from cultural imperialism, those working with fair trade report it as being an empowering movement for small growers (Rice, 2000).

PHILOSOPHIES, GUIDELINES, AND OPERATION

The philosophical underpinnings of both certified organic and fair-trade coffee run counter to the historical concerns of coffee production and trade. In fact, they are diametrically opposed to the central issue of increasing yields at all costs and the historical avenues of commercialization of coffee from tree to cup. A recent trend in the Latin American coffee sector has been the modernization or "technification" of production (Rice and Ward, 1996). Trade has long been in the hands of local elites (Williams, 1994). Those interests in control of conventional production and trade traditionally have shown concern for neither the ecological consequences of production nor equity within the commodity chain. Most recently, with the advent, spread, and embracing of neo-liberal economics across the Latin American landscape, concerns for small producers or the land upon which they base their production rarely get silhouetted against the free-market horizon.

The initial motivations for small growers joining the ranks of fair trade and/or organic coffee vary, but are usually linked to economic reasons. While the fair trade choice is obvious, the organic option can be more nuanced. Small growers choosing to "go organic" hardly do so for the benefit of the planet or because they have suddenly seen the agroecological light (although, once they employ organic techniques, these reasons do emerge). Rather, organic methods represent a path toward increased productivity without dependence upon input substitution (Bray, 1991; Rosset and Altieri, 1997). The premium paid for organic coffee is also a key attractor.

Organic Coffee

Certified organic coffee has its roots in the biodynamic agricultural ideals developed by Rudolph Steiner. The tenets of biodynamic agriculture are as much spiritual and social, as they are agronomic. These principles

greatly influenced the philosophy that has come to characterize what is known as "organic" agriculture in the US, and "organic," "ecological," or "biological" agriculture in Europe. Among other aims, the mission of the organic movement is "committed to a holistic approach in the development of organic farming systems ..."(IFOAM, 1996). For years, the movement has been self-regulated, organized in such a way so as to have independent parties responsible for the tasks of standards formation, certification, and inspection. The independence of the separate tasks creates a workable system with built-in oversight between standards, inspection, and final certification. More recently, legislators in both Europe and North America have paid attention to the rules and regulations, principally (at least in the US case) because of the current and potential market activity and profit potential associated with organic products (Buck et al., 1996).

Basic standards and international guidelines for certification derive from the International Federation of Organic Agricultural Movements (IFOAM), a group best described as the "certifier of the certifiers." Most standards reflect the adoption of traditional best practices (IFOAM, 1996), although some have improved practices (Dudley et al., 1997). Standards relating to agricultural production globally are grouped under themes such as conversion to organic agriculture, crop production, animal husbandry, storage and transportation of products, processing, social justice, and labeling and consumer information. The federation then presents general principles and minimum requirements related to each theme. More specific requirements associated with certification are developed by individual certification agencies, of which 12 are accredited members of IFOAM and another six are awaiting accreditation (IFOAM, 1996).

With the recent and rapid growth of CO coffee markets in the North, specific guidelines are now developed for coffee certification. They are part of the IFOAM Guidelines on Coffee, Cocoa and Tea, and, unlike the standards, which are meant to be applicable worldwide, these are obviously restricted to areas of the world in which these crops grow.

Specific certification agencies' regulations generally follow the recommendations of the IFOAM standards, but may vary considerably – especially if a certifier is not a member of IFOAM. Naturland of Germany, for instance, reportedly will not certify coffee as organic if there is no shade cover. The Organic Crop Improvement Association (OCIA) of the US, on the other hand, will and has. Within the standards for general agricultural production, however, there is less variance in certification standards. For instance, no agency allows synthetic chemical use and all agencies adhere to practices that promote soil health and protection. Some certification agencies are not IFOAM members, but even so, the philosophy and dedi-

cation to organic practices on the part of non-members is strong. Moreover, the global community of certification agencies is still small enough that the self-policing aspect of the community proves effective. Fraud rarely occurs.⁷

Independent inspectors go into the field to determine whether a farm can be certified as organic. The vast majority of inspectors work as independent contractors for certification agencies on a per job basis. Inspections adhere to that particular agency's specific standards and paper work, at the same time satisfying the transcendent IFOAM guidelines. Other inspectors work for a private entity, where they are employees of a company involved in certification, such as the California Certified Organic Farmers (CCOF) group formed in 1973. Another model under which inspectors operate is within the public sector, where state employees working in agricultural agencies on issues of weight and measures or pesticides conduct organic inspections from time to time (Jim Riddle, 1998).

The costs of the inspection and certification are borne by producers. Inspection fees range between \$300 and \$500 per day, depending upon who conducts the inspection. The producer also pays transportation costs (getting the inspector to and from the farm). A certification fee is charged, usually pegged to production and amounting to 0.5% of gross sales. The costs of inspection and certification are borne by the grower or the producer cooperative, an arrangement that allows for well-organized groups to afford the costs.

Pricing for CO coffee works on a premium basis. The price is tagged to the New York "c" price, a volatile figure affected by the market's presumptions about how weather, social, and political conditions might impact supply and demand of coffee worldwide. Certain coffees maintain competitive advantage due to their origins. A Guatemalan or a Costa Rican coffee normally fetches a \$0.35 to \$0.50 per pound differential above the "c" price, simply because these coffees have historically displayed consistent flavor qualities. Ultimately, the price paid for the organic premium depends to a large degree upon the bargaining power and acumen of the cooperative representatives, provided that the coffee meets basic quality standards. The premium awarded CO coffees vary between \$0.15 and \$0.45 per pound generally, regardless of where the coffee is produced. It is this premium that attracts small growers to the concept of organic production methods.

⁷ From my personal experience in researching organic coffee, on the rare occasions that activities or attitudes running counter to the organic ideals do emerge, peer outrage and network communication within the larger organic community are quick to correct such anomalies.

