Published in final edited form as:

Migr Dev. 2013 June 1; 2(1): 132–149. doi:10.1080/21632324.2013.766552.

Chiapas' Delayed Entry into the International Labour Market: A Story of Peasant Isolation, Exploitation, and Coercion

Jason Davis and

Carolina Population Center, University of North Carolina, Chapel Hill, NC, 27516-2524, USA

Hallie Eakin

School of Sustainability, Arizona State University, Tempe, AZ, USA

Abstract

This manuscript presents a synthetic view of Chiapas' migration history over the last century through a thorough examination of relevant English and Spanish-language literature sources. Unlike most Mexican states, Chiapas did not heavily rely upon migration, especially international migration, as an economic strategy until very recently. The reasons that underlie Chiapas' late adoption of economic migration include socio-political and economic structural factors that shaped rural and agrarian policy and demographic trends. This paper evaluates these structural factors with regards to several migration theories to assist our understanding of how and why Chiapans were prevented or discouraged from leaving their native communities. The paper concludes by detailing the perfect cascade of climatic, demographic, economic and political factors that ultimately forced Chiapans to resort to international migration as a major economic diversification strategy.

Keywords

migration; subsistence agriculture; neoliberal reform; coffee crisis; Chiapas

Introduction

Chiapas is known as 'a country onto itself' within Mexico: relatively isolated from political and economic changes that characterize much of its country's history; a culture and demographics that are more closely tied to its Mayan neighbours in Guatemala than to the *ladino* dominated *altiplano* of northern Mexico; a climate and topography (Figure 1) that create barriers to movement and the flow of capital; and a place of resource extraction rather than investment causing it to remain the poorest state in Mexico (Solis 2005). Nevertheless, the last two decades illustrate that conditions in Chiapas are rapidly changing as evidenced by a marked transformation in migration pattern and destination. To illustrate this change, between 1995 and 2006, international migration rose nearly 50 fold from 2,500 to 120,000 annual migrations (EMIF-Norte 2006). Such dramatic change suggests an erosion of isolation and raises questions about the demographic, political and socio-economic fluxes

prompting Chiapans to join the rest of Mexico in integrating international migration to the United States into its suite of livelihood strategies.

In this article we review the literature to derive a synthetic view of the most prominent drivers of change in migration patterns, and interpret these drivers in light of migration theory. Of particular interest to us is evidence of the role that rural and agrarian policy and the political-economy of rural production play in explaining changes in demographic patterns. Focusing on the behaviour of peasant¹ households in the state, we illustrate how international and national institutional reforms and specific environmental and economic temporal shocks overlay onto ongoing processes of demographic change to alter the conditions for outmigration. As we argue below, the case of Chiapas provides a unique insight into how policy, social structure, and resource access can override broader scale conditions of wage differentials and economic opportunity to restrict population movement. In the following section, we introduce pertinent migration theories. We follow this section with a brief introduction to current migration characteristics, before delving into Chiapas' demographic, agricultural policy and land use history. We conclude by returning to migration theory to interpret Chiapas' unique trajectory of migration.

Migration Theory

Social scientists have studied migration dynamics in developing economies for well over a century. As early as 1887, E.G. Ravenstein produced a set of laws that capture late-19th century British migration cause and pattern. Amongst Ravenstein's numerous laws—that often hold true today—is migrants initially take short distance migrations but as they gain more information, they will step their way to further destinations (step migration) (Ravenstein 1889).

Over the previous century, numerous demographers, economists, geographers, and sociologists have adapted Ravenstein's migration laws to better fit their circumstances. In 1966, Everett Lee conceived his 'push-pull' theory largely based on Ravenstein's original laws (Lee 1966). Under this model, migrants carefully weigh the expected economic and social benefits for migrating to different destinations versus remaining at home. If a potential migrant destination has more benefits and/or fewer detriments than staying at home and 'intervening obstacles' such as the cost or danger of making such a migration journey are not too great, then an individual will choose to migrate.

About the same time that Lee was working on his push-pull model, Kingsley Davis published work on his multiphasic response model (Davis 1963). While not strictly a migration theory, this model argues that when smallholder households face increasing internal and local population pressures, they take a variety of actions to reduce a potential decline in their standard of living. Such measures include sending household labour to urban areas and/or abroad to seek out better paying jobs—in addition to delay of marriage and adoption of contraception.

¹The term peasant refers broadly to include landless farmers, *ejidatarios*, and smallholders with fee title land.

Social network theory is similar in many respects to Ravenstein's step migration. Under this theory, pioneering migrants from sending communities venture out seeking better living conditions, principally higher wages. Successful migrants then send word back to household members, extended family, and friends about employment opportunities that exist in migrant destinations. This in turn starts a wave of migration that progressively grows larger as information diffuses through sending communities. Furthermore, successful migrants often facilitate the migration process through the funding of migration journeys, the supply of invaluable information concerning routes of travel, the provision of shelter upon migrant arrival to the destination, and employment contacts (Massey et al. 1987; Lindstrom and Lauster 2001).

