Does Fair Trade Coffee Have a Future in Mexico?
The Impact of Migration in a Oaxacan Community

Jessa Lewis and David Runsten

Introduction

Coffee growers throughout southern Mexico have been hit with low world coffee prices coupled with a steady scaling-back of government support to the agricultural sector. This has negatively affected not only coffee farmers themselves, who are unable to maintain their livelihoods at current prices, but also the Mexican environment, as some growers choose to abandon their plots or convert their land to more intensive uses. There is considerable anecdotal evidence that a major response to this crisis has been increasing migration from Mexican coffee regions for employment. Another response among some groups of growers has been to differentiate their coffee by certifying it as environmentally sustainable, organic, and/or Fair Trade, or by selling it in other high-quality niche markets. Many of these means of differentiation return higher prices to producers, utilize more labor, and require producers to be organized into local cooperatives, and would thus seem likely to deter migration. With regard to Fair Trade coffee in particular, a number of recent studies have made the tentative assertion that producers selling to this market face less pressure to migrate, a hypothesis that increasingly appears as fact in the Fair Trade marketing literature.

Investigating the linkages between coffee production and migration in southern Mexico is crucial to understanding the potential for certification programs such as Fair Trade and organic to at least diminish migration pressures. Every commission empanelled to study migration from less-developed countries to the United States has concluded that only development in the sending regions would lessen migration (e.g. United States Commission on Migration and Cooperative Economic Development). However, there is little history of migration research in these coffee areas and almost no research on the links among low coffee prices, migration, and certification programs.

This paper is a first effort to examine these complex relationships in detail, drawing on a case study conducted in Summer 2004 in a high-migration, certified Fair Trade-organic coffee-producing community of Oaxaca, Mexico. Although international migration from the community has existed to some extent for decades, its acceleration in recent years can be linked

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at least in part to recent low coffee prices. Remittances from migrants are currently helping to finance coffee production in the community, but migration brings with it a series of transformations in the community and in the region at large that serve to decrease the economic, social, and cultural viability of coffee production—including certified coffee production. The case study findings raise doubts about the medium-term sustainability of the Fair Trade coffee model in the face of the high opportunity costs of labor represented by U.S.-bound migration.

**Mexican coffee**

Coffee is a large sector in Mexico. Considering family and hired field laborers and processors, the coffee industry in Mexico encompasses some three million people in 12 states, the majority residing in Chiapas, Oaxaca, and Veracruz (Porter 2000). Coffee production has grown rapidly in Mexico since 1970. In that year, there were about 100,000 producers with 350,000 hectares of coffee; by the early 1990s, 280,000 producers cultivated 760,000 hectares; and in 2001 there were an estimated 400,000 producers with 700,000 hectares. The collapse of the quota component of the International Coffee Agreement after 1989 and the subsequent price declines thus led to a reduction in acreage, but new producers have continued to enter. As a result, average coffee farm size has fallen from 3.5 hectares in 1970 to 1.9 hectares in 2001, and 70 percent of Mexican producers today have less than 2 hectares (Boot 2003). Coffee growers are becoming smaller, more geographically remote, and more indigenous (an estimated 80 percent of Mexican coffee land is farmed by indigenous producers). Consequently, the coffee-producing zones in Mexico coincide exactly with a map of extreme poverty (Aranda Bezaury 2003; Aranda Bezaury and Morales 2002). Approximately 60 percent of small coffee farmers in Mexico were classified as living in extreme poverty even before the most recent price slump starting in the late 1990s (Fox 1994), 84 percent of Mexico’s coffee-growing communities today register high or very high levels of poverty (Carlsen and Cervantes 2004), and 98 percent of the municipalities in which coffee is produced are considered ‘highly marginalized’ by Mexico’s population agency (Aranda Bezaury 2003: 156).

Mexican coffee growers are caught up in an operational context that is shifting in four important ways:

- Structural changes in the world coffee market that followed the abandonment of the quota component of the International Coffee Agreement in 1989
- Structural changes in the Mexican economy due to liberalization and the withdrawal of the State from active intervention in agriculture
- The development of Fair Trade, organic, and other differentiated coffee systems as a response of coffee growers and progressive importers to these changes
- Increasing migration to the United States from all parts of Mexico, a cumulative process that presents new opportunities and challenges to all regions.

**Changes in the world coffee market**

Prices for coffee plummeted after a peak in 1997 to their lowest levels in more than 30 years (adjusting for inflation, prices dropped to a 100-year low) (IADB/USAID/World Bank 2002). Coffee farmers have been vulnerable to price fluctuations since 1989, when the quota component
of the International Coffee Agreement was dissolved.\(^3\) Recent low prices have resulted from consistent over-supply of coffee on the world market, driven largely by Vietnamese and Brazilian production, and the accumulation of coffee stocks in importing countries. Whereas a decade ago Vietnam’s contribution to total coffee exports was minimal, between 1991 and 2000 the country increased production by 1,130 percent with the help of development agency investments, and today Vietnam is the world’s second largest exporter (ICO data, as cited in Aranda Bezaury 2003:164). Consistent over-production by Brazil, the world's leading coffee exporter, has combined with this new Vietnamese supply to flood the coffee market. This worldwide oversupply of coffee, together with relatively stagnant overall demand\(^4\), has driven coffee prices to drastic lows. Although prices have recently rebounded slightly (2004), the price is still very low compared to historical prices (See Figure 1).

**Figure 1: World Coffee Prices, 1970-2004**

![Graph showing world coffee prices from 1970 to 2004](image)

Source: ICO 2004

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\(^3\) The economic clauses of the International Coffee Agreement (ICA), in effect intermittently between 1962 and 1989, were set up by coffee-producing and coffee-importing countries with the purpose of maintaining a predetermined, stable price for coffee in the international market. Beginning in 1976, the agreement administered the supply and demand of coffee within a price range that was above farmers’ production costs. When this quota component of the ICA was abandoned in 1989, world coffee supply increased and prices dropped markedly (Aranda Bezaury 2003, Boyce 1994). Today, a different series of international policy initiatives are seeking to regulate supply by introducing minimum quality standards into the market, as represented by the International Coffee Organization’s coffee quality-improvement program (ICO Resolution No. 407) (Lewin et al 2004:25).

\(^4\) Since 1990, worldwide coffee production has increased by 15 percent, while consumption has only increased by about 7 percent (Levi and Linton 2003: 412). “Conceptually, the overall [coffee] market can be perceived as a quality pyramid with inexpensive soluble coffee at the bottom, standard commercial blends in the middle, and progressing towards high-end and differentiated coffee at the top. While the top and bottom are growing at a healthy pace, the middle section, representing most of the space of the pyramid, has been stagnant (Lewin et al 2004: 11).”
Changes in the Mexican economy

In Mexico, the world’s sixth largest producer of coffee, growers have faced the added hardship of their government’s reduced support to the agricultural sector as a whole. The past two decades in Mexico have witnessed an array of legal, economic, and institutional reforms geared towards the ‘modernization’ of Mexican agriculture and its integration into the world economy. The ‘Reform of the Countryside’ program launched by the administration of President Carlos Salinas de Gotari in 1989 was aimed at opening Mexican agriculture to international markets and decreasing state regulation of the agricultural sector.

Since 1982 there has been a progressive elimination of government programs and interventions in Mexican agriculture. The trucking industry was deregulated in 1989, lowering the cost of transportation. Control over export permits was removed from the Confederación Nacional de Productores de Frutas y Hortalizas (CNPH) in 1990, which eliminated export quotas held by small farmers in various crops such as melons, mangos, and strawberries. Free extension services were eliminated. Agricultural research was cut back. Parastatal firms were largely eliminated or privatized (e.g. sugar, tobacco, coffee, grains, oils, powdered milk, fertilizers, seeds). Input price subsidies (e.g. electricity and fuel) were progressively reduced. Irrigation districts were turned over to the users. Crop price supports to producers of staples were limited. Subsidized credit and insurance programs were slashed. These reforms were further institutionalized in 1994 with Mexico’s joining of the North American Free Trade Agreement (NAFTA), which—along with other trade agreements Mexico has signed—has progressively opened Mexico’s agricultural sector to foreign sources of supply and led to a decline in the real prices of basic importables (grains and oilseeds) (Yunez and Barceinas 2002).

The implementation of NAFTA was therefore pre-dated by the dissolution of various institutions that had traditionally upheld basic services for small farmers, including coffee growers. The government parastatal, Instituto Mexicano del Cafe (INMECAFE), was created in 1958 to regulate the market and issue export permits. It was also involved in technical assistance, credit, and research. It was liquidated in January 1993, but it had been reducing its activities beginning in 1989; at its peak it had a budget of US$250 million and 4,400 employees. The government never exercised the degree of direct control in coffee that it did in sugar or tobacco—no one was required to sell coffee to INMECAFE—but its withdrawal created problems and opportunities for small producers. The resulting decline in financial, technical, and marketing services left small coffee growers particularly vulnerable to the price fluctuations that would begin that same year with disbanding of the quota component of the ICA (Raynolds 2002).

Product differentiation, certification, and other responses to the coffee crisis

In response to the economic and environmental threats to sustainability that characterize the current coffee situation, a range of more sustainable alternatives has emerged, which is gaining popularity among growers and consumers worldwide. Fair Trade coffee is one such alternative that aims to reduce poverty and safeguard the environment by connecting consumers of gourmet

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5 For a more thorough discussion of reforms, see Yunez and Barceinas 2002.
coffee in developed countries with small-scale developing-country producers. In order for coffee to receive Fair Trade certification, both importers and producers must adhere to a set of conditions established by the Fair Labeling Organizations International (FLO). Fair Trade coffee importers are required to:

1. purchase directly from the growers using contracts that extend beyond a single harvest cycle;
2. guarantee farmers a minimum price (current price set by the FLO is $1.26 per pound for Arabica coffee, the predominant variety found in Mexico); pay a social premium of $0.05 per pound above that minimum (or above the world market price, whichever is higher); and pay an additional $0.15 per pound if coffee is also certified Organic; and
3. provide pre-financing of up to 60 percent of contract value, if requested by growers.

In addition, growers under the Fair Trade certified label must:

1. be small-scale and family-based;
2. be organized into politically autonomous and democratic associations; and
3. pursue ecological objectives that conserve natural resources, including use of shade trees and limited use of chemical inputs.

