NAFTA, Environmental Crises, and Social Justice
Cases from the Agricultural Practices of Chiapanecos

Marcella Maiki
Middlebury College

This paper examines the environmental justice impacts of NAFTA on the Mexican state of Chiapas and its inhabitants through the lens of agricultural production. Focusing on the corn, dairy, and coffee industries, I use environmental justice theory, economic policy, agricultural production reports, testimony, and critical theory to demonstrate that NAFTA has caused environmental injustices in Mexico among small-scale corn farmers as well as in Vermont dairies among Mexican migrant workers. I examine an indigenous coffee cooperative to gauge the potential for sustainable and environmentally just development in Mexico as an alternative to transnational corporate agroindustry. The coffee farming model demonstrates the impossibility of escaping consumer capitalist markets that are steeped in paternalistic relations, destroy natural resources, and restrict personal freedoms. Overall, the implementation of NAFTA has resulted in massive land and food security problems for the rural campesino and indigena population in Chiapas and has contributed to ecological devastation. The trade agreement, which demonstrates neocolonialism, has led to the accumulation of resources in the United States at Chiapas’ expense.

Keywords: NAFTA, Corn, Coffee, dairy, Chiapas, Mexico, neoliberalism
NAFTA, Environmental Crises, and Social Justice
Cases from the Agricultural Practices of Chiapanecos

Marcella Maiki
Middlebury College

“We say here that we are at war for this reason, because there are always two indications of war. When there is war, there is migration, and there is hunger, and in Chiapas, there is migration and there is hunger.”

—Abraham Rivera, Center for Economic and Political Investigation and Community Action

Since the implementation of the North American Free Trade Agreement (NAFTA) in 1994, there have been countless political and economic outcomes, both anticipated and unexpected. With NAFTA’s enactment also comes a variety of transnational environmental justice issues. This paper establishes a working definition for environmental justice and then focuses on three major agricultural products with economic ties to Chiapas, Mexico: corn, dairy, and coffee. Through the story of these agroindustries, I show how NAFTA has caused transnational environmental justice crises by exploiting long-standing social injustices. I then explore some potential solutions moving forward. Specifically, I examine the effects of NAFTA on Chiapas, Mexico, and show that the trade agreement has caused major ecological crises, the effects of which are felt along socioeconomic lines. I turn to migrant farm workers on Vermont dairies to demonstrate that the environmental injustices affecting Chiapanecos do not stay in Mexico, but rather follow them into the United States in their new agricultural jobs. Finally, I explore the luxury good model, because many policy makers anticipated that NAFTA would prompt a shift in Mexico from subsistence agriculture to high-quality agricultural products that would be exported to Western consumers. I use the example of gourmet organic coffee cooperatives to show the advantages and disadvantages of this model in Chiapas. I discuss whether or not this is an environmentally and socially just model that should be considered for future development, or if its potential is too limited to result in large-scale benefits for small farmers.

Environmental Justice

To understand the consequences of NAFTA in Mexico among small-scale farmers, I start by establishing a working definition of environmental injustices as well as what environmental justice means, both from a restorative and a preventative perspective. In “Reconceiving Environmental Justice,” David Schlosberg examines three major components of environmental justice, which I draw on to define it. One of the most frequently discussed components is “how the distribution of environmental risks mirrors the inequity of socioeconomic and cultural status.” Schlosberg points out, however, that in addition to distribution of risks and resources,
the issues of recognition and participation are equally important components of justice. Recognition goes beyond acknowledgment of different groups, to understand that “if social differences exist, and are attached to both privilege and oppression, social justice requires an examination of those differences to undermine their effects on distributive injustice.” It means not devaluing marginalized identities or non-Western perspectives, but rather acknowledging that certain perspectives have been oppressed through historical power structures along socially constructed lines. To mitigate and/or remedy these injustices, a social justice component is necessary. Finally, with recognition comes “authentic, community-based participation” and self-determination to remedy centuries of disenfranchisement, colonial power structures, and racism. This “trivalent” perspective establishes that environmental justice refers to the prevention or remediation of environmental risks and/or resource restriction, especially in marginalized communities, through inclusive, participatory decision-making and self-determination. As I will show throughout this paper by focusing on the lives of Chiapanecos, NAFTA has violated each of these principles and has exacerbated environmental injustices.