In 1993, Douglas Massey and others prepared a compendium of theories that describe motivations and structures that stimulate migration events (Massey et al. 1993). They began their discussion by describing two micro-level theories that address migration decision-making at the individual or household level. The first, based in principles of neoclassical economics, and similar to Lee's push-pull theory, argues that individuals are rational actors who make cost-benefit calculations to determine if the cost of migration including losses of local income potential are outweighed by wage potential in a migrant destination thus necessitating a migration event. Akin to osmosis, free labour seeks out higher wages until equilibrium between wages and labour is achieved. This theory assumes perfect information regarding job opportunities, wages, cost of migration, etc., of both the migrant origin and destination. The second theory, new economics of labour migration (NELM), differs in many ways from the neoclassical economic model, not least of which in the fact that decision making is based at the household level rather than at the individual level. In many developing economies, unlike in more developed areas, imperfect social safety nets and/or well developed insurance and capital markets force smallholders to diversify their livelihood strategies. Such diversification may take the form of intensification of farm operations, growing cash crops, raising cattle or milk cows, using household labour for non-agricultural production of traditional wares or other items to be sold in the marketplace, and most relevant here, sending members to urban areas, internationally to earn additional income, or most likely a combination of these strategies.

Current Migration from Chiapas

Unlike Guerrero and Oaxaca—with similar histories of discrimination against their indigenous populations—and the rest of Mexico, international migration was a very recent phenomenon in Chiapas (Enciso et al. 2007). In just over ten years—1995 to 2006—international migration to the U.S. of Chiapans rose from a meagre 2,500 to nearly 120,000 individuals (Figure 2) (EMIF-Norte 2006). The sharp rise in international migration from Chiapas to the U.S. is strongly reflected in the return flow of remittances to Chiapan households. According to Navarro (2004), of Mexico's thirty-one states, Chiapas placed twenty-seventh among states receiving remittances from the U.S in 1997; by 2003, Chiapas' placed eleventh overall. Furthermore, between 2003 and 2005, remittance transfers to Chiapas nearly doubled from \$361 to \$655 million—amounts that are greater than a combination of tourism, foreign direct investment and farm subsidies to the region during the same time period (Solis and Aguilar 2006).

As reflected in Figure 3, interstate migration from Chiapas also demonstrates similar significant increases in recent years. According to Enciso et al. (2007), the number of Chiapans residing in other Mexican states rose from 90,000 in 1970 to 336,000 in 2000—8 percent of the total native population in Chiapas. In addition to the traditional interstate migration destinations (Mexico City and the oil producing states along the Gulf Coast), the 1990s and early twenty-first century added Quintana Roo into the mix. Interestingly, Quintana Roo's tourist boom, which began in the 1970s with the growth in tourism in Cancun (Daltabuit and Pi-Sunyer 1990), did not attract Chiapans until very late. However, the decline in tourist growth attributable to the aftermath of September 11, 2001, terrorist events in the U.S. (Burke 2004) in addition to the recent global recession, are likely to limit future migration to Quintana Roo from Chiapas. In the next sections, we contextualize these recent changes in Chiapan migration patterns through an analysis of Chiapas' demographic, political and economic history.

Mexican Migration History

Migration from Mexico to the U.S. has had a long and turbulent history—at times welcome and more often discouraged. During the late nineteenth and early twentieth centuries, conditions for migration were heightened by a combination of abject poverty, landlessness and harsh working conditions in Mexico while industrialization was on the upswing in the south western U.S. (Massey et al. 1987). The Southern Pacific Railroad was built in the region in the late-1800s. And, with the signing of Chinese Exclusion Act in 1882, traditional unskilled Chinese labour was restricted from working on the railroad's expansion thus Mexican migrant labour was employed (Massey et al. 1987). This cheap source of labour largely from Mexico's central western states—Guanajuato, Jalisco and Michoacán (Cohen 2004)—was also utilized to work in mining and rapidly expanding agricultural production throughout the south western U.S. (Monto 1994). Furthermore, numerous Mexicans crossed the U.S. border to seek refuge during the years that led up the Mexican Revolution of 1910 (Cohen 2004). Mexican migration to the south western U.S. continued to expand through the time period leading up to World War I—replacing the loss of European migrant labour—but was shut down completely with the stock market crash of 1929 (Massey et al. 1987).

In 1942, the U.S. and Mexican governments re-established Mexican migration to the U.S. with the initiation of the Bracero Program. The program allowed seasonal agricultural labour migration to south western U.S. to alleviate the loss of U.S. labour directed toward the U.S.'s increased involvement in World War II (Massey et al. 1987). From 1942 to 1964, approximately four and a half million Mexican labourers worked in the U.S. as *braceros* predominately from four central western states—Guanajuato, Jalisco, Michoacán, and Zacatecas (Craig 1971). Chiapan labour represented only a tiny fraction of *bracero* labor—0.02 percent (CONAPO 2005). Following the end of the Bracero Program in 1964, both clandestine and documented U.S. border crossing increased rapidly. From 1960 to 1980, the legal flow of Mexican migrants increased from 430,000 to three million persons (Durand et al. 2002), while an estimated 800,000 additional undocumented border crossing occurred in the 1980s (Woodrow and Passel 1990). According to Cornelius (1992), the geographical origin of Mexican migrants also shifted in the late 1980s from the central western states (Guanajuato, Jalisco, Michoacán, San Luis Potosi, and Zacatecas) to northern states (Baja

California and Chihuahua), southern states (Oaxaca and Guerrero) and central states (Federal District, Mexico and Puebla). However, as described below, Chiapas did not take initial steps toward entering the internal labour flow to the U.S. until the 1990s.

Migration History in Chiapas

Debt Peonage, Resettlement and Internal Migration: the Colonial Era to 1930s

Peasant population movements in colonial Chiapas were essentially coerced as part of colonial economic development policy and practice. Following the Old World invasion of the Americas by Europeans, much land in Mexico was taken from indigenous populations and given to colonial administrators and the Catholic Church (O'Brien 1998; Saldana-Zorrilla 2008). The colonial policy was to resettle the indigenous populations from the Chiapan lowlands to the Highlands, into densely populated communities on terrain and soils that were generally of poor quality for farming (Nations 1994; Rus 1994). The main impetus for the resettlement program was economic, namely to place indigenous populations in close proximity to the large haciendas of the Highlands, which dominated the higher quality lands, in order to better control badly needed labour for colonial production purposes (Collier and Quaratiello 2005).