Fair Trade Coffee⁸

Fair trade (FT) coffee falls within the larger fair trade movement, that has its origins in Europe, where Catholic youth founded a development charity in the Netherlands in 1959. Conferences by UNCTAD during the 1960s produced the non-charity concept of "trade not aid" on the part of developing countries, that led to the "world shop" establishment in 1969 in the Netherlands. The idea quickly spread to countries all over Western Europe. The ideals and standards of fair trade have been incorporated into seals such as Max Havelaar, TransFair, and Fairtrade, all of which now have joined into an umbrella group known as FairTrade Labeling Organizations (FLO) International.

Coffee was incorporated into the fair trade movement in 1988, when the Max Havelaar mark was introduced in 1988 in the Netherlands. As with other commodities moved within the FT community (cocoa, honey, sugar, etc.), the focus is on growers receiving a fair price for the coffee they produce. A "floor price" of \$1.26 per pound has been established for the higher-quality "washed arabicas," a category that includes most coffee derived from Mexico, Central America, and Spanish-speaking South America. If the world price (New York "c") exceeds \$1.26 per pound, FT coffee pays five cents per pound above that price.

The fair price is conditional. Among other criteria to be met, the producer group must consist of small growers who depend upon family labor to produce their coffee. The group must be organized and operated along democratic lines, and the democratic decision making process extends to the destiny of additional capital resulting from participation in the FT movement. Moreover, the organization must be politically independent, be open to accept new members, and not practice discrimination on the basis of sex, religion, politics, or race. Qualifying associations then register with the International Coffee Register (ICR) in the Netherlands, and are approved to establish commercial agreements with licensed importers (Equal Exchange, 1995). The ICR maintains a database on fair trade coffee organizations and coordinates annual inspections of the groups. One of the big benefits to growers involved in fair trade derives from the inspection conducted each year, organized by the ICR, which provides security to members vis-à-vis democratic process, investment of price premiums into member benefits, etc. To date, only one organization

⁸ Fair trade historically has focused on small grower groups. A recent interest in larger plantation labor conditions by FT activists addresses an integral part of the coffee labor equation (Coffee Working Group, 2000).

⁹ The very first fair trade coffee was an effort to import a Guatemalan coffee into Europe as "Indio Solidarity Coffee" (EFTA, 1995).

has been removed from the registry due to lack of compliance with fair trade norms.

Unlike the organic coffee sector, where certification and inspection costs fall to producers, the monetary costs in the fair trade sector are borne by the importers and licensed roasters/distributors. Importers pay no license fee, but are expected to provide credit to producer groups. According to the fair trade rules of operation, grower associations may request up to 60% of their payment as pre-payment for promised deliveries, essentially obtaining credit from these buyers. For importers handling, say, a container of coffee (37,500 lbs.), such advances mean substantial outlays of capital prior to receiving the product. The credit often come at times when grower groups are most in need of resources in preparing their farms for the upcoming harvest.

Roasters/distributors pay a license fee for the right of using the fair trade logo on their coffee. The fee is pegged to volume moved (e.g., Canada's TransFair coffee roasters pay \$0.13 Canadian per kilo), with one-third going to Europe to maintain the international offices and pay for the on-site inspection of participating grower associations. The remaining two-thirds pays for operating the Canadian offices, promoting the fair trade concept, and monitoring of licensees. While a fair trade producer group does not incur financial costs to be a member organization within the ICR, there are time and operational commitments geared toward record keeping and processes that must be honored.

Contrast and Confluence

The CO and FT coffee movements are founded on two distinct philosophies: one environmental; the other social justice. Nevertheless, despite the tendency of activists, academics, and the general public to divorce such issues, we hear clear messages from interdisciplinary efforts that social well being and environmental health are inter-related (Blaikie, 1985; Vandermeer and Perfecto, 1995; Thrupp, 1996). Nor has this melding of the social and the ecological escaped the notice of the CO and FT coffee movements themselves.

Within IFOAM's standards committee, the issue of social justice has been a hot topic in recent years (Jan Deane, 1998). Member organizations recently completed questionnaires that assessed the membership's attitudes about social criteria being incorporated into the organic standards. Some convergence occurred. The latest revised version of IFOAM's standards includes a new chapter addressing social conditions. The standards (no longer listed as guidelines, as a previous version had done) focus on issues such as indigenous rights, and "require that certification programs

shall ensure that operators have a policy on social justice and that there should be no organic certification for production that is based on violations of basic human rights" (Bernward Geier, 1998).

Convergence flows from the other direction as well, with the FairTrade Labeling Organization International taking on issues of ecological dimensions. Over the past two to three years, FLO International and its member organizations Max Havelaar and TransFair have recognized the importance of ecological well being. The current status of these concerns translates into the stipulation that a production group's presence on the coffee register is ecologically conditional. Groups must have a work plan that shows they are working to reduce the negative environmental impacts of production and processing their coffee (Bob Thomson, 1998). There are no established timelines or concrete targets for these efforts, but it does show convergence of concerns between the movements.

GLOBAL DISTRIBUTION

The geographic distribution of both CO and FT coffee production is heavily tilted toward producers in Latin America. Due to the inherent emphases of each movement and the type of information collected, data exist only on the number of hectares of organic coffee and number of producers of fair trade coffee. As described, the movements are based on distinct philosophies and the communities operate independently. We do, however, find some overlap at the level of the production cooperatives, with some grower associations participating in both certified organic and fair trade coffee.