A Brief Historical Context

Chiapas and its inhabitants face struggles stemming from a long history of oppression, beginning with colonization and continuing with U.S. imperialism and Western intervention, all of which are founded on racism and other forms of marginalization. These historical structures of power, and the unique sociopolitical history that they both grew from and produced, continue to affect the political, economic, and social structure in Mexico today. Although not an exhaustive history of Mexico, this section briefly outlines the events and international relationships most relevant to agricultural socioeconomics, particularly Mexico’s relationship with the United States.

Most significantly, throughout much of its history, a substantial portion of Mexico’s population has been landless, with the vast majority of the property in the country owned by several prominent families and foreign investors. At the outset of the Mexican Revolution in 1910, an estimated 96% of the agricultural population was landless and about 20% of the land was foreign held. This problem of landlessness was one of the major causes of the unrest that led to the revolution. Consequently, after the revolution, one-third of the land that had been in the hands of private landowners was redistributed to the landless peasants (campesinos) in the form of collective holdings, or ejidos, which were publically held lands the campesinos could farm. The Agrarian Reform Decree in 1915 and later Article 27 of the Mexican Constitution legally recognized these rights.

First and foremost, Article 27 declared that all land and water in Mexico belonged to the nation, which has the right to impose on private property conditions prescribed by public interest. It established a limit on private property ownership of 100 irrigated hectares or its non-irrigated equivalent, and it fixed

139 Schlosberg 519.
140 Schlosberg 523.
143 Lewis.
the size of the ejidatario parcel at a minimum of 10 ha of irrigated land (Diaz-Cisneros 1983). Finally, it declared ejido land to be owned collectively by the ejido and to be inalienable.  

As a result of Article 27, many farmers received significant support from the government in the form of subsidies and assistance, which made subsistence farming a viable economic option. Under the land rights and government-protected public lands, “it was not uncommon for ejidos to receive free or subsidized machinery and technical support via government programmes aimed at improving productivity in the ‘public’ sector.”  

Despite this major positive outcome, private farms continued to prosper and receive significant benefits that were frequently unavailable to ejidos. By the 1950s and 1960s, production on private farms was high, and credit was more readily available. Further, “[in] 1960 the number of [large-scale, high-worth] farms constituted only 3.5 percent of the nation’s total, though the value of their output accounted for 78 percent of Mexico’s total agricultural production.” Clearly, the policies continued to disadvantage a majority of the Mexican population.

In addition to this agricultural foundation, NAFTA has also built on a centuries-long history of U.S. imperialism, invasion, and resource extraction in Mexico. Expansionist policies including ideas of Manifest Destiny led to frequent wars with Mexico, beginning in the early 1800s when Mexico refused to sell Texas, and continuing with the seizure of significant territory and natural resources in subsequent decades.

In more recent decades, when the United States could no longer wage war, it maintained its political-economic advantages by negotiating international policy that perpetuated the same structural imbalances in power, to Mexico’s disadvantage. Although the appearance of U.S./Mexican relations may have evolved, the relationships continue a legacy of colonialism and imperialism—driven by neoliberalism and consumer capitalism—under the name of free markets and equal opportunity.

**Corn: Land Rights and Food Security in Mexico**

Many of the agricultural policies implemented under NAFTA have undermined food sovereignty in Chiapas, particularly in terms of self-determination of production and consumption. Mexico’s geography and history raise challenges related to food security and agriculture that have only been heightened since NAFTA’s implementation. By looking at the transformation of corn farming from a form of subsistence agriculture to a major agroindustry monopolized by the United States through free trade agreements, three major environmental justice issues are apparent: land security, food security, and genetically modified organisms (GMOs) and monocultures, all of which have a disproportionately negative impact in Chiapas on the rural poor and indigenous communities.

**Land Rights**

Land rights in Chiapas are both an environmental scarcity and a social justice issue. Due to soaring population growth, the increasing demand for cattle pasture, environmental

---

144 Lewis.
145 Lewis.
146 Ballance 300.
147 Ballance 300.
degradation, forcible government relocation of populations for development projects, and unequal distribution of property have caused severe problems in regard to land rights, usage, and food production. Land rights and production fuse environmental, social, and economic justice issues, particularly in regard to the development of agroindustry.