Mexico is by far the largest supplier of Fair Trade coffee, with annual exports exceeding 3,500 metric tons (Raynolds 2002). Fair Trade certified the first three coffee cooperatives in Mexico in 1989; it has certified 32 cooperatives in Mexico to date, comprising 3,400 members and an estimated 10,000 hectares of coffee. Approximately 84 percent of Fair Trade coffee is from Latin America, with Mexico the leading supplier (Boot 2003; Murray, et al. 2003). Mexico is also the leading exporter of organic coffee. Certified organic production, which requires growers to forego the use of synthetic chemicals and fertilizers, currently consists of an estimated 170,000 hectares of coffee in Mexico, or about 25 percent of total coffee acreage.7

One reason Fair Trade coffee has become so popular in Mexico is due to the relatively low level of ‘technified’ coffee fields compared to other coffee-producing countries. “…for many smallholder farmers in Mexico the cost of transition to environmentally sustainable production is lower than in other countries. Most small-scale farmers in Mexico already grow coffee under a canopy of shade trees, and an estimated two-thirds of farmers are organic by default because there is no money to pay for agro-chemicals” (Boot 2003; see also Rice 1999; Porter 2000). As a result Mexico also has one of the lowest coffee productivity rates in the world. Between 1980 and 1990, Mexico’s coffee yield averaged only 10 quintales8 per hectare (as a comparison, in Costa Rica during the same time period the average was 34 quintales per hectare) (Piñon and Hernández-Díaz 1998). Mexico’s differentiating characteristics thus lie in the nature of the

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6 A full 80 percent of Fair Trade Coffee sold in the United States is also certified organic (Raynolds 2002).
7 This estimate is based on preliminary results from a project being conducted by researchers at the Center for Socioeconomic and Technological Studies in Agriculture (CIESTAM) of the Autonomous University of Chapingo entitled "Sistema de Seguimiento de la Agricultura Orgánica de México". The 170,000 ha figure accounts for both certified organic coffee and coffee that is ‘in transition’ to becoming certified. Coffee farmers must cultivate organically for three years before receiving certification; during this three year process they are in transition (personal communication, Lobato García 2005).
8 Quintal = 57.5 kg parchment coffee (cáf eargemino) = 46 kg (hundredweight) green coffee (cáf ao).
coffee growing process—which involves small, indigenous producers and shade coffee—as well as some potential to produce high quality coffee (although Mexico was never traditionally considered a quality coffee source).

These characteristics make Mexico a good candidate for alternative markets such as Fair Trade that are geared towards socially-conscious, environmentally-conscious, and gourmet coffee consumers. In fact, differentiating peasant-produced shade coffee from the coffee commodity market is really the only hope for survival of this system. These certification programs allow consumers to identify coffee that is grown in a manner congruent with their environmental and/or social beliefs, what are termed “credence goods,” i.e. not something the consumer can verify herself. Fair Trade in particular is about internalizing the social and environmental costs of production and expressing them in the price (VanderHoff 2002). What is occurring in coffee is essentially a quality differentiation along several dimensions: environmental, social, and of authentic origin. Coffees are presented as coming from specific high-quality micro-climates (origin), as organic (environmental), as produced by peasant families (social), and/or as protecting migratory bird habitat (environmental). The existence of local-level cooperatives provides the organizational basis to market with direct contracts, to minimize transaction costs and to organize technical assistance.

Various efforts were mounted following INMECAFE’s dissolution and the collapse of the quota component of the International Coffee Agreement to pursue these different strategies of production and marketing. The efforts were facilitated by the organization of many small coffee growers in local cooperatives, due in part to the history of agrarian reform in Mexico, in part to the indigenous identity of the producers. The National Directorate of Coffee Organizations (Confederacion Nacional de Organizaciones de Caficultores, CNOC) was formed in 1989 to represent 107 cooperatives in southern Mexico, or about 55,000 small growers. Today, CNOC represents approximately 80,000 producers across Mexico (VanderHoff 2002). In addition to CNOC, the Oaxacan state federation (Coordinadora Estatal de Productores de Café de Oaxaca—CEPCO) and other individual cooperatives all attempted to increase the marketing of coffee more directly to roasters and distributors in the importing countries. This strategy has proliferated in Mexico thanks to the pre-existing organized structure, with the shift of technical assistance—such as certification—to the cooperatives (and associated NGOs) and away from the government. The withdrawal of the federal government in this case opened a space that allowed for independent action by the cooperatives, as well as joint action through state-level (CEPCO) or national-level (CNOC) organizations.

The set of standards and conditions set out by FLO provides a stream of economic, social, and environmental benefits. From an economic standpoint, the minimum price guaranteed by Fair Trade importers is a significant improvement over the current price received by most coffee growers, who must sell their coffee through middlemen to national exporters. Mexican coffee growers often receive as little as 30 cents per pound for coffee that is ultimately sold for 7 to 8 dollars per pound to consumers in the United States. This price differential in the conventional coffee market has been linked to monopolistic control over the processing, roasting, and marketing of coffee beans (Porter 2000). The Fair Trade agreement also provides some security, in that it guarantees growers a minimum price regardless of market fluctuations and usually entails multi-year contracts.
The requirement that Fair Trade growers be organized into transparent associations aims to ensure that the economic benefits deriving from participation in the Fair Trade coffee market accrue equally to all members of a particular community. Given this more equitable distribution, communities that are Fair Trade certified—in comparison to non Fair Trade communities—often display a relatively higher level of intra-community cohesion, a larger number of social projects, and a greater involvement and participation of members in these projects. In Fair Trade certified coffee communities throughout the Isthmus region of Oaxaca, for example, community leaders are encouraging the participation of community members in the implementation of projects that extend beyond coffee to include the ecological, social, and cultural development of their villages as well (Piñon and Hernández-Díaz 1998). These types of projects are increasingly being led by groups of women who have organized themselves with the support and encouragement of Fair Trade cooperatives (Aranda Bezaury 2005).

One of the best examples is the pioneering cooperative UCIRI (Union of Indigenous Communities of the Isthmus Region) in Oaxaca, with about 2,000 members from various indigenous groups in one of the poorest areas of Mexico. They have been quite successful in selling virtually all of their coffee through Fair Trade and Organic channels. This has allowed them to engage in a variety of rural development efforts, such as building schools and clinics, hardware stores and food stores, fixing members’ houses with new roofs, floors, stoves, and latrines, starting a public bus service, creating a clothing maquiladora and a fruit preserves factory, and trying to diversify crop production (VanderHoff 2002). Recently they have started selling coffee directly to Carrefour in France at Fair Trade prices. UCIRI’s cooperative effort has created a nexus for action, credit, and sales that has allowed them to compete successfully in the global economy.9

From an environmental perspective, the Fair Trade movement shares similar ecological principles with other alternative coffee markets such as certified organic, bird-friendly, and shade-grown coffee. These environmentally-friendly alternatives reflect the need to bring agricultural systems more in line with the natural environment, given the realities of rapidly expanding human populations and ever-degrading natural resources.

Migration

According to studies by the World Bank, there are increasing problems with food security in Mexican coffee-producing regions, and thousands of permanent and temporary coffee workers have been forced to seek alternative employment as a result of the crisis (Fritsch 2002). Many of these farmers are leaving their rural communities and migrating to the cities, or across international borders, in search of jobs. Although it is difficult to quantify the direct effect of the current coffee situation on undocumented immigration to the United States, there are clear indications of a relationship between these two phenomena.10

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9 The most extensive discussion of the current state of these markets is found in Giovannucci and Jan Koekoek 2003.
10 For example, six of the fourteen undocumented migrants found dead in the Arizona desert in May 2001 were identified as coffee growers (US House of Representatives 2002).
People have been migrating for work from Oaxaca for most of the last century. The Mixtecs in particular have a long history of migration with farm labor contractors to work in agriculture (Zabin, et al. 1993). There was some participation in the Bracero Program by Oaxacans, and this led to increasing undocumented migration to the United States starting in the early 1970s. By the early 1990s, the Mixtecs were working in many areas of the United States (Runsten and Kearney 1994). This migration has accelerated to the point where Oaxaca may now be the largest sending state of new migrants to the United States. A recent study of 63,000 matrículas issued by the Mexican consulate in San Diego between 1995 and 2002 showed that Oaxaca and Guerrero were the leading states, accounting for almost a quarter of the matrículas (Runsten, forthcoming).

Sixty percent of Mexico’s territory is severely degraded, and the Mixteca region of Oaxaca in particular is characterized by high rates of erosion and poor soils (Natural Heritage Institute 1998; Velásquez 2002). However, the coffee regions, because they have maintained traditional shade systems, have suffered less degradation, and the more remote regions of Oaxaca, the state of Chiapas, and the state of Veracruz—where the majority of Mexican coffee is grown—have not traditionally sent migrants to the United States. But now all of these regions are becoming migrant sending areas. Regions such as the Chatino area in the southern Sierra of Oaxaca rapidly committed to U.S. migration in the past decade, even though they have extensive amounts of land. A recent report estimated 2004 remittances to Chiapas from the United States at US$500 million, noting that there were almost no such remittances as recently as 1995 (Balboa 2004).

Selected studies have suggested that the coffee crisis has been associated with increased out-migration from Oaxacan and other southern Mexican coffee-producing communities. A series of case studies from Colorado State University’s Sociology Department have additionally suggested that coffee communities in southern Mexico that are engaged in Fair Trade or organic coffee production have been relatively more able to remain on their farms instead of being forced to migrate. However, no detailed migration study has been conducted in these coffee communities.

Migration theory suggests a number of reasons coffee-growing families might undertake migration, one of which is to diversify risk. Low coffee prices present them with two views of a new reality: on the one hand, coffee has become a more risky (and an overall lower returns) investment, suggesting that sending some family members to work off-farm would lessen the overall risk; on the other hand, the limited financial returns from coffee means that the family requires alternative sources of cash both for living expenses as well as for operating capital for coffee production. The incomplete capital markets in rural Mexico imply that only well-connected coffee cooperatives have access to low-cost operating capital, and even this is limited. The decision to migrate is a function not only of the problems with coffee, but also the demand


12 An important exception is an article by Mestries Benquet (2003) that explores the relationship between the coffee crisis and emigration from coffee-producing communities in the state of Veracruz. However, production of certified coffee is not as common in Veracruz and thus does not factor into the discussion.
for labor in the receiving region and the expected returns from working there. Greater economic
growth in the United States or the devaluation of the peso relative to the dollar both tend to make
migration a more attractive option.

A well-studied characteristic of migration is that it is cumulative and self-perpetuating (Myrdal
1957; Massey et al 2002). As migration from a village develops, the risks associated with it
decline and the expected returns rise due to the development of social capital, leading to more
migration. This increased migration drains human capital out of the region, raising the
opportunity cost of labor and hence the local wage.13 Coffee growers who set out in part to
provide operating capital for coffee via migration thus end up undermining coffee production by
raising its costs.