Certified Organic

A survey of the various certification agencies around the world yielded data on the number of hectares of certified organic coffee at the global level. A total of 16 different certification agencies report 205,686 hectares of coffee in 15 countries (Table 1).¹⁰ As Table 1 shows, Latin America accounts for

This figure may be inflated for at least two reasons: 1) farms often arrange for certification from more than one agency, and an agency may carry a farm (and therefore report its area) on its books, even though it may not actually certify that farm that year; 2) inflation of areal statistics by farmers or farmer associations, as can occur when *total* farm area is understood to be *coffee* area by the inspector and, subsequently, the certifying agency. Sources involved in field certification of organic coffee in Peru, for instance, contend that the figure related to that country's CO coffee area may be an over-estimate by more than 75%, with Peru's true certified coffee area being closer to 9100 hectares (Gerardo Medina,1999). If Peru and Mexico's areas for CO coffee are reduced accordingly (the two

TABLE 1

Reported Certified Organic Coffee Area (in hectares), by country (1997/98)*

Country	Hectares of Certified Organic Coffee		
Peru	37,633		
Mexico	93,039		
Indonesia	26,882		
Guatemala	7895		
El Salvador	9441		
Ecuador	12,381		
Nicaragua	10,116		
Costa Rica	271		
Cameroon	700		
Bolivia	2528		
Brazil	2100		
Dominican Republic	852		
Sri Lanka	16		
Colombia	1332		
Papua New Guinea	500		
Total	205,686		

^{*}Note: see text for explanation of accuracy of these reported figures (section "Global Distribution") especially footnote number 10. Source: survey of certification agencies conducted by author.

the lion's share, with more than 86% of the global area. Mexico leads the world in certified organic coffee area with more than 93,000 hectares. The yields vary greatly from country to country, and even within country from group to group and grower to grower, but for those countries for which data are available, yields average 505 kg/ha, which is just shy of the FAO's reported world average for all coffee.

The major certifiers are based in the North, even though some – such as the Organic Crop Improvement Association (OCIA) – have chapters in coffee producing countries. Recent years have seen the formation of locally based national certification agencies in several countries. Groups located in Colombia, Bolivia, Peru, and Nicaragua have joined to form a regional network called BioLatina, which aims to harmonize details of organic standards and coordinate programs, thus adding credibility to local efforts from

largest and therefore the two for which such errors are most likely), the total global CO coffee area may be closer to 110,000 hectares. Given the lack of a centralized data base for certified organic coffee globally, knowing the true global area at present is difficult.

Yield Comparisons for Certified Organic and Conventional Coffee in El Salvador (averaged over four years--1994 to 1998)

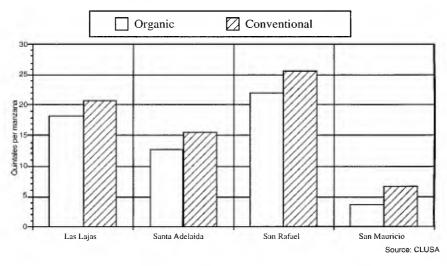


Figure 1.

importers' perspectives (Neuendorff, 1997). With the cost of certification being a major obstacle for small farmer groups to join the ranks of organic producers, this growth of local agencies will undoubtedly serve to alleviate this problem. IFOAM supports the formation of in-country certifiers

It is worth mentioning the recurrent debate over productivity with respect to organic practices. Critics of organic production methods usually cite lower yields as a deterrent to producers' willingness to become involved in organic coffee. It is a valid argument. Often the yields fall dramatically after a transition is made, and some models show that organic yields simply cannot compete with conventional yields (Akkerman and van Baar, 1992). In what is probably the best record keeping to date with respect to conventional and organic production of coffee, however, some data from El Salvador show an intriguing comparison. Figure 1 shows data from four years of production on four different cooperatives, each of which has maintained organic and conventional practices. While average organic yields never exceed conventional yields for any one of the farms, they are quite close, information that contradicts a common perception of organic production as low yielding. Future records will prove interesting, when data from a longer time series will provide a more powerful argument.

TABLE II
Fair Trade Coffee Membership and Production, 1996/97

Country	Registered Members	Production (metric tons)	Kilos per Member
Tanzania	237,357	25,524.50	107.54
Uganda	67,600	18,000.00	266.27
Mexico	39,103	16,574.97	423.88
Zaire	20,552	3645.00	177.36
Peru	10,667	6217.52	582.87
Colombia	10,618	7046.43	663.63
Guatemala	9844	3385.24	343.89
Nicaragua	8292	4571.14	551.27
Dominican Republic	7448	4795.02	643.80
Haiti	6871	180.00	26.20
Costa Rica	4147	2096.62	505.57
Bolivia	3245	1217.40	375.16
Brazil	2419	3045.00	1258.78
Venezuela	1679	764.00	455.03
Honduras	1520	1117.75	735.36
El Salvador	1205	336.93	279.61
Cameroon	950	200.00	210.53
TOTALS/Averages	433,517	98,717.517	227.71

Source: ICR, 1996/97

Fair Trade Coffee

Worldwide, the International Coffee Register has more than 433,000 producers associated with 240 organized groups. Collectively, these cooperatives produced more than 98,000 metric tons of coffee in 1996 (Table 2). Latin America has 25% of the membership, and accounts for 52% of the production. An updated list of organizations registered with the ICR shows a total of 321 producer groups belonging to 169 registered organization (FLO, 2000).