Between 1970 and 1990, the population in Chiapas doubled, and the indigenous (*indigena*) population tripled. Add to that the influx of migrant farmers from Guatemala, the displacement of thousands after the 1983 eruption of the Chicon volcano, and the government relocation of tens of thousands into the Eastern Lowlands for several hydroelectric projects, and the state has seen unimaginable shifts in population. As a result, there is simply not enough land in the hands of these small-scale, subsistence farmers to support the population.

NAFTA, and the domestic economic changes in Mexico that accompanied it, are doing nothing to resolve these land rights and security issues, and are often intensifying the problem. Between the late 1980s and the early 1990s, as a result of massive debt, Western pressure for structural adjustment, and the impending implementation of NAFTA, “Mexico was required to change Article 27 saying land needed to be turned into private property rather than a community good.” As the Mexican government moved toward liberalization, government support for agriculture became more limited, and “economic liberalization included the termination of several of these programmes, with the result of a decrease in production capital within ejidos.” Once their land was privatized, many campesinos ended up renting or selling it to large corporations, because the increased competition from commercial agribusiness in the United States meant they were unable to support themselves by farming. Therefore, these liberal reforms largely went against the interests of the campesino and indigena population, the people whose rights the constitution was supposed to be protecting.

Clearly, issues of oppression, most often through race and class, are structural, embedded in and permeating all levels of society. They are at the root of numerous environmental problems in Mexico, almost all of which spring out of land insecurity. First, many of these environmental issues are related to the problem of “resource capture” and the historical imbalances in the distribution of wealth and resources in Mexico. Since Mexico is a postcolonial state, all of the current political, economic, and social structure is built on that foundation. The historical structures that allowed a powerful elite to create conditions in their own political and economic favor and exploit indigenous people, the poor, and women are still in effect today. As Abraham Rivera explains, NAFTA capitalizes on this by further marginalizing historically oppressed groups and promoting large transnational corporations and local elites. “NAFTA only benefits the local oligarchy. It benefitted Mexico because it benefitted the big monopolies.... All the rest, the whole worker sector, the whole agricultural sector disappeared; it went under.” Even when land rights and redistribution were still granted under Article 27 of the Mexican Constitution, before the implementation of NAFTA, political and economic

---

149 Howard and Homer-Dixon 8.
150 Root Causes of Migration.
151 Lewis.
152 Root Causes of Migration.
elites regularly circumvented or outright violated these laws for their own gain, while further exploiting already-marginalized populations.\textsuperscript{153} Now that Article 27 no longer offers communal land holdings protection, marginalized populations face even more challenges, which are understandably causing civil unrest like that seen in the Zapatista rebellion in Chiapas during January of 1994.

Indigena populations are at the highest risk of marginalization. They are confined to strict areas of employment, typically minimum-wage agricultural work.\textsuperscript{154} As the percentage of indigena in municipio\textsuperscript{155} populations increases, so too increases the percentage of people living in poverty. In municipios where “more than 70 percent of the population are indigena, over 80 percent [of the inhabitants] are poor.”\textsuperscript{156} Furthermore, Chiapas has the highest marginalization coefficient in Mexico, meaning that according to an index of education, dwellings, population dispersal, and monetary income, Chiapas fares the worst.\textsuperscript{157}

Relocating and migrating to work for large, often foreign-held agribusinesses is frequently the only way that these families are able to survive. Agroindustry is restructuring entire communities, primarily by creating “rural cities.”\textsuperscript{158} This process includes relocating rural populations to a central hub and thus transforming former campesinos into “workers on reserve for the agroindustry” that will develop in the newly cleared areas around these “cities,” thereby stripping the workers of their communitarian mode of life and their lands.\textsuperscript{159} Since the implementation of NAFTA and the privatization of ejido land, many of these farmers have chosen to sell or rent their land to these businesses as a source of (insufficient) income. Consequently, they frequently become day laborers, working their own rented-out land as the majority of profits and benefits are going to large-scale agribusinesses—either the Mexican upper class or foreign investors—rather than to the actual farmers who have been struggling for their land rights for centuries. The campesinos do not get to eat their own corn but must purchase their food from a small supermarket, often owned by the investor.\textsuperscript{160}

To further complicate the issue of land scarcity, much of the land that is available for small-scale farming is being degraded through poor agricultural practices. Slash-and-burn clearing and the overharvesting of wood as a fuel source are two of the more obvious examples. These practices and the resulting land degradation, while often carried out by small farmers, are informed by the socioeconomic systems in Mexico and of NAFTA. The marginalization of the rural poor—through their inability to integrate into the economic system and through increased competition that resulted from free trade—has increased economic pressures on campesinos and indigenas. As a result, these communities have begun using traditional practices like slash-and-burn at a rate that is unsustainable, leading to loss of nutrients in the soil, deforestation, and