The precarious living conditions experienced by indigenous populations—in particular, lack of high quality land from which to meet subsistence needs—allowed large *latifundios*² in both the Highlands and coastal coffee-growing regions to easily exploit indigenous labour (Bobrow-Strain 2005; Collier and Quaratiello 2005). It was a common practice at the time to coerce peasant labour through cash advances and strong arm tactics into signing labour contracts that for all practicable purposes placed them into positions of indentured servitude (Sanchez et al. 1989; Rus 1994). Labour contracts allowed landowners to subject peasants to harsh working conditions with poor pay or risk imprisonment if they fled their employer (Rus 1994; Bobrow-Strain 2005). Labour contracts also typically stipulated that workers pay rent to their employers and purchase all their provisions in company stores (Sanchez et al. 1989). Upon the completion of the contract period, it was very common for peasants to return home owing as much debt as was advanced to them when they signed their labour contract, thus instituting long-term indebtedness to the great *latifundios* (Rus et al. 1986; Rus 1994).

The resettlement process and the associated inequitable allocation of productive lands that characterized colonial Chiapas set the stage for a long history of labour and land exploitation that largely excluded indigenous and smallholder populations from the benefits of agricultural production and growth even after Mexican Independence in the nineteenth century (Cohen 2004). Poor access to land and productive resources made it necessary for indigenous groups to supplement their incomes through wage labour either locally on the few large haciendas in the highlands or to make annual journeys at their own expense to the coffee plantations in the coastal region of Soconusco (O'Brien 1998).

²Latifundios refer to the few great estates of Latin America that largely rely upon peasant labor for commercial farming. Minifundios, in contrast, are small-holdings used for subsistence farming.

While other parts of Mexico underwent land reform immediately following the 1910–1917 Revolution, the combination of Chiapas' relative isolation and the dominance of powerful *latifundios* were able to preclude land reform until the 1930s (Rus 1994). Thus, Chiapan indigenous populations maintained the same poor, land deprived existences from 1880 until the 1930s. The exploitation and harsh working conditions in which most indigenous worked created long-standing distrust of the 'ladino world', which partially explains a long history of indigenous isolation and delayed interstate and international migration.

Land Distribution and Agrarian Change: Interior migration and land settlement 1930s–1965

Land reforms initiated in the 1930s provided a new disincentive for migration: the possibility for the rural peasant population to meet their subsistence needs working their own land. Following the U.S. stock market collapse of 1929, the Mexican government made the decision to transition from an export-oriented economy to one that practiced self-sufficient food production. This shift placed the Mexican peasantry at the base of Mexico's plan for industrialization (Gates 1988; Collier and Quaratiello 2005). Food self-sufficiency was supported by the onset of agrarian reform and land distribution in the state under the leadership of President Lazaro Cardenas in 1934. In Chiapas, the agrarian reforms of the Cardenas era entailed the redistribution of land from underutilized haciendas to formerly landless indigenous peasants through cooperatively-owned *ejidos* in the Highlands and along the Soconusco coast (Collier and Quaratiello 2005). Land distribution in addition to other agricultural reforms such as federal price supports for key agricultural commodities reduced the need for seasonal economic migration through the 1930s.

While the land distribution process did provide many households new opportunities in subsistence and small-scale commercial production, the increasing integration of rural households, including more isolated communities in Chiapas, into commercial agriculture was accompanied by declining terms of trade between agricultural and manufactured goods. The continued divergence between the price of peasant produced foodstuffs and other costs of living in *ejidos* made life difficult, forcing peasant farmers to cultivate 'their land to the limits of its capacity' as well as to contribute part-time labour to 'the reviving sector of commercial agriculture' (Collier and Quaratiello 2005, 35). For others, conditions had worsened to the point where they abandon their smaller claims to *ejido* land in the Highland and Soconusco coast, instead opting to seek larger plots of *ejido* land in the la Selva Lacandona region of eastern Chiapas (O'Brien 1998).

The colonization of the Selva Lacandona by peasant farmers did not take root until the 1940s, nearly a decade after Cardenas' agricultural reforms were implemented. Potential colonists were never legally prevented from colonizing la Selva Lacandona prior to this time, but aside from the fact that the jungle was impenetrable, unpleasantly hot and humid, and inhospitable, until the 1930s most landless peasants were prevented from leaving their locations due to a system of debt peonage and paternalistic relationships where individuals were tied to particular haciendas and plantations practically for life (O'Brien 1998). While the 1917 Mexican Constitution outlawed the practice of the state guaranteeing labour to lowland plantations, such rules were never fully applied to Chiapas until Cardenas' appointed governor took control of the region in the 1930s (O'Brien 1998).

The designation of Lacandon land for redistribution in *ejidos* was largely a practical solution to alleviate the land demand exerted by landless peasants on local and state governments (Howard and Homer-Dixon 1996; O'Brien 1998). Unlike in other parts of Mexico where large, underutilized haciendas and plantations were appropriated by the federal government and redistributed to peasant claimants, the government in Chiapas was relatively weak compared to the large *latifundios*, which often paid mercenaries to fight off government land redistribution initiatives. Designating unsettled and generally inhospitable Lacandon land for redistribution was thus politically expedient (Howard and Homer-Dixon 1996; O'Brien 1998; Collier and Quaratiello 2005).