These migration dynamics have been largely ignored in the recent studies of certified coffee. As
Murray, et al. recently put it:

“…a small but growing percentage of small-scale coffee farmers have found a solution to
the crisis [our emphasis]. In the past decade, more than 500,000 farmers from 23
countries in Latin America, the Caribbean, Africa and elsewhere have become Fair Trade
certified coffee producers. Agreeing to produce their coffee under an externally
monitored set of social and environmental standards, Fair Trade coffee producers in turn
have received a guaranteed price for their coffee. That guaranteed price has been double
or more the recent price paid for conventionally produced coffee, and along with the
social and environmental conditions fostered by participation in Fair Trade has enabled
these farmers to survive the crisis [our emphasis] and invest in the future” (Murray et al
2003: 3).

In the rest of this paper, we explore the impact of migration on a Fair Trade-organic certified
coffee village in Oaxaca, and suggest that such migration might in fact undermine the optimistic
view of the Fair Trade system as it is currently operated.

Taking a Closer Look at the Links: Case Study of a Oaxacan Community

Jessa Lewis and local assistant Adalberta Antonio Santiago interviewed 105 coffee-farming
households during Summer 2004 in San Juan Cabeza del Río, a small coffee-producing
community in Oaxaca. Cabeza del Río is located in the Putla de Guerrero district of Oaxaca’s
Mixteca Baja, a region of high out-migration.14 Coffee farming, accompanied by subsistence
corn and bean production, has been the main economic activity of the community for almost 40
years. It is situated on a dirt road that begins near Putla, a small commercial center located
approximately 35 kilometers to the north of the village. The difficult-to-navigate road winds its
way south through the mountainous region, passing through Cabeza del Río and other
communities of the Santa Maria Zacatepec municipality, and ending in neighboring municipality

13 This is what economists refer to as “Dutch disease.”
14 Cabeza del Río is now officially in the region of Sierra Sur, which borders the Mixteca to the south. It was
formerly part of the Mixteca, but Oaxaca’s last governor altered the regional boundaries, moving Cabeza del Río
from the Mixteca to the Sierra Sur region. However, most people in the community still consider themselves to be
part of the Mixteca region.
Santa Cruz Itunduia in the community of Zaragoza.\(^{15}\) Despite years of government promises, the road has not been paved and the 35-kilometer trip from Cabeza del Río to Putla takes over 4 hours by vehicle. During heavy rains, this road can become impassible and requires constant repair provided by community members on a rotating volunteer basis (tequio).

Two coffee cooperatives, La 21 de Septiembre and Michiza, operate in the community and account for over 130 organized producers in total. The regional cooperative La 21 de Septiembre (under the CEPCO umbrella) began to operate locally in Cabeza del Río in 1994, in many ways stepping in where INMECAFE had stepped out, and acquiring many of its former members.\(^{16}\) Michiza, a much smaller statewide cooperative founded in 1984 on principles similar to those of UCIRI in the Isthmus region, began operating in Cabeza del Río in 1995.\(^ {17}\) At the time of interview, the 130 organized producers in the community were divided roughly equally between the two organizations. Members of CEPCO and Michiza are either certified organic already or are in transition to becoming certified (a three-year process), and all coffee from these cooperatives is sold at Fair Trade prices. Although it is more difficult to determine their exact numbers, there is also a significant presence (at least 50) of non-organized coffee producers in the community. Non-organized producers do not have organic certification, nor can they certify their coffee as Fair Trade by definition, due to their non-organized status. They therefore do not command the associated certification premiums.\(^ {18}\)

The community was selected by reviewing CEPCO villages in conjunction with municipal-level migration data from the 2000 Mexican census (CONAPO 2002). Cabeza del Río was chosen based on the following criteria: large number of both organized producers (socios) and non-organized producers (libres); high quality of coffee commanding a premium price\(^ {19}\); importance

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\(^ {15}\) Like Cabeza del Río, Zaragoza is a coffee-producing community that has been negatively affected by low coffee prices, with many households turning to migration as way to earn extra income. Zaragoza’s high elevation and combination of other agroclimatic factors allow growers to produce coffee of exceptional quality that has recently been acknowledged and sought out by international buyers (personal communications, Hernandez Balderas 2004, Aranda Bezaury 2004). Given the high quality of its coffee and the success of other non-coffee ventures in the community (Zaragoza runs several successful timber operations as well), this community has received much recent attention and study from other North American and Mexican researchers (see Harris 2002, Instituto Maya 2005, Santiago Paz 1998; Martinez-Legaria 2003). These studies can provide an excellent baseline for comparison with Cabeza del Río due to regional and other similarities.

\(^ {16}\) La 21 de Septiembre is one of the largest regional cooperatives under the CEPCO umbrella, with over 900 organic producers in 21 communities throughout the Putla district (Garcia Garcia, personal communication 2004). CEPCO is comprised of 16,000 members statewide residing in 64 municipalities throughout Oaxaca (Boot 2003: 19; personal communication, Melchor Vila 2005), and includes ten of Oaxaca’s indigenous groups.

\(^ {17}\) Michiza was founded in 1984 and adopted its formal name of Yeni Navan, Sociedad de Produccion Rural de Responsible Limitada (SPR) in 1989. It has a total of 1,300 socios in 48 communities throughout Oaxaca (Hernandez-Diaz 2004; personal communication, Cruz Sanchez 2004).

\(^ {18}\) The pilot study included significant numbers of both organized and non-organized producer households (67 and 38, respectively) in order to allow for statistical comparisons to be drawn between the two. Coffee producers were enumerated and divided into two basic groups: those that are organized and participate in Fair Trade/organic coffee production and those that do not. Each group was further stratified by prior information on migration collected through the enumeration, and a random sample was drawn from the strata. Producers were asked a series of quantitative and qualitative questions regarding basic demographic characteristics of the household, coffee production, and household- and village-level migration (past, current, future).

\(^ {19}\) The relatively high elevation of the community (1040 meters) and surrounding agricultural lands lends itself to the production of high quality coffee. This coffee commands a superior price compared to that which is produced in lowland coffee-producing regions of Mexico.
of coffee production as an economic activity; significant number of organized members receiving Organic and/or Fair Trade certification, with correspondingly significant sales to Fair Trade/Organic markets; and noteworthy presence of out-migration.

History of migration from Cabeza del Río

Internal migration within Mexico from Cabeza del Río has been taking place for generations, and migration to the United States has been occurring at some level from the community since the early 1980s. The most recent Mexican Census (INEGI 2001) recorded the population of Cabeza del Río in that year to be 1,657 individuals. This figure accounts only for those individuals residing in the community at the time the census was carried out. Official community documents record Cabeza del Río’s 2003 population at 1,947 individuals. This 2003 figure accounts for individuals residing in the community at time of census plus individuals considered to be outside the community temporarily (i.e. temporary migrants).

Tables 1A and 1B present population estimates for Cabeza del Río. Based on the community’s 2003 figure of 1,947 plus data collected in the pilot study, the estimated population of community members who were residing in Cabeza del Río during Summer 2004 is 1,512. An additional 435 individuals are estimated to be living temporarily outside the community (310 in the United States, and 125 elsewhere in Mexico). Using the same 1,947 figure as a base, an additional 417 individuals are estimated to have migrated permanently from the community (177 to the United States, 240 elsewhere in Mexico). The majority (91 percent) of these permanent migrants are married. It can be expected that at least some of the categorized ‘temporary migrants’ will eventually become (and indeed may already be) permanent migrants. As will be discussed later in this paper, the majority of temporary internal migrants from these households are single children who are studying, and this higher education makes them less likely to return given the limited opportunities inside the community. Most temporary US migrants are also children whose parents may have a hard time admitting that they will not eventually return home to stay. The large number of individuals born into coffee-producing households in the community who now live permanently either in the United States or elsewhere in Mexico, indicates that permanent settlement is a likely trend, particularly once a household member marries. In summary, there were 2,364 people identified overall with ties to Cabeza del Río: 487 (21 percent) in the United States, 365 (15 percent) elsewhere in Mexico, and the remaining 1512 (64 percent) in the community.

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20 Since only coffee-producing households were interviewed for the 2004 study, these calculations assume that non-coffee-producing households are similar to coffee-producing households in broad demographic and migratory terms.
Table 1A
Population Estimates for Cabeza del Río, 2004

<table>
<thead>
<tr>
<th></th>
<th>Household heads</th>
<th>Single children</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals currently migrated temporarily to the United States</td>
<td>52 (2.7%)</td>
<td>258 (13.3%)</td>
<td>310 (15.9%)</td>
</tr>
<tr>
<td>Individuals currently migrated temporarily in Mexico</td>
<td>0 (0%)</td>
<td>125 (6.4%)</td>
<td>125 (6.4%)</td>
</tr>
<tr>
<td><strong>Subtotal temporary migrants</strong></td>
<td><strong>52 (2.7%)</strong></td>
<td><strong>383 (19.7%)</strong></td>
<td><strong>435 (22.3%)</strong></td>
</tr>
<tr>
<td>Individuals currently living in the community</td>
<td></td>
<td>1512 (77.7%)</td>
<td></td>
</tr>
<tr>
<td><strong>Total residents and temporary migrants</strong></td>
<td><strong>52 (2.7%)</strong></td>
<td><strong>1565 (80.0%)</strong></td>
<td><strong>1947 (100%)</strong></td>
</tr>
</tbody>
</table>

N=95  
Sources: Cabeza del Río Unidad Medica Rural (2003)  
Oaxacan Migration and Coffee Production Pilot Study (2004)

Table 1B
Estimate of Population Migrated Permanently from Cabeza del Río Households

<table>
<thead>
<tr>
<th></th>
<th>Household heads</th>
<th>Single children</th>
<th>Married children</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals migrated permanently to the United States</td>
<td>7</td>
<td>24</td>
<td>146</td>
<td>177</td>
</tr>
<tr>
<td>Individuals migrated permanently within Mexico</td>
<td>0</td>
<td>7</td>
<td>233</td>
<td>240</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7</strong></td>
<td><strong>31</strong></td>
<td><strong>379</strong></td>
<td><strong>417</strong></td>
</tr>
</tbody>
</table>

N=95  
Sources: Cabeza del Río Unidad Medica Rural (2003)  
Oaxacan Migration and Coffee Production Pilot Study (2004)