\textsuperscript{153} Howard and Homer-Dixon 40.
\textsuperscript{154} Howard and Homer-Dixon 7.
\textsuperscript{155} Municipality or a county-level division, the next level after state divisions.
\textsuperscript{156} Howard and Homer-Dixon 7.
\textsuperscript{158} Root Causes of Migration.
\textsuperscript{159} Root Causes of Migration.
\textsuperscript{160} Root Causes of Migration.
erosion. Development programs, both domestic and multilateral, have prioritized cattle ranching and cash crop development, leading to widespread deforestation and the use of pesticides and other chemicals. Yet, when small-scale farmers commit environmental degradation as a means of survival, saving the rainforest becomes a rallying cry for Northern conservationists.

According to Barry, the United States is not looking at these land security issues as the root of major environmental and economic problems, but rather only recognizing the outcomes such as the resulting deforestation as problematic.

By not looking at how economic systems, international trading relationships, and class structures contribute to poverty in Mexico, the U.S. government and leading environmental organizations contribute to the belief that the main threat to rainforests and the conservation of other natural resources comes from the poor. Obviously, the poor by cultivating eroded hillsides, occupying the agricultural frontier, and depending on firewood for fuel are the perpetrators of much environmental destruction in Mexico. For the most part, however, they have no other survival options given the failure of the agricultural economy to provide income and the inability of other economic sectors to provide jobs.

Clearly, the United States is not taking any responsibility for solving the larger root problem, does not consider the significant structural power imbalances that contribute to environmental harm, and is diverting attention away from its own role by blaming the Mexican farmers, who rarely have another option.

Food Security

Food security is also an environmental justice issue. If a community does not have access to an environment and resources that can produce enough food to feed the population, it will face enormous challenges. Such challenges in Mexico, and specifically in Chiapas, are numerous. Free trade with the United States has dramatically increased the competition for small-scale corn farmers because of the dramatic influx of corn from the United States into Mexican markets. As David Harvey succinctly explains, “While proclaiming its role as a noble leader organizing ‘bail-outs’ to keep global capital accumulation on track, the U.S. paved the way to pillage the Mexican economy … debt crises were orchestrated, managed, and controlled to both rationalize the system and to redistribute assets.” Despite some policy makers’ predictions that this would divert the land used for the cultivation of staple grains toward luxury exports and thus create significant economic benefit for small-scale Mexican farmers, it has resulted in a greater problem of food security. Many campesinos and indigenas are no longer able to subsist on their own land. With the additional logistical complications of distributing food to rural populations, severe poverty and malnutrition are serious consequences of NAFTA for the rural poor.

The corn from the United States that is now dominating the Mexican market is primarily yellow feed corn, mainly for cattle, pork, and poultry, rather than human consumption. Despite the low competition from U.S. producers in white corn, the corn used as a staple grain to make tortillas, the increased imports are still creating problems. Food is increasingly unaffordable,

162 Barry 209.
163 Barry 207.
165 Nadal 8.
as the cost of tortillas has risen dramatically, despite the low cost of corn.\footnote{Steven Zahniser and William Coyle, \textit{U.S.-Mexico Corn Trade during the NAFTA Era: New Twists to an Old Story} (USDA Economic Research Service: Rep. no. FDS-04D-01, May 2004) 10.} Additionally, the prioritization of ranching over farming has serious implications for a country where 50\% of the population does not eat meat, mainly due to cost.\footnote{Howard and Homer-Dixon 19.} Wealthy urban citizens or foreign markets consume the majority of this meat, and the diversion of resources from domestic consumption to foreign export is contributing to malnutrition in small farming communities. In this way, the colonial practice of resource extraction continues in an evolved form.

Furthermore, while small farms still produce much of Mexico’s corn, small-scale subsistence farming is becoming economically unfeasible. Mexico was a net exporter of corn before the implementation of NAFTA, but it now imports the majority of its corn from the United States. As Tom Barry explains in \textit{Zapata’s Revenge}, “If grain imports increase and local production falls, as seems likely, the challenges of ensuring that the rural populations have adequate access to basic foods will increase.”\footnote{Barry 109.} The truth of Barry’s forecast can clearly be observed in the rising tortilla prices and difficulties in distribution.