Lack of information on area devoted to the FT coffee does not allow for yield calculations. However, calculation of production per member reveals that globally each member produces 228 kg. This varies considerably, even when a simple hemispheric comparison is made. Producers in Latin

America average 480 kg, whereas those in Africa average 145 kg each. Maps 1 through 3 show these differences graphically.¹¹

One interesting feature of the fair trade coffee groups emerges when we extract those groups that produce certified organic coffee. Globally, we find that 15% of the FT coffee associations also produced CO coffee in 1996. In terms of total membership, these FT/CO producers make up 3.2% of the FT membership. These same producers, however, account for 8% of all FT production. On a kilogram per member basis, individuals involved in FT and CO coffee produce an average of 550 kg/member. The non-CO fair trade members average 220 kg/member. 12

OBSERVATIONS ON BENEFITS AND CHALLENGES FACING ATOS 13

Cooperative efforts in the rural countryside provide small producers with a range of benefits unattainable when they proceed as atomized actors within their local milieu. Access to materials and credit is an obvious positive effect derived from social organization at the production level. Larger cooperatives can make economies of scale purchases, thus potentially cutting expenses linked to goods, services, and credit. Community cohesion and coordinated actions aimed to further the interests of the community are also benefits that often come about as "side" effects of cooperative strengthening and success.

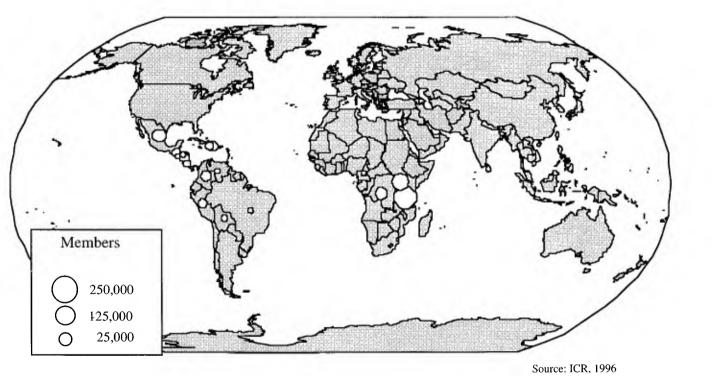
A coffee cooperative can have a number of forms, depending upon the country, its founding philosophy, whether the state was involved in its initial and continued operation, etc. Generally, however, there are primary level cooperatives or community groups involved in the actual labor, production, and (sometimes) processing of their crop. To take advantage of economies of scale (green, ready-to-roast coffee is shipped in units called "containers," which contain 37,500 pounds of coffee), these producer

¹¹ Map 3 shows an intriguing difference between Latin American and African producers' productivity, measured in kilos per member (area data, and therefore yield data are not available). It is possible that this difference derives from parcel size differences. Yet, since FT coffee by definition involves small-scale producers, I think it doubtful that farm size is the factor behind these differences. I would speculate that it has more to do with coffee in Latin America facing fewer diseases and pests than in its geographic homeland of Africa.

¹² Again, as with the Latin America/Africa comparison, these differences could be explained by farm size differences. However, there is no reason to believe that FT members involved in organic coffee might have larger farms (and therefore might logically produce more per individual) than those producing conventional coffee.

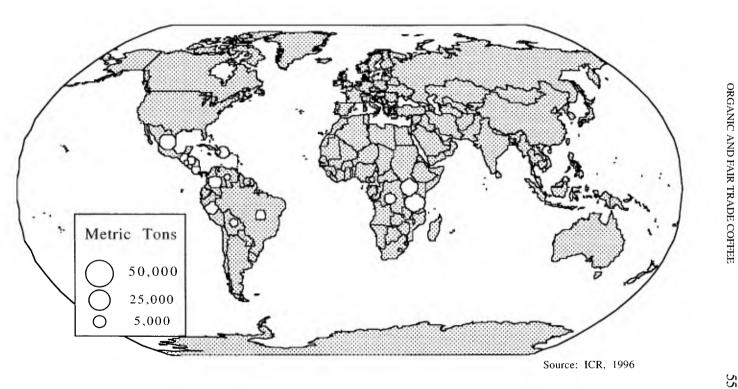
¹³ This section is greatly informed by the thoughtful conversations with Paul Rice about the challenges facing FT and CO coffee cooperatives in Latin America.

Fair Trade Coffee Membership

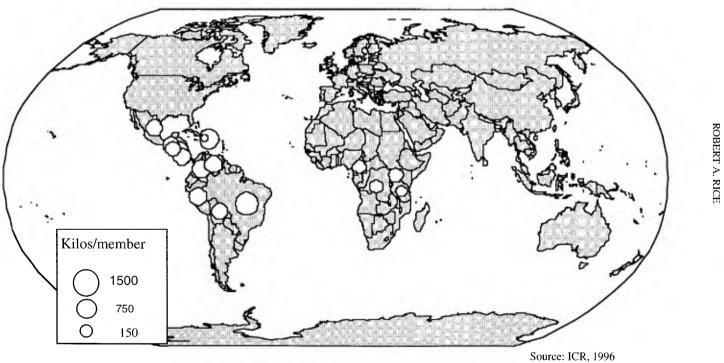


Map 1.

Fair Trade Coffee Production, by Country



Fair Trade Coffee Production: Kilograms/Member



Map 3.

cooperatives – especially the more successful ones – band together into secondary level organizations dedicated to marketing the coffee worldwide. These secondary cooperatives often process the coffee to its final pre-roast stage (green beans). Depending upon local markets, a secondary cooperative might roast and distribute some of its coffee as well (as some in Mexico do).

The economic benefits derive from price premiums associated with the coffee sold. Since the FT and CO movements tend to channel their coffee more directly to the importers or roasters in the North, thus avoiding the traditional merchant capital intermediaries, they receive additional economic advantages by capturing more of the coffee's value. But as noted elsewhere, the benefits gained from rallying around a concept such as organic production techniques can be as much organizational as agronomic (Nigh, 1997).

An intriguing aspect of the ATO movements is the success with which some cooperatives (be they based on CO or FT or both) operate, while others are fraught with sequential and insurmountable setbacks. Some grower groups fly high on the wings of one (or a few) charismatic personalities and/or tireless individuals. Such a model, however, is not desirable if it means operational disorientation when such figures leave or, more pessimistically, if the handling of funds creates fertile ground for corruption.