Paralleling the colonization of la Selva Lacandona was an expanded demand for agricultural labour in Chiapas' internal lowlands, creating a new pull for internal migration. The growth in labour demand came at the end of World War II when the world experienced a sharp rise in global commodity prices that continued climbing upward from the 1950s through the next two decades (Rus 1994). Elsewhere in Mexico the rise in commodity prices was accompanied by significant public investment in high-yielding, capital intensive 'Green Revolution' technologies, ideal for the irrigated and relatively flat lands in north-central and northern-western Mexico. In the case of Chiapas' peasant farmers, the most notable change in livelihood opportunity was not through the availability of technology, but rather an increase in demand for their cheap labour (Edelman 1980; Gates 1988).

High commodity prices stimulated an expansion in exports, stimulating growth in the traditional destination region for internal migration. Initially, the agricultural boom increased the pull of Chiapan labour to the coffee-growing region of Soconusco, however new export plantations in the Chiapan interior lowlands and Lacandona region of eastern Chiapas (see Figure 1 as a reference) also expressed a high demand for labour where corn, beans, mangos, sugar, rice, and cacao were grown (Rus 1994). In order to maintain highland labour sources in the interior of the state, the government employed a two-pronged strategy: First, state and federal government improved the road infrastructure between the Highlands and interior lowlands (Rus 1994). While road improvement attracted many Highland labours to the lowlands, it did not completely break the cycle of Highland to coastal migration that had occurred for decades. To completely redirect Highland labour away from the coffee plantations, Mexico's Immigration Service turned a blind eye to the clandestine crossing of Guatemalan labourers into the Soconusco coffee-growing region, effectively undermining coastal agricultural wages and making farm work in the interior of Chiapas far more attractive to peasant migrants (Rus 1994).

Mexican Oil Boom (1974–1985): Initiation of out-of-state migration

A new pattern of migration, involving movement of Chiapan youth in search of agricultural and non-farm opportunities out of state, began in the 1970s and was stimulated by Mexico's expanded investment in oil. The shift in migration patterns was in part a result of a national change in the orientation of development. The Mexican government's emphasis on agricultural exports as a mainstay of the economy came to an abrupt end in the early 1970s with the global energy crisis. When the Organization of Oil Producing Countries (OPEC) upset the global energy market by reducing its supply of oil to the world market, the price of

gasoline and other oil-based products skyrocketed. These oil price spikes enticed many nations, including Mexico, to increase their production of oil and to enter the global energy market (Collier and Quaratiello 2005). Large oil fields were discovered or expanded in the States of Tabasco, Campeche and a few in northern Chiapas (Gates 1988).

From 1974 to 1985, Mexico became a 'Petroleum Economy' with the unfortunate side effect of currency inflation and a drop in value of nonpetroleum exports (Collier and Quaratiello 2005). From 1968 to 1982, agriculture's contribution to GDP fell by half (14 to 7 percent) while petroleum increased from 27 to 38 percent (Scherr 1985). The drop in Chiapas' prices for coffee, mangos, and bananas, in addition to rising unemployment and the lack of affordable land, created a regional economic crisis and a jump in poverty (Enciso et al. 2007). Conditions deteriorated to such an extent that many of Chiapas' peasants fled the countryside *en mass* to Mexico City, oil producing states to the north (Sanderson 1986; Collier and Quaratiello 2005; Enciso et al. 2007; Tellez 2008), and tourist areas along the Mexican Riviera (Solis 2005; Solis and Aguilar 2006).

Some of the harms caused by the boom in oil exports and the deflation of agricultural prices were mitigated by the establishment of the *Sistema Alimentario Mexicano* (SAM). SAM, completely funded with oil revenue, was a move to set Mexico back on a track of self-sufficiency in basic grain production by providing assistance to peasant farmers in rain fed lands (Gates 1989; Eakin 2006). The program provided access to credit, price supports and subsidized agricultural inputs, as well as technical assistance to principally peasant agricultural producers (Austin and Esteva 1987; Gates 1988; Eakin 2006). While short-lived (1979–1982), SAM produced dramatic changes in Chiapas maize production. Total planted area in maize expanded by 34 percent, and much of this expansion was in irrigated land. Production rose by 88 percent in the short period of the program. Subsistence and semi-subsistence farmers were the focus of the policy, although the expansion in irrigated area suggests more commercially-oriented farmers may also have benefitted (Andrade and Blanc 1987). While one can only speculate on SAM's impact on migration patterns, the increased availability of inputs and markets for food production likely temporarily mitigated incentives to migrate for food-insecure smallholders.

Nevertheless, the broader context of the oil boom and expansion of the industrial and manufacturing sector nationally profoundly altered the livelihood opportunities of Chiapas' peasant communities. The 'petrolization' of Mexico's economy and the ability of peasants to find good paying jobs in the petrol states led Chiapas to transition from a barter agrarian economy to a cash-based economy (Collier et al. 1994; Flood 1994). This transition forced many, especially unencumbered younger males, to consider migration as their primary economic strategy, forsaking a long history of subsistence agricultural work. During this time period, economic migration became a rite of passage for many young males to display through conspicuous consumption, their ability to provide for a family and thereby attract a potential spouse (Collier and Quaratiello 2005).