NAFTA has also shifted agricultural production in Mexico. As competition from the United States over corn has driven prices down and eliminated the subsidies to small farmers in Mexico, domestic farmers have had to make dramatic changes in order to feed themselves and their nation.\footnote{Barry 71.}

Most dramatic will be the impact on small farmers who have traditionally sold corn on the domestic market and benefited from guaranteed prices more than double the international market price. As support prices for corn are eliminated, most corn farmers will find they can no longer cover their costs and will drop out of the market.\footnote{Ronald Nigh, “Organic Agriculture and Globalization: A Maya Associative Corporation in Chiapas, Mexico,” \textit{Human Organization} 56.4 (1997): 427.}

Interestingly, this prediction from Barry’s 1994 book has proven true, though not entirely. Overall in Mexico, during the first year of NAFTA, production of basic grain fell 13.3\% from the previous year, and imports increased 19\%.\footnote{Ronald Nigh, “Organic Agriculture and Globalization: A Maya Associative Corporation in Chiapas, Mexico,” \textit{Human Organization} 56.4 (1997): 427.}

In poor farming communities like Chiapas, however, this decrease in production has not occurred, and the land devoted to corn farming has increased dramatically.\footnote{Nadal.} Nadal proposes that “the expansion of cultivated surface in corn, in spite of price reductions, is a response of poor households to the combined environment of low corn prices and higher tortilla prices.”\footnote{Nadal 17.} Due to increased trade with the United States, the peso has significantly dropped in value and Mexico’s poor are unable to buy as much as they could in the past. Consequently, many small-scale campesinos cannot afford to sell corn on the domestic market and the rising cost of tortillas eliminates the option of cultivating and exporting luxury crops, which do not come with a high enough return to feed the farmers.\footnote{Jessa Lewis and David Runsten, “Is Fair Trade-Organic Coffee Sustainable in the Face of Migration? Evidence from a Oaxacan Community,” \textit{Globalizations} 5.2 (2008): 275–90.} One alternative is to grow corn to feed their families and
supplement their food supply, an option that does not provide any NAFTA-related monetary or quality-of-life benefits. Despite this increase in corn production in Chiapas, vast numbers of Chiapanecos do not have “alimentary sovereignty,” due to the trade deficit and food deficit with the United States.\footnote{Root Causes of Migration; Nadal.}

**GMOs and Monocultures**

Increased competition from the United States has also led to a dramatic shift in the type of corn available for consumption in Mexico and the ability for self-determination. An increasing flow of genetically modified (GM) corn into Mexico raises environmental justice concerns around consumer health, traditional practices and cultural preservation, and the maintenance of biodiversity.

The vast majority of corn imported into Mexico from the United States is feed corn for cattle, pork, and poultry, the majority of which is genetically modified. According to the U.S. Department of Agriculture, “adoption of all biotech corn accounted for 90\% of corn acreage in 2012.”\footnote{US Department of Agriculture, Economic Research Service, *Recent Trends in GE Adoption*, 9 July 2013, web, 1 Dec. 2013.} The effect of GMOs on human health remains a concern and a question. A controversial study published in 2012 linking GM corn and Monsanto pesticides to tumors and early death in rats has been revoked due to concerns about the small sample size used in the study.\footnote{Barbara Casassus, “Study Linking GM Maize to Rat Tumours Is Retracted,” *Nature.com*. 28 Nov. 2013, web, 02 Dec. 2013.} However, the question of whether GMOs have a detrimental impact on human and animal well-being remains. Opponents of GMOs suggest that they should not be consumed until we know more about their effects. Additionally, since Mexico does not require GMO labeling on food products, Mexicans cannot choose whether or not to consume products made with GM corn or animals that have been fed with GM corn.\footnote{Anne Seymour and Susan Gzesh, “End Importation of GM Corn to Mexico Campaign,” *GM Watch*, Oct. 2000, web, 01 Dec. 2013.}