Grower groups attempting to chart new terrain – be it socioeconomic or ecological – often find stumbling blocks within the conventional structures of society. States direct no laws or incentives – and few, if any services – toward certified organic producers. Technical assistance directed at conventional coffee production virtually ignores the organic sector. In fact, many state mechanisms that traditionally provided assistance to small growers have been dismantled or have lost support in recent decades (Tiffen, 1997). Moreover, pressure from agrochemical representatives continues to coax small producers into expensive, input-based production (Kuehn, 1996).

Credit poses one of the most difficult problems for cooperatives. In El Salvador, year after year the conditions imposed upon cooperative members by banks become more burdensome. Frequently, credit approval, timely credit decisions, and other services tied to credit are contingent upon purchasing synthetic agrochemical inputs (Kuehn, 1996). In Mexico, recent efforts to increase coffee production by the state fall under a program known as *Alianza para el Campo*, (SAGAR, 1996). Organic coffee producers around Pochutla, Oaxaca have faced pressure by state technicians to modernize their holdings (remove shade trees and purchase

agrochemicals) in order to receive credits from the program (Francisco Zavaleta, 1996).

Finally, there are potential security issues involved with ATOs. By definition, these groups operate with philosophies counter to conventional commercial arrangements and state-sponsored production packages. The teach-by-example potential some of them represent could easily be viewed as threats to the longstanding, accepted ways of production and trade. In countries with documented histories of repression against social organizations that show success by recruitment and organizing, successful ATOs could easily face the negative reactions of established interests in the coming years. To date, the battle has been based on information hoarding, in which know-how about markets, price changes, commodity chain adjustments, etc. is kept within specific social circles – out of bounds to the ATOs (Victor Perez-Grovas, 1999).

Contracts and Price Fluctuations

Producer cooperatives often make contracts to deliver their coffee to the marketing cooperative prior to harvest time. If prices remain stable until harvest *and* the marketing cooperative can pay all or nearly all of the money due a grower at the time of delivery, the marketing cooperative usually collects the coffee it has agreed to send abroad and all parties involved survive through another year.

Of course, if prices decrease during the "waiting period" between contract and harvest/delivery, the FT cooperatives do relatively well. Growers receive their guaranteed "floor price" and are willing to wait some time if the marketing cooperative decides that a two-part payment is in order. Under such conditions, the marketing cooperative can wait until it receives payment before paying the final installment to the growers. Organic producers may fare less well, but the premium price paid for their product can be incentive enough for members to respect their contract agreements.

If, on the other hand, prices increase substantially during this waiting period, the system can be sorely tested. Everyone involved in coffee expects to gain from the higher prices. Intermediaries or merchant capitalists in the form of "coyotes" acting on their own or as representatives of local *beneficios* (processing facilities) scour the countryside in search of coffee. As prices reach and go beyond \$2.00 per pound on the New York commodities market, marketing cooperatives find themselves in competition with other local interests to capture the coffee produced by their membership (Tiffen, 1997; David Griswold, 1997). Further price hikes only serve to intensify the competition. If producers (understand-

ably) sell outside their contracts, marketing coops can find themselves facing delivery shortfalls. As Whatmore and Thorne (1997: 299) observe, "tensions between the modes of ordering of enterprise and connectivity [can] become immediate and tangible as, for example, the warehouse goes unfilled." Such contract failures send shock waves along the commodity chain to others expecting delivery.

Certification

The fees charged for organic inspection and certification often represent an obstacle that small growers find too costly (Thrupp, 1997). For those involved in cooperatives, the inspection of the cooperative as a whole often occurs via a random sample of the various holdings within the organization. The cost is paid by the cooperative, thus easing the financial hardship on any single producer.

Local initiatives aimed at organic certification are lowering the fee structure of inspection and certification, the result of which can only be beneficial for growers needing the service. Four Latin American agencies – Bolicert of Bolivia, BioMuisca of Colombia, Inkacert of Peru, and Cenipae of Nicaragua – formed a network in the mid-1990s known as BioLatina. IFOAM supports such efforts because they help facilitate and solidify the networks associated with CO coffee. Moreover, a logical argument for incountry inspectors relates to their understanding of local flora and fauna, customs, and general social cues - knowledge that can be indispensable when working to evaluate the organic production process. Additionally, agencies such as Certimex of Mexico have developed norms more suited to local conditions, thus reducing the problems likely to emerge from having northern guidelines adopted and applied wholesale in the South. As more and more in-country certification agencies develop the personnel and skills needed to carry out the business of what until now has been done by representatives from the North, the process should become less costly. Lower costs, in turn, should open the door to more producers.

Cooperatives as Businesses

Obviously, operating any business poses challenges. Attempts to do so by small farmers operating in a cooperative structure in remote areas can be a Sisyphean labor. Any cooperative must satisfy the "double bottom line" (Paul Rice, 1999). It entails the normal economic bottom line, as well as a social bottom line. Meeting the rigors of responsible cash flow in order to proceed into the next period of operation, cooperatives must balance the ledgers with their membership, pay the staff, and, if needed, meet whatever

savings requirements are necessary to establish or continue their credit fund. In short, liquidity is a constant challenge.

Cooperatives even receive pressure from "allies" within the movement. In the case of FT cooperatives, the cooperative managers can, within the FT rules, request up to 60% of their final payment as pre-payment. Some form of pre-payment is often requested in order to ease the annual cash flow problem that producers encounter. Yet, financing an upcoming delivery requires substantial lines of credit on the part of FT importers. One tactic some importers use is to promise to buy more of a cooperative's coffee on the condition that the cooperative *not* request all or any of it's rightful pre-payment (Bob Thomson, 1998). Such conditions obviously place growers in the age-old situation of not having funds when they are most needed, and certainly go against the spirit of FT principles.