The Pivotal Decade (1990–2000): Agricultural Restructuring and International Emigration

Chiapas entered the 1990s as one of the poorest states in Mexico. Neither leading, nor substantially shaping the national development agenda, Chiapas was – and remains – a

primarily agricultural state characterized by significant inequities in land access and persistent rural poverty. However, up to the 1990s, very little international migration had occurred from Chiapas even though following World War II international migration had become an increasingly common practice throughout most of Mexico—especially in the northern border states. What happened in the late 1980s and 1990s to facilitate Chiapas' entry into the international labour market can be described as a perfect cascade of climatic, demographic, economic, and political factors that hit the region within a very short time period forcing severely disenfranchised peasants to turn to international migration to the U.S. as a key component of their future livelihood strategy.

Employment and Demographic Factors—Between 1990 and 2000, Chiapas' population increased at a 2.2 percent rate, while from 1950 to 2000 its overall population increased fourfold from just under one million to nearly four million. Furthermore, Chiapas' working-age population of fifteen to fifty-nine year olds increased over three times between 1970 and 2005 reaching a peak of 593,000 working adults in the early 1990s (Diaz and Sanchez 2007). Employment opportunities in the 1990s – and today – are still largely rural (Table 1). Nearly 50 percent of the economically active population was employed in agriculture in 2000. Persistent conditions of poverty and economic marginalization have limited economic opportunities in other sectors. Coffee, the most important cash crop to Chiapas' economy, provided income for nearly 25 percent of its working population (500,000 labourers) while maize, coffee and beans together formed the basis of the rural peasant economy (Perez-Grovas et al. 2001).

While there had been some progress in land reform in the twentieth century, progress was slow and by 1990 the growing population had led to severe problems of land access (Villafuerte Solís and García Aguilar 2006). This fact in addition to the large increase in working-aged adults has likely led to an increased propensity to utilize migration as both an economic diversification strategy and as a measure to alleviate population pressure.

Political Factors—Political change in the late 1980s is considered by some to be the most important factor in altering the course of Chiapas' migration history (Solís and Aguilar 2006). Unlike areas of Central America that have never been supported by the government, most of Mexico's farmers, including those in Chiapas, enjoyed some degree of public intervention in agricultural markets, services and production throughout most of the twentieth century. Agrarian policies following the Revolution of 1910 allowed most farmers not only to grow crops for personal consumption but also to participate in the agricultural economy. In the wake of a severe debt crisis following the collapse of Mexico's oil boom in the late 1980s, Mexico was forced to turn away from its history of peasant food production as a means of national food self-sufficiency and instead to increase support of industrial agriculture (Collier and Quaratiello 2005), essentially the adoption of free market policies and neoliberal reform advocated under the Washington Consensus³.

³The Washington Consensus, as originally defined, represents a list of ten neoliberal policies proposed to reduce poverty conditions throughout Latin America. These neoliberal policies include: fiscal discipline, trade liberalization, privatization, deregulation, property rights. Within Latin America, Mexico has gone the furthest in implementing the neoliberal reforms advocated within the Washington Consensus (Fluharty 2006).

One of the first acts of President Salinas de Gortari, a Harvard trained economist, was to phase out food price controls and subsidies for peasant agriculture in 1988 (Ochoa and Lorey 2000; Zedillo Ponce de Leon 1996) including deregulation of the price of agricultural inputs and farm products (Appendini 1998; de Janvry et al. 1995). He went further by ending the governmental practice of providing credit to rural farmers forcing them to rely upon private entities for loans (Saldana-Zorrilla 2008). This change effectively excluded all peasant farmers from obtaining farm loans as only ‘potentially profitable’ farms were eligible for such loans (Appendini 2001; Eakin 2005; Solis 2005; Keleman et al. 2009). According to Howard and Homer-Dixon (1996), in 1985–1989, 80 percent of Chiapas’ agricultural producers had no access to credit while in 1990, the rate jumped to over 87 percent of producers. The Mexican government also stopped subsidizing crop insurance and the development and distribution of new seed strains and fertilizers. This led to a drop in insured cropland from 40 percent in the 1980s to 10 percent in 2000 (Saldana-Zorrilla 2006, 2008).

As described in further detail below, in 1992 Salinas shuttered the Mexican National Coffee Institute (INMECAFE)—the coffee parastatal regulating coffee production, marketing and exports—effectively removing all governmental price supports, technical assistance, and subsidized credit to the coffee industry (Gates 1989; Eakin et al. 2006). He also went further by reforming Article 27 of the Mexican Constitution and Agrarian Code, ending the land redistribution process and instituting a new policy that granted official title to all individuals with usufruct rights to *ejido* plots (Collier and Quaratiello 2005). Landless populations in Chiapas who had been struggling for decades for land access thus faced a sudden denial of opportunity (Solis and Aguilar 2006).

Perhaps the final (policy) nail in the coffin of peasant farming was the ratification of the North American Free Trade Agreement (NAFTA) in 1994. This agreement ended decades of agricultural price protections through the lifting of tariff and import restrictions—subjecting farmers to international competition. For some crops including maize, the lifting of trade restrictions was meant to be phased in over a fifteen-year period, but the national government did not enforce its options to protect the maize market (Nadal 2000, 2002; Keleman et al. 2009). There is some disagreement over the effect of NAFTA on maize prices and production in Chiapas, with some studies finding evidence of maize abandonment and livelihood change (e.g., Keleman et al. 2009) and others finding evidence of maize persistence as a subsistence crop with the support of *PROCAMPO*, a government per-hectare payment for farmers of basic staples (Solís 2005). Nevertheless, it is widely agreed that the policy reforms of the 1990s represented a substantial shock to the rural economy—enough to force populations to look elsewhere for economic opportunity.