Migration typically leads to an exacerbation of wealth disparities among households in a community. It is the wealthier households that can afford to send migrants to the United States in the first place, and this migration serves to further increase their wealth as migrants send money back home to their families. This pattern is notable in Cabeza del Río, where a clear differentiation can be observed between households that have migrated internationally and those that have not. A further distinction can be observed among households that have migrated internationally depending on when that migration began initially. Table 2 displays the distribution of coffee-producing households according to the first year the first household member left for the United States. It shows that over one-half of migrant coffee-producing households sent their first household member to the United States sometime after 1995. As would be expected, those households that began migrating internationally at an earlier stage appear to be wealthier today than those that began migrating more recently. Using asset accumulation (ownership of cattle) and living conditions (material of roof of house) as proxies for wealth, Table 3 displays this differentiation among households according to international migration history. At the time of interview, the households that had sent migrants to the US before 1995 were more likely both to have better-constructed houses and to own cattle than the households that migrated after 1995. Those households that had never migrated were most likely to have rustic houses and to own no livestock.
Table 2
Year of First Departure by First Household Member to Migrate to the United States

<table>
<thead>
<tr>
<th>Year of Departure</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982 - 1995</td>
<td>28</td>
</tr>
<tr>
<td>1996 - 2000</td>
<td>25</td>
</tr>
<tr>
<td>2001 - 2004</td>
<td>22</td>
</tr>
<tr>
<td>No HH member ever migrated to the United States</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>
N=97
Source: Oaxacan Migration and Coffee Production Pilot Study (2004)

Table 3
International Migration and Indicators of Wealth

<table>
<thead>
<tr>
<th></th>
<th>Roof of corrugated iron or tile</th>
<th>Cement roof</th>
<th>Cattle owned</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>First US migrant originating in HH left 1982 - 1995</td>
<td>17</td>
<td>52</td>
<td>52</td>
</tr>
<tr>
<td>First US migrant originating in HH left 1996 - 2000</td>
<td>23</td>
<td>33</td>
<td>29</td>
</tr>
<tr>
<td>First US migrant originating in HH left 2001 - 2004</td>
<td>25</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>No one ever migrated from HH to the United States</td>
<td>35</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
N=97
*Differences between early and more recent migrants significant at 99% (p<.0001 for roof and p=.011 for cattle).
Source: Oaxacan Migration and Coffee Production Pilot Study (2004)

An important question with regard to this case study is whether or not households that have migrated internationally, particularly those that began migrating early on, have used the added wealth accumulated through migration to invest further in coffee production. Tables 4 and 5 display total coffee land owned and total coffee kilos sold by households in 2004. These tables show that those households sending migrants to the United States from an early stage are likely to have the most coffee land and to have sold the most coffee in the 2004 harvest. Although it cannot be determined from the data to what extent households were participating in coffee production before they began sending family members abroad, these results can tentatively suggest that, at least historically, migration and coffee production in the community have been complementary activities.
The coffee crisis and increased international migration

Like small growers across Oaxaca, Mexico and the world, the coffee-producing households of Cabeza del Río have suffered from the continued drop in world coffee price. Although, as discussed above, migration to the United States has been occurring at some level since the 1980s, unique sojourns by members of coffee-producing households have accelerated dramatically in
the last 5 years. First-time US sojourns by household members, a trickle throughout the 1980s and the early 1990s, increased notably in 1999: 74 percent of first-time sojourns to the United States by members of coffee-producing households have occurred in the last 5 years. As Figure 2 suggests, this recent surge in sojourns to the United States can be linked at least in part to the recent drop in world coffee price. A simple regression where percent of first-time US sojourns was regressed on international coffee price found that the coffee price was significantly negatively correlated with percent of US journeys, accounting for approximately one-fifth of the variation. However, when introducing a major ‘pull’ variable attracting migrants to the US (the strength of the US dollar), the price of coffee is no longer a significant determinant of percent of US sojourns. This suggests that other factors beyond price are mostly responsible for this recent increase.

Figure 2: Cabeza del Río Migrant Journeys to the United States and Coffee Prices

![Graph showing correlation between coffee price and percent of US sojourns](image)

N=101
Sources: International Coffee Organization (ICO 2004a)
Oaxacan Migration and Coffee Production Pilot Study (2004)

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21 The most common US state of destination for the last decade or so has been New Jersey (89 percent), where migrants are employed in a variety of jobs ranging from yardwork to restaurant services to factory work to construction. In the 1980s, the most common international destination for migrants was the US state of California. A similar percentage was found by Mestries Benquet (2003) in his study of coffee-producing communities in Veracruz. His study found that 76 percent of international sojourns from those coffee-producing communities had commenced since 1998-1999.

22 Regression equation predicting percent of US sojourns over the period 1982 to 2003 based on international coffee price is significant (F(1,20)=5.524, p=.029), with an adjusted $R^2$ of .18. The correlation between coffee price and percent of sojourns is significant and negative (Beta =-.465, t=-2.35 (p=.029)).

23 Regression equation predicting percent of US sojourns based on international coffee price and peso/dollar exchange rate was significant ((F(2,19)=16.521, p<.001), with an adjusted $R^2$ of .60. The correlation between peso/dollar exchange rate and percent of sojourns is positive and significant (Beta =.705, t=4.67 (p<.001)). The correlation between coffee price and percent of sojourns is still negative but is no longer significant (Beta =-.186, t=-1.23 (p=.234)).
The link between low coffee price and migration is supported by interviewee response to the open-ended question of why household members had gone to the United States (Table 6). When asked to specify the reasons why a household member had migrated internationally, the most commonly cited response, following “lack of money / poverty”, was that coffee is no longer a viable economic activity (“el café ya no vale”, or “coffee no longer has value”). Closely following that response was a perceived lack of income opportunities in the community, suggesting that these individuals do not currently consider coffee production to be a viable income-generating activity.

<table>
<thead>
<tr>
<th>Cited Motive for International Migration</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of money/Poverty</td>
<td>66</td>
</tr>
<tr>
<td>‘El cafe no vale’</td>
<td>23</td>
</tr>
<tr>
<td>Lack of income opportunities</td>
<td>20</td>
</tr>
<tr>
<td>Build or improve a house</td>
<td>14</td>
</tr>
<tr>
<td>Children's education expenses</td>
<td>8</td>
</tr>
<tr>
<td>Medical expenses / illnesses</td>
<td>6</td>
</tr>
</tbody>
</table>

N=73
Source: Oaxacan Migration and Coffee Production Pilot Study (2004)

The recent surge in US-bound migration since 1999 coincides with a period of tightened border enforcement by the US government, which has made it increasingly more expensive and more dangerous for undocumented immigrants to cross into the United States. Figure 3 illustrates the rising trend in migrant smuggler fees, which have increased sharply since the late 1990s. A female migrant from Cabeza del Río, who was interviewed in February 2005 in Asbury Park, New Jersey, reported paying US$3,700 to smugglers in 2004 in order to transport herself and her two-year-old daughter across the US border. Other migrants from the community who are living in Asbury Park reported spending several days walking through the unforgiving desert in order to arrive in the United States, an experience that none of them hoped to repeat. Given the increasing costs and dangers associated with crossing the border, many of these migrants are staying in the United States for longer periods of time than they had originally intended when leaving Cabeza del Río. That a growing number of individuals from Cabeza del Río have decided to pursue international migration as an economic strategy, at a time when the costs and dangers of crossing the border are higher than ever, suggests that the forces driving migration are unresponsive to US immigration policies.²⁶

²⁵ Informants were asked about the household’s motives for international migration in an open-ended format, so were not limited to a single response. All answers provided by the informant were recorded. In addition to the top six reasons shown in Table 6, other responses included: ‘to feed the children’, ‘to start a business’, ‘to adventure’, ‘because the male children no longer want to work in the campo’, and ‘because migrant children want to buy themselves nice clothes and a car or truck’.
²⁶ This has been forcefully argued by Doug Massey and his co-authors. Massey, et al. 2002.
Labor scarcity, wage-labor costs and remittances: Migration and its economic impacts on coffee production

The relationship between coffee production’s profitability and US-bound migration is certainly not unidirectional. Although a consistently low coffee price has likely contributed to the recent surge in international sojourns, this migration sets in motion a series of other processes that affect coffee production’s viability in a variety of ways that extend beyond commodity liquidation price. First, the departure of household members from the community erodes family labor power, particularly male family labor power. While internal Mexican migration from Cabeza del Río is divided more or less equally between men and women, international migration is performed mostly by men (88 percent) of prime working age (78 percent fall between the ages of 16 and 28, inclusive). Consequently, there is a relative lack of men in this prime working age range in the community. Women are present in coffee-producing households in Cabeza del Río at higher percentage levels in every 5-year age interval between 20 and 49. At the time the

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27 These descriptive statistics apply to household members in the US at the time of interview, and they are consistent with demographic statistics reported by another recent case study on migration from coffee-producing communities in southern Mexico. Mestries Benquet (2003) found that US-bound migrants from coffee communities in Veracruz are predominantly male (89 percent) and also of prime working age (75 percent between ages 20 and 34). On the level of Mexico as a whole, the National Population Council of Mexico (CONAPO), based on surveys carried out between 2001-2003, estimated that temporary US-bound Mexican migrants are 94 percent male, and that 85 percent are between the ages of 12 and 44 (CONAPO 2004).

28 Cumulative percentages of men and women aged 20 to 49 are 18 percent and 36 percent, respectively.
interviews were conducted, over one-half of coffee-producing households had at least one male household member in the United States, often including the male head of household (Table 7).

Table 7

<table>
<thead>
<tr>
<th>Presence of Head of Household and/or Sons in the United States</th>
<th>At time of Interview</th>
<th>In the last 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOH only or HOH plus one or more sons in the United States</td>
<td>20%</td>
<td>29%</td>
</tr>
<tr>
<td>One or more sons in the United States</td>
<td>36%</td>
<td>34%</td>
</tr>
<tr>
<td>No HOH nor any sons in the United States</td>
<td>44%</td>
<td>37%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

N=102
Source: Oaxacan Migration and Coffee Production Pilot Study (2004)

Although coffee activities are performed by men and women alike, there are activities in the coffee fields that require a certain degree of physical strength and are almost exclusively performed by men. When a man is not available to do the work, someone must be hired to complete the task, or it is often simply left undone. Furthermore, the harvesting of coffee—which in Cabeza del Río and in most of Mexico is performed by hand—is not only a labor-intensive but also a time-sensitive process. Coffee berries must be plucked at a precise stage of ripeness to ensure optimal quality. In order to address this labor constraint at particular times of the crop cycle, coffee-producing families in Cabeza del Río have traditionally engaged in mutual, unpaid labor exchanges called *guezas*. In addition to the *guezas*, the hiring of non-family labor, especially during harvest time, has been a common and crucial practice in Cabeza del Río for as long as its inhabitants have cultivated coffee. Day-laborers from nearby communities have typically arrived during periods of peak activity to work for daily wages. In addition, landless (or relatively coffee land-poor) individuals from Cabeza del Río perform this day-labor on the fields of their neighbors. This wage-based system of labor exchange largely dominates in the community today, although a select number of families continue to perform purely voluntary *guezas*.