Aside from this economic bottom line, coops have a social or democratic bottom line. Decisions about the daily and long-term operations of the business should ideally include the concerns of the membership. Transparency around payment, investment, and savings issues is imperative in order to maintain trust within the organization.

Cooperatives, like any other successful economic endeavor, must adhere to certain rules of management in order to survive. For those involved in fair trade, there are some aspects of the arrangement (e.g., the floor price) that modify the rules to a certain degree, knowing that a guaranteed price will always be paid. Nonetheless, operational challenges are best met by skilled individuals making decisions based on informed economic logic. For this reason, one key challenge to cooperatives' successes hinges upon management. Training in general management techniques and in leadership skills may represent the most important ingredient in finding the successful recipe for coop survival. For the business portion of the cooperative's activities, a professional business managerial staff has been identified as one of the most critical components to the group's longevity and financial security. A report written for the Inter-American Foundation, in which a production/marketing cooperative project was examined as a case study, states

... the other functional aspect of marketing cooperatives that should concern donors is economic viability ... The social and political *objectives* and *benefits* of the organization must be distinguished from the purely economic *administration* and *operation* of the economic activities, which should be run with the exact same criteria as any other efficient, competitive, economic business. (Heinegg and Ferroggiaro, 1996) [emphases original]

The double bottom line is important. The democratic aspects of the cooperative must be maintained, as well as the financial management

occurring in a responsible manner. This two-pronged goal can create tremendous tension within the organization.

Outside of cooperatives, there is scant history of relinquishing power over the commercial destiny of one's coffee crop. And even within cooperatives, growers have traditionally been in charge. Most operated their own financial matters, making their own decisions about selling their coffee and the price at which it is sold. Placing such decisions in the hands of individuals who, though they may have business acumen, are not experienced coffee growers, poses some difficult challenges to growers who are members of marketing cooperatives. Lack of understanding by individuals about the nuances or intricacies of commodity pricing, the buying of futures for hedging or offsetting potential loses, etc. creates an understandable tension between financial managers and others (the board of directors as well as the general membership).

There is a trust factor involved, certainly, but the roots of the tensions probably extend beyond that. Small growers know coffee. They have worked with it all their lives. Giving up control to managers – even managers they themselves have hired – is no easy feat. Yet the success of managers is obviously linked to the freedom to make decisions about coffee supplies on a daily (sometimes-hourly) basis. Such decisions simply cannot be micro-managed by a board of directors. Rather, the board's general policies should direct a manager's decisions in the broad sense, but provide that person with enough "room" to operate in ways that benefit the cooperative financially.

A critical challenge, then, to the successful operation of alternative trading organizations, is adequate training. Training relates not merely to hired managers who have the skills to handle coffee as a commodity on the world market. It also refers to the education or training of the cooperative membership about what the financial managers' jobs entails.

Just as the conventional coffee commodity chain has developed its own "cement" that binds the economic relations between producers and buyers, the ATOs must seek to do the same if they are to operate effectively. The FT movement is currently reflecting upon how such training might be realized, and are considering a two-cent per pound increase in the FT coffee price. These additional funds could go into a training fund set aside specifically for the purpose of addressing the larger questions of liquidity, personnel training, grower education, and, ultimately, intra-organizational trust.

CONCLUSION

International coffee trade by alternative trade organizations dedicated to environmental and social principles has emerged in recent years via the certified organic and fair trade movements, respectively. The two initiatives have distinct philosophies, and have captured specific markets within the larger specialty coffee industry. While the certified organic movement bases its *raison d'être* on a process-oriented set of coffee plant management guidelines, the fair trade community focuses on issues of the final price-paid-to-grower and internal democracy dynamics of small grower associations. The last few years have seen a confluence of concerns in both movements.

The increased growth of and interest in alternative trading organizations handling certified organic and/or fair trade coffee in recent years confirm consumer interest in the environmental and social dimensions of coffee production and trade. Current trends within the specialty coffee sector point to continued interest and growth on the part of importers, roasters, and retailers.

Small grower organizations form the social base upon which these coffee initiatives and trends have built. Operating within or alongside the larger players in the global coffee sector places such groups in direct competition with long-established local and international economic forces. Associations of small producers involved in these coffees face stiff challenges – both internal and external to their groups. More work – especially *in situ* fieldwork aimed at uncovering the challenges, benefits, tensions, and successes – is needed to understand better the ways these networks operate in the dynamic agro-food complex.

REFERENCES

Adrianc, Jim, "Planting the seeds of a new agriculture: living with the land in Central America." *Grassroots Development* 19(1)(1995), 2–17.

Akkerman, Age and Peter van Baar, El Café Orgáico: La Sostenibilidad de un Grano de Oro. CDR Serie Estudios No. 4 (Centro de Estudios para el Desarrollo Rural, Universidad Libre de Amsterdam, Oficina Regional Centroamericano, San José, Costa Rica, 1992).

Blaikie, Piers, *The Political Economy of Soil Erosion in Developing Countries* (Longman Scientific and Technical, New York, 1985).

Bray, David, "Where markets and ecology meet: organic coffee from the Sierra Madre of Chiapas." *Inter-American Foundation Review* (IAF, Washington, DC, 1991).

Bray, David, interview. Telephone conservation with Dr. Bray, Chair and Associate Professor Department of Environmental Studies, Florida International University, Miami, FL (August 2, 2000).