Economic Shocks – The Coffee Industry—Among the various social and economic factors contributing to the change in migration patterns in Chiapas, the coffee sector merits specific attention. Thirty-three percent of Mexico’s coffee was grown in Chiapas in 1997 (SAGAR 1999), and the value of Chiapan coffee exports from 1996–1997 was \$300 million (U.S. dollars) (Solis and Aguilar 2006). As described above, the coffee sector has been both a driver of internal migration in Chiapas (e.g., to the Soconusco region) as well as a source of population stability as smallholders gained access to land to produce their own coffee

harvests in the twentieth century. According to Harvey (1994), in 1990, 66 percent of all Chiapan coffee farmers owned up to two hectares of coffee *finca* while 90 percent owned less than five hectares.

In the early 1990s, mirroring the liberalization of Mexico's agricultural sector as a whole, the Mexican government closed INMECAFE—ending most governmental price and financial supports as well as government sponsored research and development in the coffee industry (Collier and Quaratiello 2005; Eakin et al. 2006; Hausermann and Eakin 2008; Saldana-Zorrilla 2008). A few governmental programs were established to alleviate some of the hardships borne by the coffee crisis, such as *Programa Nacional de Solidaridad* (PRONASOL) and credit via the *Instituto Nacional Indigenista* (INI) (Perez-Grovas et al. 2001). Indirectly, the *Oportunidades* program, a cash transfer program whose aim is to increase school enrolment, may also have helped smallholder coffee producers from abandoning land (Barham et al., 2011).

Just prior to these domestic reforms, the International Coffee Agreement (ICA) which regulated international coffee prices, collapsed (Navarro 2004; Solis and Aguilar 2006; Santacruz de Leon and Villalba 2009)—resulting in the deregulation of coffee quantity and quality (Ponte 2002; Eakin et al. 2006). These factors led to a sharp decline in coffee prices in 1998, followed by a two-year period of stabilization and then another steep drop in prices through 2002 (Solis and Aguilar 2006). In 2003, the price for 'other mild' Arabica coffee rested just above its historic low set in 2001 (Eakin et al. 2006). The result of these events was the loss of tens of thousands of seasonal labour jobs and, for some farmers, the temporary abandonment of their coffee harvests (Navarro 2004; Saldana-Zorrilla 2008).

There is some evidence that this most recent coffee crisis forced some smallholder coffee farming households to diversify their incomes by sending individuals members and perhaps even entire households to seek work in other states and the U.S. (Renard 2010; Navarro 2004; Saldana-Zorrilla 2008). According to Oxfam (2001), the coffee crisis caused 500 families per week (both farmers and labourers) to leave Chiapas in search of better economic opportunities in the oil producing states, *maquiladores* or the U.S. Immigration to Chiapas by Guatemalan agricultural workers was also affected: Santacruz de Leon and Villalba (2009) report a loss of 40,000 documented Guatemala agricultural workers—a nearly 60 percent drop—between 1995 and 2005. Navarro (2004) estimates that prior to the crisis 90,000 Guatemalan day labourers travelled from their villages to seasonal jobs along the Soconusco coast. Most of them now either stay home or continue on their way to the U.S. border.

Zapatista Uprising and Environmental Shocks—Armed conflict and social unrest associated with the Zapatista Uprising and related land claims provided an added incentive for many Chiapans to abandon local employment instead opting to migrate to the U.S. The Zapatista Uprising symbolically took place on January 1, 1994, the same day that NAFTA was ratified. For Chiapas' peasant constituency, the rebellion had the positive effect of forcing the redistribution of 250,000 hectares to the Zapatistas. However, due to the large increase in the peasant population, the small size of allocated farm plots and the loss of all governmental agricultural supports, some have argued that the reallocation of land only

further entrenched the impoverished peasant economic class at the mercy of market prices (Solis 2005). For the region as a whole, the Zapatista conflicts between *campesinos* and larger landowners led to the displacement of 35,000 largely indigenous and/or rural peasants who took up residence in urban areas (Diaz and Sanchez 2007). While most returned to their native communities, 10,000–12,000 displaced Chiapans continue to reside in urban areas. An additional negative result of the uprising was a retardation of outside investment to the region, reduced crop production and the displacement of some of the local population (Solis and Aguilar 2006).

To make matter worse for Chiapans, Hurricanes Mitch and Stan hit the coastal areas and Sierra Madre de Chiapas in short succession. Hurricane Mitch, a storm considered the most powerful to make landfall in the Western Hemisphere during last two centuries, terrorized Central America and Chiapas in October/November 1998 (NCDC 2010). Mitch flooded more than 200,000 hectares in Soconusco (Santacruz de Leon and Villalba 2009) and killed 400 people throughout Mexico (Navarro 2004). Seven years later, Hurricane Stan affected 600,000 people with flooding along the Chiapas coast (Saldana-Zorrilla 2008), destroyed 65 percent of Soconusco's banana harvest (Santacruz de Leon and Villalba 2009) and damaged over a third of the planted area in coffee (CENAPRED 2006). Both storms caused spikes in out-migration as households struggled to cope with losses (Alscher 2009). Neither event, alone, is responsible for the new surge in emigration to the U.S. witnessed in the early twenty-first century (Solis and Aguilar 2006).