An overriding complaint of coffee producer households was that it has become increasingly more expensive to hire this labor, needed primarily for the weeding/cleaning (*limpias*) and particularly the harvest. According to the interviewees, the average amount paid daily for hired labor just 5 to 7 years ago was 50 pesos; at the time of interview most producers paid a daily wage for laborers of 100 pesos. In US dollar terms, this represents an approximate 56 percent increase in hired labor costs. 29 Interviewees claim that some day-laborers are starting to demand up to 120 pesos, and they fear that these costs of hired labor will rise even further in the future.

29 Average dollar wage between 1997 and 1999 was $5.62, versus a dollar wage of $8.77 in 2004, an increase of 56 percent.
been a common practice, are also complaining about the problems of reduced availability of laborers and the increasing cost of hiring them (Bartra et al 2005).

This rise in labor cost can be attributed in large part to migration, since people have an alternative cash-generating opportunity in “el norte” and thus can demand a higher wage. International migration has increased in communities surrounding Cabeza del Río as well. Whereas the majority of non-family labor was previously provided by non-community members, two-thirds of coffee-producing households currently employ day-laborers exclusively from Cabeza del Río; much smaller percentages employ labor exclusively from surrounding communities or from a combination of the two categories (see Table 8). This reduced influx of labor from surrounding communities has exacerbated the labor scarcity problem and given wage-laborers in the community even greater leverage to command higher pay for their work. Many interviewed producers who were unable to find or unable to afford enough day-laborers, or who were simply unwilling to invest significant sums of money in hired labor given the low price of coffee, lamented the large quantities of coffee berries left to rot on the branches during the 2004 harvest. Although, as noted above, Mexico averaged over 10 Qq per hectare in the 1980s, the average amount of coffee harvested and sold by producers in 2004 in Cabeza del Río was only 2.6 Qq per hectare.\footnote{This average applies only to those producers in Cabeza del Río who actually sold coffee in 2004. The sale of so little coffee does not necessarily imply that their yields were that low, but rather that they were unable or unwilling to harvest all of the coffee. For Mexico at large, the National Coalition of Coffee Organizations (CNOC) estimates that 20 percent of the 2004 crop was left to rot in the fields due to low coffee prices (Carlsen and Cervantes 2004: 1). In the case of Cabeza del Río, further study is required to determine exactly to what extent low coffee sales are a product of 1) an actual decrease in yields resulting from fewer plant renovations and failure to perform certain yield-enhancing cultivation practices such as pruning, application of fertilizer, and two cleanings, versus 2) the unavailability of labor at time of harvest, versus 3) a decision by farmers to not pick their coffee (or hire laborers to pick their coffee) because anticipated sales will not cover costs.}

### Table 8

**Origin of Hired Coffee Day-Laborers in Cabeza del Río, by Coffee Growers**

<table>
<thead>
<tr>
<th></th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabeza del Río only</td>
<td>66</td>
</tr>
<tr>
<td>Surrounding communities</td>
<td>19</td>
</tr>
<tr>
<td>Cabeza del Río plus</td>
<td>16</td>
</tr>
<tr>
<td>Surrounding communities</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

N=63  
Source: Oaxacan Migration and Coffee Production Pilot Study (2004)

Although international migration has contributed to the erosion of family labor power and to inflated costs of hiring non-family labor, it also has contributed extra income in the form of migrant remittances. Many households in the community are currently using part of the remittances they receive to help cover operating costs for coffee production. In response to an open-ended question about remittance use, paying day-laborers for coffee activities was the second most commonly-cited use of remittances by receiving coffee households, following food and basic household needs (Table 9A). When asked specifically if remittances had been used for...
investment in coffee production, nearly three-quarters of remittance-receiving households replied that they had used remittances to hire day-laborers for the *limpia* and/or harvest. A much smaller percentage of households had used remittance money to purchase coffee land and/or invest in coffee processing infrastructure (Table 9B).

Table 9A
Cited Uses of Remittances

<table>
<thead>
<tr>
<th></th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and basic household needs</td>
<td>78</td>
</tr>
<tr>
<td><strong>Non-family labor for coffee activities</strong></td>
<td>33</td>
</tr>
<tr>
<td>Medical expenses / illnesses</td>
<td>30</td>
</tr>
<tr>
<td>Construct or improve a house</td>
<td>27</td>
</tr>
<tr>
<td>Children's education expenses</td>
<td>21</td>
</tr>
<tr>
<td>Purchase livestock (cattle)</td>
<td>6</td>
</tr>
</tbody>
</table>

N=74
Source: Oaxacan Migration and Coffee Production Pilot Study (2004)
*Question asked without any specific prompting regarding use of remittances for coffee production.

Table 9B
Cited Use of Remittances for Coffee Production

<table>
<thead>
<tr>
<th></th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hire non-family labor for coffee activities</td>
<td>74</td>
</tr>
<tr>
<td>Purchase coffee land</td>
<td>7</td>
</tr>
<tr>
<td>Purchase processing equipment/infrastructure</td>
<td>2</td>
</tr>
</tbody>
</table>

N=74
Source: Oaxacan Migration and Coffee Production Pilot Study (2004)
*Follow-up question on use of remittance, a direct, specific question regarding use of remittances for coffee production.

Table 10 cross-tabulates the peso amount spent by households on hiring labor to help with three major coffee activities (the *limpia*, harvest, and pruning) with degree of international migration by male household members. The table indicates that when households have male family members in the US, they are much more likely to hire in labor for these coffee-producing activities and to spend more on this hired labor. This difference is most pronounced when one of the males in the United States is the head of household (HOH), a result that is to be expected given that the HOH usually performs the bulk of the labor required for coffee cultivation activities (with the help of his family and/or hired labor).
Table 10
Pesos Spent on Hired Labor for the *Limpia*, Harvest, and Pruning Per Kilo of Coffee Produced versus Degree of International Migration by Male Household Members in the Last 5 years

<table>
<thead>
<tr>
<th>Migrated to the United States:</th>
<th>No labor hired</th>
<th>.001 to 10 pesos/kilo</th>
<th>&gt;10 pesos/kilo</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOH only or HOH plus one or more unmarried sons</td>
<td>8% 8</td>
<td>22% 30</td>
<td>48% 60</td>
<td>63% 100</td>
</tr>
<tr>
<td>One or more male children</td>
<td>13% 10</td>
<td>47% 48</td>
<td>42% 42</td>
<td>100</td>
</tr>
<tr>
<td>No HOH nor male children</td>
<td>79% 59</td>
<td>31% 31</td>
<td>10% 10</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

N=87  Top numbers in cell are row percentages, bottom numbers are column percentages
* Differences according to degree of international migration significant at 99% (p<.0001).
Source: Oaxacan Migration and Coffee Production Pilot Study (2004)

One interesting consequence of households using remittances to hire non-family labor is that some of this money is shared with non-migrant households, circulating the remittances throughout the community and lessening at least somewhat the tendency for migration to exacerbate the income/wealth gap. As mentioned above, the majority (two-thirds) of day-laborers now come from Cabeza del Río itself and not from surrounding communities. In 15 percent of all coffee-producing households, the head of household works on other people’s land consistently throughout the year in order to earn the majority of his household’s annual income. As would be expected, working most of the year on other people’s land for pay is more likely to be an option sought out by households that do not send migrants to the United States and thus do not have this additional income source (Table 11).31

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31 It is not uncommon, however, to find a producer family who hires in the majority of labor needed for all stages of coffee production, but who nonetheless continue to work—if only minimally—on their neighbors’ farms during harvest time, either in *guezas* or for pay. In these cases, it is not necessarily the need for money that drives family members to pitch in on their neighbors’ farms, but rather the strong tradition of mutual exchange and cooperation that still exists in the village plus the social stigma attached to appearing lazy or ‘too good’ for the campo.
Table 11
Provision of Year-Round Labor by Male Head of Household (HOH) According to Degree of International Migration since 1999

<table>
<thead>
<tr>
<th>Migrated to the United States</th>
<th>Proportion of HHs where HOH works as day-laborer year-round</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOH only or HOH plus one or more unmarried sons</td>
<td>4%</td>
</tr>
<tr>
<td>One or more male children</td>
<td>11%</td>
</tr>
<tr>
<td>No HOH nor male children</td>
<td>26%</td>
</tr>
</tbody>
</table>

N=100
* Differences according to degree of international migration significant at 95% (p=0.0128)
Source: Oaxacan Migration and Coffee Production Pilot Study (2004)

Migration and socio-cultural impacts on coffee production and the community: Higher education, ‘de-peasantization’, and strained communal governance

Various socio-cultural changes associated with international migration can be noted in Cabeza del Río in addition to its economic impacts. As stated above, it is primarily young people (almost 80 percent aged 16 to 28) who are leaving the community for the United States in order to supplement their family’s income. As young people from Cabeza del Río experience life outside the community, coming into contact with other potential options for making a living, their perception of life in the campo changes significantly. In fact, many children who have migrated to the United States express frustration to their parents regarding what they see as the now fruitless pursuit of coffee production. There is often tension between migrant children—who want their parents to use the remittances they send home for basic food, health, and education needs—and their parents, who have remained in the community and are committed to coffee production. As these children enter adulthood, it is doubtful that many will decide to carry on their parents’ work in the coffee fields, particularly if prices do not rebound. And parents are becoming increasingly aware of this reality: over half believed that their children would not continue with coffee cultivation.

Migration and higher education

Even those young people who have not ventured to the United States are much more likely than their parents—and indeed many are encouraged by their parents—to pursue other options besides the life of a farmer. Most prominently, there is much greater focus now as compared to even twenty years ago on the higher education of the community’s children. Except for the poorest households in the community, who cannot afford to send their children to school beyond middle school, most parents dream of higher educational achievement for their children that will open up doors to a greater range of employment options. Whereas middle-aged and senior individuals
in the community often received only a few years of elementary school or no schooling whatsoever, it is generally expected in Cabeza del Río that a child will attend school at least through middle school, since a middle school facility functions in the community.

Several children in Cabeza del Río are also now pursuing education beyond middle school: 27 percent of coffee producer households contain at least one member who is currently pursuing or has already completed high school, and 13 percent of households have at least one member who is pursuing or has completed her/his university Bachelors degree. Studying beyond middle school requires that a student migrate to another town in Mexico, as there is no high school nor university in Cabeza del Río. The pursuit of higher education is in fact the primary purpose presently behind the majority of temporary internal migration of household members. Three-quarters of temporary migrants are currently studying, and many of them are pursuing or have already earned their Bachelor’s degree. The age range for these temporary internal migrants is between 14 and 25, and compared to temporary migrants to the United States this group is much more likely to be female. In fact, there are roughly equal percentages of male and female children who are pursuing higher education. The majority (71 percent) migrate within Oaxaca state, mostly to the nearby town of Putla but also to Oaxaca City, Huajuapan de León, Pinotepa Nacional, and Tlaxiaco; smaller numbers have ventured to other states in Mexico (see Table 12).