- Buck, Daniel, Christina Getz, and Julie Guthman, "Consolidating the commodity chain: organic farming and agribusiness in northern California." Working paper and Food First Development Report (Institute for Food and Development Policy: Oakland, CA, 1996).
- Burgess, John, "Deal brews to give fairer deal to farmers: coffee at premium price improves growers' lot," *The Washington Post* (Saturday, May 13, 2000), p. E-1.
- Carlton, Jim, "A global effort for poor coffee farmers: 'fair trade' movement's strategy is to bypass middlemen," *The Wall Street Journal* (1999), p. A-2.
- CLUSA, data from the Cooperative League USA comes from correspondence with Stanley Kuehn, CLUSA director in San Salvador, El Salvador, 1994–1998.
- Coffee Working Group, "Campaign for improvement of working and living conditions on coffee plantations." Newletter No. 2 (July) (Fair Trade Organisatie, Culemborg, the Netherlands, 2000) [www.fairtrade.nl].
- Collier, Robert, "Coffee lovers find a cause," *The San Francisco Chronicle* (Thursday, October 14, 2000) p. A-16.
- Deane, Jan, Communication (via electronic mail) with Ms. Jan Deane, Chair of the IFOAM Standards Committee (September 2, 1998).
- Dicum, Gregory and Nina Luttinger, *The Coffee Book: Anatomy of an Industry from Crop to the Last Drop* (The New Press, New York, 1999).
- Dudley, Nigel, Chris Elliot, and Sue Stolton, "A framework for environmental labelling," *Environment* 39(6) (1997), 16–25.
- Equal Exchange, Document ("Fair Trade: A Viable Alternative for Small Producers") provided by Equal Exchange, fair trade coffee distributor in the United States, located in Canton, MA (March, 1995).
- European Fair Trade Associations (EFTA) Yearbook. (1995). Found at http://antenna.nl/fairtrade/fair66.html on the Internet.
- European Fair Trade Associations (EFTA) Yearbook. (1994). EFTA's Fair Trade Survey of European Countries, listed at <www.web.net/fairtrade/fairtra
- Fair TradeMark Canada, n.d. Campaign Kit developed and published by Fair TradeMark Canada, a TransFair affiliate in Ottawa, Ontario. Website address: <www.web.net/fairtrade>.
- Foppen, Reina, Communication with Ms. Foppen, Secretary for FLO-CR at the Max Havelaar office in Utrecht, Netherlands (1998).
- FAO, various years United Nations Food and Agriculture Organization Production and Trade Yearbooks (FAO: Rome). Also on the internet at <www.fao.org>, under Statistical Databases.
- FAO, Organic agriculture (Document COAG/99/9). United Nations Food and Agriculture Organization's Committee on Agriculture, 15th Session, Rome, Italy (1998).
- FLO, Fairtrade Labeling Organizations International, list of producer organizations and cooperatives (dated 19 July 2000), provided by TransFair.
- Fuchs, Peter, "Organic and Fair Trade coffee of High Quality from Costa Rica, Guatemala and the Dominican Republic: Preliminary Study/Current Situation Analysis" (Fox Research AB, Stockholm, Sweden, 1997).
- Geier, Bernward, Communication with Mr. Bernward Geier, Executive Director of IFOAM, September 9, 1998.
- Goodman, David, "Agro-food studies in the 'age of ecology': nature, corporeality, biopolitics," *Sociologia Ruralis* 39(1) (1999), 17–38.
- Gorman, Laura, "What's brewing in coffee?: the 1997 SCAA/Gourmet Retailer Specialty Coffee Research Report. Pt. I," *The Gourmet Retailer* 18(5) (1997), 113–126.

- Griswold, David, Conversation with Mr. Griswold, president of Sustainable Harvest Coffee Company in Emeryville, CA, at the Specialty Coffee Association of America annual meeting, New Orleans, LA, April, 1997.
- Hayashi, Hidetaka, Written communication with Mr. Hayashi, President of Hayashi Coffee Institute in Tokyo, Japan. June/July, 2000.
- Heid, Petra, Letter communication from Ms. Heid, International Section of Naturland Verband, Grafelfing, Germany, 9 January 1997.
- Heinnegg, Ayo and Karen M. Ferroggiaro, "Inter-American foundation Strategy in the Mexican Coffee Sector: A Case Study of ISMAM." Report prepared on site in Chiapas, Mexico for the Inter-American Foundation, November, 1996.
- International Coffee Organization (ICO), "Agricultural and Economic Analysis of Organically Grown or 'Organic' Coffee." Document EB-3639/97 (E) (ICO, London, 1997).
- International Coffee Register (ICR), Correspondence with Marjoleine Motz, Coordinator of the International Fair Trade Coffee Producers' Register Max Havelaar/TransFair/Fairtrade in Utrecht, Netherlands (1996).
- IFOAM, IFOAM Basic Standards for Organic Agriculture and Processing and Guidelines for Coffee, cocoa and Tea; Evaluation of Inputs (Werbedruck, St. Wendel, 1996).
- Junguito, R. and D. Pizano, *Producción de Café en Colombia*. Bogota: FEDESAR-ROLLO/Fondo Cultural Cafetero (1991).
- Kuehn, Stanley, "The Certified Organic Coffee Project in El Salvador." Paper presented and in the proceedings of the First Sustainable Coffee Congress, National Zoological Park, Washington, DC, September (Smithsonian Migratory Bird Center, Washington, DC, 1996).
- Lee, Thomas, "Starbucks gives in to coffee activists," *Seattle Times* Monday, April 10, 2000.
- Luttinger, Nina and Gregory Dicum, "Wake up and smell the coffee: why your cup is brewing with issues and what you can do," The *San Francisco Bay Guardian* May 26–June 1, 1999, Vol. 33, No. 34, pp. 22–25.
- McArthur, Loren, "Cup of justice," Dollars and Sense 217 (May/June) (1998), 6.
- Medina, Gerardo, Communication with Mr. Medina, a certified organic inspector in Peru (1999).
- Murdoch, Jonathan, "Inhuman/nonhuman/human: actor-network theory and the prospects for a nondualistic and symmetrical perspective on nature and society," *Environment and Planning D: Society and Space* 15 (1997), 731–756.
- Murphy, C. Ellen, "La Selva and the magnetic pull of markets: organic coffee-growing in Mexico," *Grassroots Development* 19(1) (1995), 27–34.
- Neuendorff, Jochen, "The national certification of organic products: where is it heading?" *Agriculture and Rural Development* 1/97 (1997) pp. 47–49.
- Nigh, Ronald, "Organic Agriculture and Globalization: A Maya Associative Corporation in Chiapas, Mexico," *Human Organization* 56(4) (1997), 427–435.
- Paige, M. Jeffery, "Coffee and power in El Salvador," Latin American Research Review 28(3) (1993), 7–40.
- Perez-Grovas, Victor, Interview with Mr. Perez-Grovas, President of the coffee cooperative Majomut, based in San Cristobal de Las Casas, Chiapas, Mexico (1999).
- Rice, Paul, Interview with Mr. Rice, long-time organic coffee cooperative organizer and current Executive Director of TransFair, USA in San Francisco, CA (1999).
- Rice, Paul, "Misconceptions about fair trade coffee," Specialty Coffee Chronicle: A Publication of the Specialty Coffee Association of America, July/August (SCAA, Long Beach, CA, 2000), p. 14.