Relatedly, the issue of self-determination and cultural preservation through agricultural practices has arisen over corn. Maize plays a central role in many cultural practices in Mexico, where it was first domesticated thousands of years ago. The hundreds of individual varieties of corn are deeply tied to the cultural and religious practices of indigenous groups. The Maya believe that the gods made the first people from corn. When the critical diversity of such a crop is compromised along with the ability of campesinos and indigenas to grow their own corn, there is a cultural injustice stemming from global capitalism—the profitability of Northern agroindustry is prioritized over traditional relationships with the land. Vandana Shiva critiques this aspect of globalization specifically by examining the development of the global food supply system and its effects on local communities. Shiva notes the crucial link between food diversity and cultural diversity…. But globalizing the food supply destroys local production and market practices, and local cultural identity suffers.\footnote{Schlosberg 525.}

Schlosberg continues by arguing that the “development” created by globalization is often destruction of the local environment, culture, and sustainable way of living. Abraham Rivera echoes this sentiment when commenting on multilateral development projects. He explains,
“There is a total rejection of the communal lifestyle and a total racism as well to not accept another lifestyle other than the capitalist one to develop for themselves.”179 The increasing role of foreign investment and the importation of GM crops, both of which stem from the goal of increasing yields rather than preserving cultural identity, are built on this Western-centric, development-oriented perspective.

Finally, GM corn has environmental impacts related to biodiversity. In the United States, few varieties of corn are planted, and the majority of what is planted is genetically modified. In Mexico, genetic variations in corn and the resulting hundreds of varieties are a type of insurance against difficult growing conditions. However, corporations including Monsanto and Dow are pushing for permits to plant approximately 2.5 million hectares of GM corn in Mexico, more than a third of the estimated 7.1 million hectares of total corn production area in the country.180 While the permits have not yet been approved and are facing significant resistance, experimentation with certain modified corn varieties has already begun in Mexico, although these experiments are being done in isolation without the potential for pollination.181 It is unlikely that there is no GM corn being grown in Mexico, however. While imported corn is destined for consumption, “nothing will prevent growers who buy these seeds in local or regional markets, to use them as seed stock if the need arises. Because transgenic corn will be mixed with non-transgenic corn, it is reasonable to expect that some of the transgenic corn will find its way into Mexican corn fields.”182 Even though GM corn is likely already present in Mexico, the potential concession to Monsanto would dramatically alter the production of corn in the country. The irony, of course, comes from the United States’ insistence that Mexico preserve its biodiversity in certain hotspots, such as the rainforests, while implementing trade policy that allows for a dramatic reduction in biodiversity and genetic variability of food, and the high probability of GMO contamination or the elimination of heritage varieties of corn.183

The Implications

Corn exports from the United States to Mexico rose 240% in the first ten years following NAFTA’s implementation.184 Mexico has gone from having a net surplus of corn to relying on the United States to meet its demand for corn. Increasing international economic pressures have violated Mexican land rights, reduced food security, and compromised the integrity of heritage varieties of maize. Each of these is a dramatic environmental injustice, but in conjunction, the results are even more devastating and lead to even more socioeconomic and environmental problems.

Dairy: Migration as an Environmental Injustice

Due to the problems associated with land and food security in Mexico, hundreds of thousands of Mexicans are traveling as migrant farmworkers in order to support their families. Since the implementation of NAFTA in 1994, Mexico has lost more than two million

---

179 Root Causes of Migration.
181 Nadal.
182 Nadal 31.
183 Nadal.
184 Zahniser and Coyle 10.
farm jobs, and each year the migration of Mexican workers to the United States has more than doubled.\(^{185}\) Despite the surging migrant population and the globalization of agriculture that is fundamentally shifting toward foreign investment and profit in agroindustry, current proposals for immigration reform do not address these root causes of migration nor do they protect the human and worker rights of people who are forced to cross borders to survive due to these policies. Free trade agreements allow for wealthy corporations and wealthy individuals to migrate and move freely but don’t allow for poor people to cross borders to survive.\(^{186}\)

In other words, corporations and capital can move across borders without repercussion after NAFTA, with conditions particularly favorable for American and Western foreign “investors.” At the same time, laborers are extremely restricted, and some critics believe that these immigration restrictions are not keeping pace with the increasingly global market. “When the basic conditions for human survival don’t yet exist, humans decide to migrate, just like any other species of animal. It’s one of the most illogical traits we have as humans. We are the only species of animal that does not permit migration because of hunger.”\(^{187}\) Immigration reform is, of course, a charged political issue in the United States, one that yet again cuts along lines of race, class, and nationalism. In recent decades, the North has largely determined the immigration regulations. “The vast majority of these initiatives have been launched from the north, construct the ‘south’ (i.e., Mexico) as a problem or threat, and reproduce consciously and unconsciously elements of chauvinism, paternalism, patron-clientism and protectionism.”\(^{188}\)

These ideas are founded in colonial relations and continue to prioritize the United States both environmentally and economically, using racism and economic scare tactics to perpetuate the structural imbalances of economic power.