32 At the time of interview, the community had purchased a plot of land in order to build a high school in Cabeza del Río.
The internal migrants discussed here are currently considered to be away temporarily. However, their higher educational achievement provides them with a wider range of employment opportunities beyond the campo that makes their return to the community unlikely. The irony of seeking greater education is that there are virtually no employment opportunities in the village that would utilize the education. At the time of interview in 2004, only two individuals were found to be residing in the surveyed coffee-producing households who had completed high school and/or university schooling. One is employed as a teacher in the town’s middle school (all other teachers at the school commute in from other regions/states of Mexico). The other individual is also a teacher, but he typically lives and teaches in other communities of the region; he was living at home during the time of interview only because his wife had just given birth to a baby daughter.

The pursuit of higher education is being facilitated in part by the remittances sent by migrants in the United States. Touchingly, there were some households in which an older child had migrated to the United States and was sending money directly to a younger brother or sister for pursuit of

### Table 12
Profile of Temporary Internal Migrants

<table>
<thead>
<tr>
<th>Education (N=31)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently studying</td>
<td>75</td>
</tr>
<tr>
<td>Currently pursuing or already completed high school</td>
<td>40</td>
</tr>
<tr>
<td>Currently pursuing or already completed university</td>
<td>40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age (N=21)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>14-16</td>
<td>13</td>
</tr>
<tr>
<td>17-22</td>
<td>78</td>
</tr>
<tr>
<td>23-25</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Single (N=32)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>98</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Female (N=32)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>54</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Destination (N=31)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Putla, Oaxaca</td>
<td>43</td>
</tr>
<tr>
<td>Oaxaca City, Oaxaca</td>
<td>16</td>
</tr>
<tr>
<td>Huajuapan de León, Oaxaca</td>
<td>7</td>
</tr>
<tr>
<td>Pinotepa Nacional, Oaxaca</td>
<td>5</td>
</tr>
<tr>
<td>Tlaxiaco, Oaxaca</td>
<td>2</td>
</tr>
<tr>
<td>Tecomatlán, Puebla</td>
<td>12</td>
</tr>
<tr>
<td>México, DF</td>
<td>12</td>
</tr>
<tr>
<td>Acapulco, Guerrero</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: Oaxacan Migration and Coffee Production Pilot Study (2004)
higher education. As shown in Tables 6 and 9A above, when asked in an open-ended format, ‘educational expenses’ was among the top five most commonly-cited motives for international migration, and also among the top five most commonly-cited uses of remittances. When asked specifically if they used part of remittances for educational expenses, 83 percent of receiving households replied in the affirmative, and in 28 percent of these households the money was used for a child’s higher education (high school or university). An additional 6 percent reported that they are planning to use remittances to finance higher education, though they have not done so yet (the child is not yet of age).

In conclusion, the relationship between migration and education is much more complex than one might expect. Children who migrate to the United States at a young age are apparently forgoing higher education for themselves; no temporary migrants from Cabeza del Río who were living in the United States had received education beyond middle school. However, the money sent home by international migrants is helping to enable other children from the community to migrate internally in pursuit of education beyond middle school. High school and university education is most typically pursued between the ages of 15 and 22, inclusive, though some individuals in this age range are still studying middle school in the community. Excepting these individuals who are still studying middle school, this age cohort accounts for almost one-fifth of Cabeza del Río’s population (current community residents plus temporary migrants). Of these young adults, 33 percent are living in the community, 38 percent have migrated temporarily to the United States, and neither of these two groups has studied beyond middle school. However, 23 percent of these young adults are somewhere else in Mexico pursuing higher education. Given the typically low educational level attained by most individuals born into remote, rural Mexican communities, this finding is interesting and is worth further exploration. For the purposes of this particular case study, however, the most important implication is that this higher educational attainment opens new doors of opportunity for young people, which serves to drive them further away from the campo and from coffee production.

Migration’s impacts on community traditions and communal governance

Even when looking at the community’s older generation, there appears to be a shift out of agriculture in general. This trend is apparent in the tendency for households to shift away from basic subsistence corn production. Over one-fifth of coffee-producing households planted no corn whatsoever in the last cycle, and therefore needed to purchase all corn. The majority of coffee-producing households (78 percent) still produce some corn for subsistence. However, less than one-fifth were self-sufficient in corn, and very few produced enough corn to sell any within the community (see Table 13). The recent opening of a tortillería by one migrant household in the community, and its ability to remain in business, further represents this shift away from subsistence corn production and processing by individual households.

---

33 An additional 6 percent are in Mexico but are not studying.
34 Almost all corn is purchased at the local CONASUPO store (Compañía Nacional de Subsistencias Populares) that provides subsidized prices to community members. A few households purchase from neighbors.
Finally, out-migration is taking its toll on the communal system of governance that operates in the town. Although the inhabitants of Cabeza del Río are mestizos, and indigenous languages have long since died in the community, they still govern themselves by an indigenous communal system of usos y costumbres which requires that community members assume positions of responsibility called cargos (voluntary community service) and tequios (collective voluntary labor on community projects). The departure of so many male inhabitants of prime working age from Cabeza del Río to the United States is affecting these communal systems of governance and voluntary work, and the men that remain behind (i.e. those that do not migrate) complain that they are shouldering an unfair share of their village’s communal duties. Cabeza del Río is starting to implement new rules for migrants. For example, if someone has been appointed to a cargo and wants to leave the community he must now pay a 10,000 peso fine in order to remain a community member. Similarly, when a man is called for tequio service, his family must pay someone (typically 100 pesos/day) to substitute for him in his absence.

If a tequio is not overly-strenuous physically, a woman often substitutes for her husband. There are also many women who are beginning to occupy cargos in place of their husbands, shifting notions of traditional gender roles and responsibilities. This shift in gender roles is also apparent at the level of the coffee organizations, where women have comprised an increasing percentage of membership: 39 percent of La 21’s current membership and 62 percent of Michiza’s current membership.

---

Table 13
Corn Production by Household

<table>
<thead>
<tr>
<th>Percentage of Households (%)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some corn produced</td>
<td>78</td>
</tr>
<tr>
<td>Some corn produced, some bought from CONASUPO</td>
<td>59</td>
</tr>
<tr>
<td>Self-sufficient in corn</td>
<td>14</td>
</tr>
<tr>
<td>Self-sufficient in corn, and extra corn sold to neighbors</td>
<td>5</td>
</tr>
<tr>
<td>No corn produced (all corn bought from CONASUPO or neighbors)</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

N=104
Source: Oaxacan Migration and Coffee Production Pilot Study (2004)

---

35 Of Oaxaca state’s 570 municipalities, 415 follow traditional forms of community organization known as usos y costumbres (VanWey, et al 2005: 86).
36 In addition to paying these types of official fines, many families in Cabeza del Río who have migrants in the US attempt to compensate for the absence of their family members by other, non-official means. For example, a son from one family migrated to California in the early 1980s, and he sent enough money home in the first decade of his absence for his family to build a new, two-story cement house in the community. This son has married a US citizen and is now living permanently in California with his wife and children. His parents, however, rather than moving out of their rather run-down adobe house and into the house built with their son’s remittances, have decided to use their son’s house to provide shelter free-of-charge to the group of commuting schoolteachers who reside in the town during the academic year. As the father explained to me, they do this so that when his son returns for visits or in the event that he ever decides to return to the community, no one would give him trouble for not performing his communal duties.
membership is female. Belonging to an organization requires that a socio attend frequent local meetings and be present for inspections and other requirements of their cooperative, obligations that cannot be fulfilled by an individual who takes frequent sojourns away from the community.\textsuperscript{37}

**Impacts of the coffee crisis on the environment**

Coffee is produced in some of the poorest and most marginalized regions of Oaxaca, in communities characterized by relatively poor infrastructure and poor accessibility (i.e. bad roads). One positive by-product of these developmental deficiencies from an environmental perspective is that coffee regions also tend to be more environmentally pristine than more developed areas. The coffee calamity in Mexico is therefore threatening not only some of the country’s poorest people, but also the country’s delicate environment. This trend is worrisome from an environmental public goods perspective given that many of these coffee farms, and their surrounding forests, fall within the internationally-designated Mesoamerican ‘biodiversity hotspot’ zone.\textsuperscript{38}  \textsuperscript{39}

Like the majority of Mexico’s coffee growers, the producers of Cabeza del Río manage small plots and intercrop coffee trees with shade trees of various types—including fruit trees, like banana or citrus, as well as nitrogen-fixing trees—in a diverse agroforestry system (Porter 2000). As opposed to many other coffee-producing countries in Latin America, the majority of coffee farmers in Cabeza del Río and in southern Mexico at large have preserved their traditional cultivation systems despite a region-wide push to ‘technify’ coffee fields via the use of higher density planting, higher fertilizer and chemical use, and the elimination or reduction of shade cover. Consequently, whereas 40 percent of coffee farms in Costa Rica and 69 percent of coffee farms in Colombia are classified as ‘technified’, the figure in Mexico is only 17 percent, one of the lowest percentages in Latin America (Rice 1999; Piñon and Hernández-Díaz 1998).

Although traditional coffee systems do not provide the same ecological benefits of a natural forest, they come closer than most other agricultural systems in reproducing natural forest processes and functions. The canopy provided by the leaves and branches of shade trees protects the soil from harsh weather; the leaves that fall from the trees provide nutrients that reduce the need for chemical fertilizers; and the supportive root systems of the trees help prevent erosion. In contrast to other agricultural activities such as corn cultivation and ranching, which often require clear-cutting or slash-and-burn practices, coffee can be cultivated in relative harmony with the forest (Hull 1999).

Traditional shade coffee also exhibits a large degree of biological diversity, housing 60 to 70 percent of species found in nearby natural forest. Between 1990 and 1994, a team from the Smithsonian Migratory Bird Center discovered over 150 bird species on shade-coffee farms in

\textsuperscript{37} For an in-depth analysis of migration’s impact on communal governance in a coffee producing-community, see Mutersbaugh 2002.