- Rice, A. Robert and Justin Ward, *Coffee, Conservation and Commerce in the Western Hemisphere*, White Paper No. 2 by the Smithsonian Migratory Bird Center (Smithsonian Migratory Bird Center/Natural Resources Defense Council, Washington, DC, 1996).
- Riddle, Jim, Conversation with Mr. Jim Riddle, president of the Independent Organic Inspectors Association (IOIA), based in Winona, MN, September 8, 1998.
- Roseberry, William, "Introduction." In William Roseberry, Lowell Gudmundson, and Mario Samper Kutschbach (eds.), *Coffee, Society, and Power in Latin America* (Johns Hopkins University Press, Baltimore, 1995), pp. 1–37.
- Rosset, Peter and Miguel Altieri. "Agroecology versus input substitution: a fundamental contradiction of sustainable agriculture," *Society and Natural Resources* 10, 283–295.
- SAGAR, "Alianza para el Campo Programa Café." 1995–2000 (SAGAR/Consejo Mexicano del Café: Mexico, DF) January 30, 1996.
- Salter, Stephanie, "Smelling the coffee it's 'Fair Trade' Certified," San Francisco Examiner Thursday, April 13, 2000.
- Samper Kutschbach, Mario, "In difficult times: Colombian and Costa Rican coffee growers from prosperity to crisis, 1920–1936." In William Roseberry, Lowell Gudmundson, and Mario Samper Kutschbach (eds.), *Coffee, Society, and Power in Latin America* (Johns Hopkins University Press: Baltimore, 1995), pp. 151–180.
- Sánchez, José Luís Plaza, Ellen Contreras Murphy, and David Barton Bray in review. "From certification criteria to social capital: learning from organic coffee production in Mexico," ms. submitted to *World Development*.
- Thomson, Bob, Interview with Mr. Thomson of TransFair Canada in Ottawa, Canada, July, 1998.
- Thrupp, Lori Ann, New Partnerships for Sustainable Agriculture (World Resources Institute, Washington, DC, 1996).
- Thrupp, Lori Ann, "Nuevas oportunidades de mercado para el café orgánico." Paper presented at the workshop "Políticas de Plaguicidas en América Central" sponsored by CATIE-IICA at Turrialba, Costa Rica, September 17–19, 1997.
- Tiffen, Pauline, "Reflections on the challenges faced and the challenges ahead," *Coffee Break! Information Bullentin of Max Havelaar/TransFair/Fairtrade* No. 6, April, 1997.
- USDA, Japan Agricultural Situation: Organics Update, Foreign Agricultural Service GAIN Report #JA9123, October 5, 1999.
- USDA, Japan Agricultural Situation: This Week in Japan, Foreign Agricultural Service GAIN Report #JA0066, June 12, 2000.
- Vandermeer, John and Ivette Perfecto, *Breakfast of Biodiversity* (Food First, Oakland, CA, 1995)
- Waridel, Laure and Sara Teitelbaum, Fair Trade: Contributing to Equitable Commerce in Holland, Belgium, Switzerland, and France Report to Equiterre, Montreal, Canada, 1999 (www.equiterre.qc.ca/english/rapport.html).
- Watts, Michael and David Goodman, "Agrarian questions: global appetite, local metabolism: nature, culture, and industry in *fin-de-siècle* agro-food systems," In David Goodman and Michael J. Watts (eds.), *Globalizing Food: Agrarian Questions and Global Restructuring* (Routledge, London, 1997) pp. 1–34.
- Whatmore, Sarah and Lorraine Thorne, "Nourishing networks: alternative geographies of food." In David Goodman and Michael J. Watts (eds.), *Globalizing Food: Agrarian Questions and Global Restructuring* (Routledge, London, 1997) pp. 287–304.
- Williams, G. Robert, States and Social Evolution: Coffee and the Rise of National Governments in Central America (University of North Carolina: Chapel Hill, NC, 1994).

Yoshida, Hideki, Interview with Mr. Yoshida, president of Musubi International, in Reseda, California, May 22, 2000.

Zavaleta García, Francisco, Conversation with Mr. Zavaleta, General Director of the cooperative "UCI Cien Años de Soledad" in Pochutla, Oaxaca, during a visit he made to Washington, DC in July, 1996.

Smithsonian Migratory Bird Center National Zoological Park Washington, DC 20008 Phone: 202-673-4908

Fax: 202-673-4916 E-mail: rarice@igc.org