Discussion

Late twentieth-century Mexico presents an interesting case in the migration literature because almost as a natural experiment, the Mexican government ended long-standing social safety nets for its peasant constituency. Unlike most of Central and South America, Mexico instituted a series of agricultural reforms and supports for its peasant communities in the early to mid-1900s as a way to stimulate urban industrialization. By insuring a cheap source of peasant-supplied food, urban businesses could pay lower industrial wages. Agricultural reform also helped to alleviate political pressure associated with dissatisfaction with poor living conditions in the countryside. However, in 1988, President Salinas de Gortari pushed through legislation amending the Mexican Constitution, effectively ending price supports, crop insurance and subsidized loans for smallholder farmers. In short order, thousands of peasant farming communities who were barely eking out a living before the passage of NAFTA were now without a market for their harvests, virtually no access to credit and with almost no ability to acquire the inputs they needed to participate in the agricultural economy.

From the history above it is clear that Chiapan migration has conformed to a mixture of different theories and forces (Figure 4). Neoclassical economics would predict that given the large wage differentials present between Chiapas and the U.S., that migration between the two locations should have occurred long before the turn of the twenty-first century. However, as noted by Massey (1987), Mexican-American wage differentials do not strongly correlate with temporal shifts in the volume of migrations due to numerous structural barriers that were present in the system. One set of structural barriers that violates a central tenet of neoclassical economics regards a lack of 'perfect information' or even poor

information about potential migrant destinations—what they offer, how to get there, etc. A poor base of knowledge about the outside world by peasant Chiapans can be attributed, in part, to the relative isolation of their villages—70 percent of Chiapan communities supported few than 2,000 inhabitants into the year 2000—and a long history of exploitation by government and large *latifundios*. These dynamics likely created an aura of mistrust of outside influences, thus reducing the flow of information into these communities. The second set of structural barriers to migration includes physical barriers such as the debt peonage system that kept peasants tied to individual haciendas and plantations for life and economic forces—e.g. a lack of capital from which to fund a migration journey. The last set of structural barriers can be associated with the slow process of land reform and the associated agrarian policy of the twentieth century, in which the focus of rural household survival was on the legal and institutional potential of land redistribution. The slow and imperfect implementation of land reform in Chiapas led to both temporary reprieve of subsistence needs, and the persistence of hope that land access would result in welfare improvements, alleviating the need for migration.

Over the last 100 years, Chiapans have painstakingly overcome many of these barriers in a stepwise fashion that has led to the explosive rise in international migration seen in recent years. Indigenous and/or peasant Chiapans have suffered from a lack of sufficient, high quality land (push) from which to properly support their families since the European conquest. Following a multiphasic response, this has necessitated that Chiapan peasant households incorporate seasonal migration initially and longer-term migration more recently into their livelihood strategies in order to survive. Migration has the added benefit of decreasing population burden and thus reducing pressure on the land. However, Chiapan peasants were not always free to seek employment where they chose. During the first quarter of the twentieth century, they were subjected to a system of debt peonage that tied them to neighbouring haciendas in the Highlands or plantations along the Soconusco Coast. While the 1917 Mexican constitution outlawed all practices that maintain debt peonage, official word that such a law was passed did not formally reach Chiapas until the 1930s—a perfect example of the slow flow of information into indigenous Chiapan communities.

In the late 1960s through the 1980s the depression of commodity prices (push) and the pull of good petroleum wages in Tabasco and Campeche, construction jobs in Mexico City, and tourist jobs in Quintana Roo attracted poor peasants. Such opportunities provided many benefits to Chiapans. First, interstate migrants were able to amass some savings. Additionally, interstate migration allowed highly insulated indigenous Chiapans to mix with other populations which overtime led to an improvement in their ability to speak Spanish (Solis and Aguilar 2006). Presumably, as they began to communicate with a broader population of workers, they became more aware of the lucrative opportunities that exist in the U.S. and began to develop social networks tied to the U.S. (Solis and Aguilar 2006) as predicted by neoclassical economics.

Interstate migration was a big step for peasant Chiapans to consider eventual journeys to the U.S. For many, it removed two structural barriers (pulls) to such an action—a lack of knowledge and financial restrictions. However, based on the *Partido Revolucionario Institucional* (PRI) controlled government's history of slowly meting out parcels of land for

communal agriculture since the enactment of Article 27 of the Mexican Constitution, many Chiapans still held out hope that they would eventually benefit and be able to provide for their families. However, this implicit promise was shattered when neoliberal reforms abolished all governmental assistance to peasant farmers including crop insurance, access to credit and perhaps most important symbolically, the elimination of agricultural reform and any hope that future land would be redistributed to landless peasants.

The conditions that initiated international migration to the U.S. from Chiapas in the 1990s would appear to follow a NELM framework which argues that smallholder households choose to diversify their livelihood strategies through migration to make up for inefficiencies in local economies including the lack of credit and insurance markets in order to continue farming. Government subsidized credit and crop insurance were available to smallholders in Chiapas until the Salinas administration chose to implement neoliberal restructuring measures in the early 1990s. While it is difficult to disentangle the many forces (coffee crisis, natural disasters, political unrest) that also acted to push peasant labour out of Chiapas toward the U.S., such neoliberal reforms were certain to have played a role in the large exodus of Chiapans northward. In the case of a dwindling number of Chiapas' smallholder coffee producers and many other commodity producers, NELM does properly model the migration phenomenon. According to Renard (2010; pg. 31), international migration by at least one male household member is essential to the diversification strategies of smallholder coffee producers while left behind crops are now predominately tended by 'the elderly, women and children.' However, the number of smallholder coffee producers that are using international migration as a means to diversify their incomes to alleviate the paucity of crop insurance and credit is dropping precipitously. According to some scholars, it is becoming more common for entire Chiapan smallholder families to fully abandon their farmlands, thus choosing migration as a livelihood strategy in lieu of the continuance of farming and not as a way to continue farming (Navarro 2004; Saldana-Zorrilla 2008).