\textsuperscript{38} Biodiversity hotspots are defined by Conservation International as “regions that harbor a great diversity of endemic species and, at the same time, have been significantly impacted and altered by human activities” (Conservation International 2003).
Chiapas, Mexico, including a particularly high number of migratory species (Rice 1999). If these coffee farms are converted to other uses and shade trees cut down, the populations of these migrating birds could rapidly decline for lack of adequate wintering habitat. In addition to providing valuable habitat for a diverse array of both plant and animal species, the shade trees on traditional coffee farms are valuable from a global environmental perspective given their ability to mitigate the effects of global warming through carbon sequestration.40

Due to low coffee prices, farmers throughout southern Mexico are abandoning their fields or converting coffee farms to more environmentally intensive uses. This shift is not without consequence. Abandoning farms and leaving coffee cherries unharvested can lead to plagues and pest infestations the following year which can render the land useless (IADB/USAID/World Bank 2002). The switch out of coffee and into corn often requires the encroachment upon and slashing-and-burning of surrounding forested land, imposing severe ecological consequences (Porter 2000). Conversion to pasture and investment in cattle represent a means for farmers to have some liquidity in times of emergency. Unfortunately, these economic alternative presents significant environmental implications as well.

Although less than one-quarter of coffee-producing households in Cabeza del Río currently own cattle, more than half stated that they are thinking of converting some land to pasture. When producers were asked in an open-ended format what they would do if coffee prices do not rise within the next several years, one-fifth specified that they would convert coffee land to pasture, and slightly less than one-fifth specified that they would covert land to maize production (see Table 14). As one producer aptly put it, “Coffee is not a product that we can eat.” If coffee prices do not rebound, there could be a significant abandonment and/or conversion of coffee lands to other uses in Cabeza del Río. The conversion to pasture in particular is linked to migration, since it is more likely that migrating households will have the available cash to purchase livestock.

<table>
<thead>
<tr>
<th>Table 14</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alternatives to Coffee Production</strong></td>
</tr>
<tr>
<td><strong>Cattle raising as an economic activity</strong></td>
</tr>
</tbody>
</table>
| Own cattle currently (N=103)                                             | 23%
| Thinking of converting some land to pasture (N=102)                      | 55%
| **Cited Alternatives if Coffee Prices Don't Improve**                   |
| Abandon coffee fields                                                    | 29%
| Convert to pasture                                                       | 20%
| Convert to maize                                                        | 18%

N=116 for all cited alternatives to coffee production. Calculated at producer level.
Source: Oaxacan Migration and Coffee Production Pilot Study (2004)

Organic certification requires that producers follow a specific set of rules and perform a set of minimum tasks that serve to maintain a chemical-free environment. Organic growers are also

40 In fact, steps are being taken to provide a per-hectare subsidy to coffee farmers as payment for the environmental services they provide by maintaining their coffee in forest-like conditions. But it has yet to happen.
educated about an additional set of tasks and cultivation techniques that, while not necessarily required, can maximize both yield and ecosystem health. Given low coffee prices, the majority of organized producers in the community, all of whom are either certified organic or in transition to becoming certified, are currently unable to carry out many of these recommended tasks, such as performing two limpias (cleanings) or preparing and applying non-chemical fertilizer to their plants in order to increase coffee yields/quality and enrich nutrient-deficient soils. Almost all organized producers (over 90 percent) are also being negatively affected by ojo de gallo (American coffee leaf spot disease) and/or la broca (a coffee berry boring insect) (See Table 15). Elimination of these persistent problems requires extra attention and labor that many farmers lament they cannot afford at current prices.

### Table 15

<table>
<thead>
<tr>
<th>Non-Completion of Recommended Organic Tasks and Problems with Pests</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only one limpie</td>
<td>41</td>
</tr>
<tr>
<td>Organic fertilizer not prepared nor applied</td>
<td>62</td>
</tr>
<tr>
<td>Affected by ojo de gallo or broca, or both</td>
<td>93</td>
</tr>
</tbody>
</table>

N=85

Source: Oaxacan Migration and Coffee Production Pilot Study (2004)

**What about Fair Trade?: Comparing and contrasting organized and non-organized producers**

Our analysis thus far has described the relationship among low coffee prices, migration, and the environment, and between migration and its associated economic and socio-cultural impacts. No clear distinction has been made thus far between producer households who are organized into one of the community’s two coffee cooperatives and sell their coffee into Fair Trade/organic markets on the one hand, and producer households who are not organized and sell to conventional markets on the other. A major impetus for investigating the links between migration and coffee production in this paper is an attempt to further explore the suggestion of recent studies (and the assertion of Fair Trade marketing literature) that producers of Fair Trade/organic coffee have been better able to weather the storm of the coffee crisis than non-organized producers, lessening their need to migrate. The findings from Cabeza del Río demonstrate that Fair Trade/organic coffee is not a cure-all, but rather a way for farmers to currently ‘stay in the game’. However, it is questionable for how long these producers will continue to stay in the game if prices do not rebound, given the ever-increasing opportunity for migration. This section highlights some of the similarities and differences between organized producers (socios) and non-organized producers (libres). The differences between these two groups are not always in the direction one might expect.

One clear difference between the two groups is that whereas all socios sold coffee in 2004, only approximately one-half of libre producers sold coffee during this most recent crop cycle. Membership in a coffee organization requires that a producer sell his/her product to the cooperative on an annual basis, regardless of fluctuations in coffee price. Unorganized producers, on the other hand, can opt not to sell coffee when prices are so low that sales might
not even cover the price of hiring labor. Indeed, the burden of being comprometido (obligated to sell) was a commonly-mentioned reason for leaving an organization by libres who were previously members of a cooperative.

Another difference between organized and non-organized producer households regards the ownership of basic coffee infrastructure needed to wet-process coffee in a manner that allows for optimal quality. Organized producer households are more than twice as likely to own this basic infrastructure than non-organized producer households (see Table 16).

**Table 16**

| Ownership of Basic Coffee Infrastructure |
|-------------------------------|------------------|
|                                | Organized | Non-organized |
| Tanque for washing            | 66%       | 31%           |
| Patio (cement) for drying coffee | 55%    | 17%           |
| Coffee de-pulper              | 84%       | 36%           |

N=105

*All differences between organized and non-organized households with respect to ownership of coffee infrastructure significant at 99% (tanque, p=.001, patio, p<.0001, depulper, p<.0001).

Source: Oaxacan Migration and Coffee Production Pilot Study (2004)

Government programs administered through the coffee organizations have subsidized the purchase of the infrastructure for many producers, accounting at least in part for the above-mentioned differences. However, these government programs do not reach all organized producers. The following alternative hypothesis must therefore be explored: organized producers are better able to afford infrastructure because they are wealthier on average than non-organized producers. Looking at one basic indicator of wealth, ownership of cattle, suggests that organized households are indeed better off than non-organized households. Whereas more than one-quarter of organized households own cattle, only 7 percent of non-organized households are cattle-owners. Organized households also own more coffee land on average than non-organized households, indicating greater wealth and/or a greater commitment to coffee production as an economic activity (see Table 17).

**Table 17**

| Indicators of Wealth |
|----------------------|------------------|
|                      | Organized | Non-organized |
| Cattle owned         | 28%       | 7%           |
| More than 3 HA of coffee owned | 36%       | 10%          |

N=102 for cattle ownership, N=105 for coffee land ownership

*Differences between libre and socio households with respect to both cattle ownership and total coffee land are significant at 95% (p=.021 for coffee land owned, p=.0001 for cattle ownership)

Source: Oaxacan Migration and Coffee Production Pilot Study (2004)
The obvious question with regard to this study is: did socio households achieve this wealth through international migration? Contrary to what the Fair Trade literature might lead us to expect, organized producer households in the community are currently more likely to be migrating internationally than non-organized households: two-thirds of socio households versus one-third of libre households currently have household members residing in the United States.41 Perhaps more interesting is the finding that socio households were more likely to have begun sending migrants to the United States earlier than libre households, as shown in both the column percentages of Table 18 and in Figure 4 below. Whereas no libre households were sending migrants to the US in the 1980s, more than one-quarter of migrant socio households sent their first family member between 1982 and 1989 (see Figure 4), a point in time when coffee prices were still relatively high and stable (i.e. before the ICA quotas were abandoned). This suggests that these households—which are still some of the wealthier households in the community today—were indeed Wealthier to begin with, and that they were pursuing migration not as a reaction to some economic crisis but as a means to diversify their income and risk.42 It further suggests that they have pursued international migration as a complementary activity to coffee production. The row percentages in Table 18 show that migration to the United States before 1995 was significantly more likely to be from households that today are socios. Whereas organized households comprise 73 percent of all coffee-producing households in Cabeza del Río, they accounted for 93 percent of first-time migrants to the United States in the 1982-1995 period. In periods after 1995, however, organized and non-organized producer households have migrated roughly in proportion to their shares of the community’s coffee-producing population.

41 Difference between libre and socio households with respect to degree of international migration significant at 95 percent.
42 The migration literature generally finds that early migrants do not come from the poorest households, given the high costs of migration.
Table 18
Start of International Migration Among Organized and Non-organized Producer Households

<table>
<thead>
<tr>
<th></th>
<th>Organized</th>
<th>Non-Organized</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>First US migrant originating in HH left 1982 - 1995</td>
<td>93%</td>
<td>8%</td>
<td>100%</td>
</tr>
<tr>
<td>First US migrant originating in HH left 1996 - 2000</td>
<td>67%</td>
<td>31%</td>
<td>100%</td>
</tr>
<tr>
<td>First US migrant originating in HH left 2001 - 2004</td>
<td>64%</td>
<td>31%</td>
<td>100%</td>
</tr>
<tr>
<td>No one ever migrated from HH to the United States</td>
<td>67%</td>
<td>31%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

N=97  Top numbers in cell are row percentages, bottom numbers are column percentages
*Difference between libre and socio households with respect to first year of international migration between 1982 and 1995 significant at 95%. All other differences are not significant.
Source: Oaxacan Migration and Coffee Production Pilot Study (2004)

Figure 4: First Year of Migration by Socio and Libre Households

Source: Oaxacan Migration and Coffee Production Pilot Study (2004)

As discussed above, a significant proportion of remittance-receiving households use part of this money to finance coffee production. However, it is questionable to what extent households will continue to invest funds, be they remittances or other funds, in an activity that reaps such little
profit given low coffee prices. Most organized producers do not consider the ‘Fair Trade’ price they receive to be very fair. In 2004, organized producers in Cabeza del Río received an average per kilo price for their coffee that was 60 percent higher than the average price received by non-organized producers (17.1 pesos versus 10.7 pesos). Despite this higher price, an overwhelming percentage of both organized and non-organized producers (over 90 percent for each group) stated that coffee production is an activity that does not currently result in gains.