Chiapas offers a perfect example of agroindustry and the United States at once forcing and forbidding migration. An estimated 1,500 migrant laborers support the Vermont dairy industry, and over a third of them come from Chiapas.\(^ {189}\) Many are undocumented because they are ineligible for the H2A visa program, which allows seasonal migrant laborers to work in the United States.\(^ {190}\) As unskilled, nonseasonal workers, few dairy workers have the ability to enter and work in the United States legally with a visa. Once in the United States, these workers have few to no political rights, face the constant risk of deportation, and often suffer severe health problems from hazardous working conditions on the dairy farms. In fact, they work in among the most dangerous occupations in the United States, and small dairy farms with fewer than ten employees are not regulated by the Occupational Safety and Health Administration.\(^ {191}\)

Dairy workers are injured at a much higher rate than other workers in the United States: Between 2004 and 2007, nearly 7 of every 100 dairy workers were hurt.

\(^{185}\) Root Causes of Migration.  
\(^{187}\) Root Causes of Migration.  
\(^{189}\) Root Causes of Migration.  
annually on average, compared to 4.5 out of 100 for all private industries. Beyond using tractors and heavy farming equipment, dairy workers interact with large, unpredictable farm animals—work that ranks among the most hazardous of all occupations, according to a 2007 article in *Epidemiology*. Plus, they breathe air laced with bacteria and manure dust, putting them at risk for long-term respiratory disease.\(^{192}\)

Although this may initially seem like an issue of labor or health injustice, it is fundamentally tied to the implementation of NAFTA, the resulting environmental challenges, and the necessity of migration for survival. NAFTA has reduced land and food security and made it impossible for many Chiapanecos to survive in their hometowns. As a result, they are forced to migrate and become farm laborers, where they, due to their nationality and undocumented status, are subjected to hazardous work and living environments and suffer disproportionate health risks. Until the recent passage of legislation in Vermont allowing for drivers licenses regardless of immigration status, these workers were isolated and completely dependent upon their employers for transportation and access to food and healthcare. Their food security and health had the potential of being just as unstable as in their hometowns, and they are subjected to dangerous agricultural practices with unpredictable animals and the use of numerous chemicals.

Understood in this way, the necessity of migration from Chiapas is a clear case of environmental injustice. Not only does the distribution of risks and resources that initially spurs migration fall along historically oppressive racial, economic, and national lines, but the conditions of migration also result in environmental hazards and often a lack of access to resources.

**Coffee: Ecologically and Socially Sustainable or a Resignation to Western Market Control?**

The original intent of NAFTA was undoubtedly to shape agricultural markets around the world and alter domestic agriculture in Mexico. Since Mexico had a comparative advantage in certain types of farming—such as sugar cane, coffee, and fruits and vegetables that could only be farmed seasonally in the United States—a purported expected outcome of NAFTA was to divert the land used for the cultivation of basic grains toward luxury exports, which would arguably create significant economic benefit for small-scale Mexican farmers.\(^{193}\) As previously discussed, however, cultivating luxury crops for export, rather than staples for domestic consumption, is not always economically feasible. In a coffee market that is nearly as competitive as the market for corn, Mexican farmers find it challenging to stay viable.\(^{194}\)

As a result, some coffee growers are forming organic cooperatives and targeting niche markets. One example is the *Indigenas de la Sierra Madre de Motozintla* (ISMAM), a coffee cooperative of Mam Indians in Chiapas.\(^{195}\)

The adoption of organic methods and marketing strategy was a critical element in the eventual success of ISMAM’s strategy ... it provided direct access to a specialized market ... the network of “social solidarity” shops. These are some 300 shops throughout western Europe that market products from indigenous

---

192 Clarren.
193 Nadal.
194 Nigh 432.
195 Nigh 428.
communities or cooperatives throughout the Third World. A surcharge (around 10%) is levied and returned to the producers as a subsidy to help consolidate indigenous organizations.  