Although detailed cost data was not collected in Cabeza del Río, the Instituto Maya did collect such data for 5 producers in nearby Zaragoza at the same time our study was conducted (Bartra et al. 2005). Even without accounting for any fixed costs (such as depreciation of assets or feeding the animals) or cost of organic certification, their analysis showed that if family labor power were valued at the going wage (80 pesos per day on average in Zaragoza), only one of the five producers generated a profit at the Fair Trade-organic price received by producers of 1,006 pesos per quintal (Qq). The only reason that one producer showed a profit was because of a relatively high yield of 11.1 Qq/ha. The other four producers had yields of 4.1 to 6.6 Qq/ha, which left them with implicit wages for their family labor of as little as 36 pesos per day.

In Cabeza del Río, data was collected on contracted labor only, which averaged an estimated 8.6 labor-days/Qq due to low yields. At an average 100 pesos per hired labor-day, or 860 per Qq, it is apparent that even the Fair Trade-organic price of approximately 1,000 per Qq does not leave much room for the cost of inputs or family labor. Taking into account out-of-pocket costs only, net returns to coffee-producing households in Cabeza del Río were calculated by subtracting these costs from total coffee sales. Overall, almost one-third (31 percent) of coffee-producing households in Cabeza del Río registered negative returns in 2003/2004 when accounting for hired labor and input costs. Approximately one-quarter (27 percent) of households hired no non-family labor whatsoever for coffee production, and thus their only costs—in addition to opportunity cost of labor—were those of inputs and fixed costs. None of these households had negative returns. On the other hand, 43 percent of the households that did contract labor for coffee activities had negative returns, demonstrating the negative impact of high labor costs and lack of family labor on overall returns.

Distinguishing between libre and socio households, negative returns were registered in 47 percent of libre households versus 28 percent of socio households. This indicates the importance of both the higher Fair Trade-organic price, and the larger proportion of final export price typically received by organized versus non-organized producers given the elimination of middlemen. In Cabeza del Río, producer members of the cooperative La 21 de Septiembre captured almost two-thirds (62 percent) of the guaranteed premium price of US$1.41/lb paid for Fair Trade-organic coffee in 2004. Unorganized producers in Mexico, who typically must sell through middlemen, receive a much lower proportion of export price, ranging on average from an estimated low of 24 percent to a high of 47 percent.43

Although the calculations for net coffee returns are estimates at best, what is clear is that these amounts pale in comparison to the income accruing to households in the form of remittances. The amount of remittances received in the last 12 months by coffee-producing, remittance-receiving households varied considerably, from a high of 60,000 pesos to a low of 2,000 pesos.

43 Calculated from data provided in Levi and Linton 2003: 411.
However, of the 39 households that both sold coffee in the 2003/2004 cycle and received remittances in the last 12 months, 37 of them received greater returns from remittances than from coffee, and the average difference between remittances and coffee returns for these households was nearly 21,000 pesos, or about US$1,858 (See Figure 5). \textsuperscript{44}

![Figure 5: Net Coffee Returns versus Remittances](image)


Because even the Fair Trade-organic price is often insufficient to cover costs, producers have been lobbying the Mexican government to provide subsidies. Apart from technical assistance of various sorts, there are three subsidies tied to coffee production:

1. \textit{Fondo de Estabilización de Precios} (Price Stabilization Fund): this last year producers supposedly were to receive 15 dollars/quintal of parchment coffee. (The program provides the difference between NY price (70 dollars/quintal on average) and 85 dollars, up to a maximum of 20 dollars per quintal.) \textbf{165 pesos/Qq.}

2. \textit{Fondo de Fomento Productivo de Café} (Coffee Productivity Fund): 900 pesos/ha. At average Cabeza del Río yield of 2.44 Qq./ha, \textbf{369 pesos/Qq.}

3. \textit{Pagos por Servicios Ambientales} (Environmental Services Payments, forthcoming): 500 pesos/ha. At average Cabeza del Río yield of 2.44 Qq./ha, \textbf{205 pesos/Qq.}

The third subsidy is yet to be implemented, and producers in Cabeza del Río reported that the application of the first two subsidies was very uneven. One-fifth of producers had not received

\textsuperscript{44} As one can see from the graph, there is a wide variance in this difference, the standard deviation is 18,756 pesos. Net returns to coffee are gross returns less actual cash costs. We have not subtracted from remittances any up-front costs associated with crossing the border and traveling to the United States that the household might have financed.
any subsidy whatsoever from the Coffee Productivity Fund, and those 80 percent that did receive some money complained that their due amount often did not arrive in full. Therefore, it is only speculative to assume that producers might receive these subsidy amounts.

Nevertheless, if these subsidies had been paid to the five surveyed Zaragoza growers (at the yields they reported), all would have shown a net profit (on variable costs) after paying family labor the going wage. However, if wages in Zaragoza rose 25 percent to the level of Cabeza del Río (reportedly likely), two of the five growers would show a net loss even with the subsidies. Price and subsidy schemes that are calculated on the basis of a supposed wage of 50 pesos per day are not sustainable in the face of wages doubling due to migration. This is not to say that campesino producers “should be” paid a certain amount per day, only that there are real opportunity costs to producing coffee in villages like Cabeza del Río and Zaragoza: one can work on someone else’s land for up to 100 pesos per day, or one can go to New Jersey and earn ten times that.

If all of these subsidies had been operating and had been paid this past year, the average producer in Cabeza del Río would have received an additional 740 pesos/Qq beyond the (best) price of 1,006 pesos/Qq. This is a significant increase and may be one factor that helps to explain the persistence of coffee producers in the face of low prices: they expect that they might receive more subsidies and they know that they must continue to produce to receive them.

Looking to the Future: Is Fair Trade Coffee Sustainable in the Face of Migration?

In a community like Cabeza del Río, where migration is fairly well-established, producers are continuing with coffee production despite low prices for a variety of reasons. When asked why they continue growing coffee, given they are not making much money from it (indeed, as shown above, some are losing money currently), more than half replied that they would feel sad to cut down the plants because coffee is something that supported them in the past (“It’s not the plant’s fault!” was a common refrain), while approximately one-quarter said they still engage in coffee production because it is a custom/tradition (Table 21). Other reasons were less sentimental and more practical: about one-quarter replied that they were waiting for the price to rise again, and one-third simply replied that they had no other alternative: “no hay otro”. Organized producers also noted certain commitments to their organizations.

---

45 N=100
Table 21
Reasons Producers Continue with Coffee

<table>
<thead>
<tr>
<th></th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All producers</strong> (N=91):</td>
<td></td>
</tr>
<tr>
<td>Feel bad to lose a crop that supported us previously</td>
<td>58</td>
</tr>
<tr>
<td>No alternative</td>
<td>33</td>
</tr>
<tr>
<td>Price could rise</td>
<td>24</td>
</tr>
<tr>
<td>Custom/tradition</td>
<td>24</td>
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<td></td>
<td></td>
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<tr>
<td><strong>Organized producers</strong> (N=78):</td>
<td></td>
</tr>
<tr>
<td>Financial support/encouragement of organization</td>
<td>15</td>
</tr>
<tr>
<td>Committed to selling to their organization</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: Oaxacan Migration and Coffee Production Pilot Study (2004)

The coffee producers interviewed for this case study often spoke with nostalgia about a time “when coffee had value”, when houses were built, animals bought, and other investments made with proceeds from coffee. They spoke proudly about how, during the most recent peak in coffee price about 7 years ago, they produced and sold coffee at double, triple and even quadruple the quantities they currently produce. No one in those times would consider leaving coffee berries unharvested, as they often do now due to high cost of labor, lack of available family labor, and low price of coffee. If prices do not rebound, how long can households be expected to continue with an activity that returns little or no profit, especially in the face of migration opportunities that appear to offer ten times as much wages?

At the moment, producers in Cabeza del Río are using some remittances to finance the operating costs of coffee production in the expectation that their investments in their organizations and in their coffee plants will pay off in the future in higher prices and/or subsidies. The expectation that prices will rise is based on real experience, but as time passes this expectation will fade. Unless coffee becomes significantly more remunerative, people will likely abandon it in a few years. Almost 30 percent of Cabeza del Río growers stated they would abandon their coffee if prices did not rise soon, while 20 percent and 18 percent specified that they would convert their coffee land to pasture or maize, respectively. The various environmental benefits of shade coffee are now well-known and well-documented, but there is no evidence that the price consumers currently pay for organically-grown coffee is adequately compensating growers for provision of these ecological services. 46 So why should we not expect them to convert the forest to something more useful to them?

As suggested earlier in this paper, coffee production and international migration need not be mutually exclusive survival strategies. International migration can be a means to better capitalize coffee production for higher yields, quality, and returns. Furthermore, if remittances were channeled through savings accounts in locally controlled financial institutions, perhaps developmental loan programs could be undertaken in the regions and people would leave their money in the bank rather than invest it in the animals for whom they need to cut down the forest.

46 See Giovannucci and Ponte, 2005.
But coffee prices would have to be higher. Nominal wages have doubled in five years in Cabeza del Río, but FLO last year proposed to lower the price of Fair Trade coffee and to transfer the costs of certification to producers. The price of Fair Trade coffee has not risen in over 10 years. Even if the coffee price rises, it will be impossible to recreate the coffee economy of the past in Cabeza del Río. The rapid increase in migration from the region has reduced the labor power available and doubled local wages in nominal terms. Most young people either leave the village for the United States or for higher education. Either path makes it unlikely that they will return to work in the fields. A difficult generational transition lies ahead. One could imagine fewer coffee producers with higher returns, but the availability of labor would appear to be a serious obstacle to sustainability of certified coffee production.

If the future looks difficult for coffee in Cabeza del Río, can Fair Trade-organic certified coffee at least prevent migration from occurring in places where the opportunity cost of household labor is still relatively low? The community of Cabeza del Río was chosen in part on the basis of its significant migration history. Although Cabeza del Río is not necessarily representative of all current coffee-growing communities, what is happening there may foreshadow what will be seen in much of the rest of southern Mexico as migration accelerates. Due to the high level of inter-regional variation displayed by coffee producing communities across Oaxaca and southern Mexico, however, it would be imprudent to extrapolate the conclusions from this case study too widely. This initial pilot study is intended to provide an in-depth, region-specific analysis upon which future research will build and expand both geographically and conceptually. More studies are planned.

47 “… the relative profitability of organic versus conventional coffee is determined primarily by the low opportunity cost of household labor of the campesino family. This factor is more important than both price or the organic or social premium given to certified coffee. Thus, the study confirms organic coffee production as the ideal strategy for campesino families where household labor is generally undervalued, or where older dependent sons prefer not to emigrate from the community to seek better paying work in construction, industry, or across the border” (Nigh 1997: 434).
Reference List


Velasquez, Julio Cesar. 2002. Sustainable Improvement of Agricultural Production Systems in the Mixteca Region of Mexico, International Maize and Wheat Improvement Center (CIMMYT), Mexico, D.F.