ISMAM was able to use the members’ indigenous identity to its advantage. More broadly across the country, Mexico has become the world’s largest producer of organic coffee, with Chiapas producing nearly 24% of coffee for export. Clearly, organic coffee production has been relatively successful in the state. However, several factors have caused production to stagnate in recent years, “including the absence of good agricultural practices, the age of plantations, poor fertilization, and higher production costs.”  

While this niche market has made this cooperative very successful, the USDA data raises questions about how reasonable it is to expect all Mexican farmers to begin producing goods for similar markets. Although the organic food industry is rapidly growing, it remains a small, luxury market. Sustainable, organic, cooperatively produced coffee is neither a staple good nor even a good that all consumers can afford, even in the West. With market stagnation, it seems unreasonable to suggest that small-scale farmers turn to the luxury coffee market in place of subsistence farming.  

The case of ISMAM also presents a model of development that fuses traditional practices with global, capitalist markets. As Nigh points out, “we can see in this example an image of the struggle of Mexican campesinos, and perhaps of all farmers today, to redefine their identity in the market.” The cooperative employs principles of environmental justice, mainly through the methods of farming and the decision-making process. For example, recognition and participation were demonstrated in “the decision to adopt organic farming technology and [a] marketing strategy,” which was made collectively and “widely discussed among ISMAM members in local and general assemblies. In the discussions, the argument that organic methods were more harmonious with Indian traditional agriculture was emphasized.” While the cooperative must be involved in the global market, ISMAM made decisions that affirmed self-determination and ecological and social sustainability, while being economically viable.  

Although this cooperative model clearly cannot be implemented throughout the entire country, it does provide an alternative path for agricultural development away from mechanized labor, with increased profits and quality of life for those in the cooperative. The challenges of finding profitable niche markets and maintaining land rights remain, but there is some hope moving forward for alternative development models that, although they rely on foreign consumers and an export economy, do not include receiving funding from and extracting profits to large transnational corporations.  

This cooperative model, however, continues to function within a neocolonial framework. Western markets are consuming not only coffee but also a particular, highly

196 Nigh 433.  
198 Hernandez and Ford 4.  
199 Nigh 435.  
200 Nigh 433.
privileged, commoditized status or social belonging, and perhaps even guilt relief, by demonstrating their interest in “fair trade” or an environmentally and socially conscious lifestyle.

First world consumers who purchase ISMAM coffee are not just buying a commodity; they are consciously selecting a product certified to have been produced according to internationally established organic production methods, in a “socially responsible” commercial structure by farmers who are “the last descendants of the Mayan Indians,” as ISMAM’s promotional material informs us. Organic coffee is a typical postmodern economic product with high symbolic and aesthetic content in which “organic production as an entire way of life” is part of what is being marketed.\textsuperscript{201}

In order to reap some small benefits, ISMAM members must commodify their very identity, positioning themselves as an exoticized other, producing a unique product. The success of these cooperatives is still dependent on the West’s desire to consume imported luxury goods. At the same time, the success of global markets is dependent on perpetuating this desire for consumerism. Thus, ISMAM is not fully able to establish a more socialist/cooperativist economic system, because it caters to a portion of the market steeped in a tradition of colonialism and resource extraction.

Conclusion

Environmental crises caused or exacerbated by NAFTA range from outright disregard for land rights to agricultural workplace hazards that disproportionately affect Mexican migrant laborers within U.S. borders. The globalization of corn has strained Mexico’s poor, making it virtually impossible to subsist on their own produce and difficult to afford the rising cost of tortillas. As a result, some families are attempting to farm while supplementing their income through nonfarm wage labor or through migration to the United States. Once in the United States, migrant laborers continue to face environmental hazards, as their living and working conditions are often remote and dangerous.

Although organic coffee and other luxury crops are not bolstering the Mexican economy nearly as much as experts predicted before NAFTA, some cooperative farms, such as ISMAM, have successfully found a niche—European markets that will pay a high enough price to sustain cooperative organic farming. This cooperative method resists the environmental crises caused by NAFTA, allowing families to stay on their traditional lands and build a method of development that honors their cultural heritage. It also uses an inclusive decision-making model, is ecologically sustainable, and is at least at the moment economically viable. Yet this model continues to work within a system that advantages Western consumers, perpetuates oppressive economic policy, and extracts resources for export at an unsustainable and unjust rate.
References