Conclusion

Chiapan migration to the U.S. is largely a story of indigenous peasant isolation, coercion, and exploitation. Unlike Mexico's western central states that have centuries-long histories of moving back and forth across the U.S. border, Chiapans did not consider such a prospect until the end of the twentieth century. Prior to that time, Chiapan peasants were largely in the dark about the economic potential of migrating to the U.S. When they were not held in virtual indentured servitude, the years of exploitation by *ladino* landowners caused them to retreat into their communities shunning outsiders and the flow of information about the outside world. In the late 1930s, an implicit symbiotic relationship was established where the PRI controlled government would redistribute land to peasant farmers while they in turn would produce cheap food from which the country could urbanization. However, with the exception of the Cardenas government, there was very little sympathy or use for peasant communities other than as a source of cheap food production. Following a gradual process where peasant farmers were forced to venture out into the world to compensate for a lack of viable land from which to provide for their families, migrants started to make strides toward breaking down many of the formal barriers to international migration such as access to savings, information and entry into social networks tied to U.S. communities. Once the

promise of Agrarian Reform and the potential for participating actively in Mexico's national economic growth was unlikely to be realized, the cessation of public agricultural support programs, the collapse of the coffee market and the social unrest caused by the Zapatista Revolution and natural disasters, made international migration to the U.S. a logical step for best alleviating chronic destitution.

Acknowledgments

We are grateful for comments provided by Mariel Aguilar Støen. The paper received support from MIRLU: The effect of migration and remittances on land use change in rural Mexico and Guatemala: Is there a forest transition? (Centre for Development and the Environment at the University of Oslo) and has been endorsed by the DIVERSITAS program.

Bibliography

- Alscher, Stephan. Environmental factors in Mexican migration: The cases of Chiapas and Tlaxcala. Mexico Case Study Report # D 2.6.2.4 EACH-FOR Environmental Change and Forced Migration Scenarios Project. 2009. (www.each-for.eu)
- Andrade, A.; Blanc, N. Sam's cost and impact on production. In: Austin, JE.; Esteva, G., editors. Food Policy in Mexico: The Search for Self-Sufficiency. Ithaca, NY: Cornell University Press; 1987.
- Ángeles H. Las migraciones internacionales en el Soconusco, Chiapas: un fenómeno cada vez más complejo. Comercio Exterior. 2004; 54(4):512–518.
- Appendini, K. Changing agrarian institutions: interpreting the contradictions. In: Cornelius, W.; Myhre, D., editors. The Transformation of Rural Mexico: Reforming the Ejido Sector. San Diego, CA: Center for US-Mexico Studies, University of California, San Diego; 1998.
- Appendini, K. De la milpa a los tortibonos: La reestructuración de la política alimentaria en México. 2. Mexico, DF: El Colegio de Mexico and the United Nations Institute for Social Development; 2001.
- Austin, JE.; Esteva, G. Food policy in Mexico: The search for self-sufficiency. Ithaca, NY: Cornell University Press; 1987.
- Barham BL, Callenes M, Gitter S, Lewis J, Weber J. Fair trade/organic coffee, rural livelihoods and the "agrarian question": southern Mexican coffee families in transition. World Development. 2011; 39(1):134–145.
- Bobrow-Strain A. Articulations of rule: landowners, revolution, and territory in Chiapas, Mexico, 1920–1962. Journal of Historical Geography. 2005; 31:744–762.
- Burke, G. Yucatecos and Chiapanecos in San Francisco: Mayan immigrants from new communities. In: Fox, J.; Rivera-Salgado, G., editors. Indigenous Mexican Migrants in the United States. Regents of the University of California; San Diego, CA: Center for U.S.- Mexican Studies and the Center for Comparative Immigration Studies at the University of California, San Diego, CA; 2004.
- CENAPRED. Características e impacto socioeconómico de los huracanes "Stan" y "Wilma" en la República Mexicana en el 2005. Distrito Federal, México: Secretaria de Gobernacion y Centro Nacional de Prevención de Desastres; 2006.
- Cohen, JH. The Culture of Migration in Southern Mexico. Austin, TX: University of Texas Press; 2004.
- Collier GA, Mountjoy D, Nigh RB. Peasant agriculture and global change: a Maya response to energy development in southeastern Mexico. Bioscience. 1994; 44:398–407.
- Collier, GA.; Quaratiello, EL. Basta! Land and the Zapatista Rebellion in Chiapas. Oakland, CA: Food First Books; 2005.
- Cornelius, W. From sojourners to settlers: the changing profile of Mexican labor migration to California in the 1980s. In: Bustamante, J.; Reynolds, CW.; Ojeda, RAH., editors. US- Mexico Relations: Labor Market Interdependence. Stanford, CA: Stanford University Press; 1992.
- CONAPO (Consejo Nacional de Población). Migración México-Estados Unidos. Panorama regional y estatal. México: 2005.

- Craig, RB. *The Bracero Program: Interest Groups and Foreign Policy*. Austin, TX: University of Texas Press; 1971.
- Daltabuit M, Pi-Sunyer O. Tourism development in Quintana Roo, Mexico. *Cultural Survival Quarterly*. 1990; 14(1):9–13.
- Davis K. The theory of change and response in modern demographic history. *Population Index*. 1963; 29:345–66. [PubMed: 12335951]
- de Janvry, A.; Chiriboga, M.; Colmenares, H.; Hintermeister, A.; Howe, G.; Irigoyen, R., et al. *Reformas del sector agrícola y el campesinado en Mexico*. San Jose, Costa Rica: Fondo Internacional de Desarrollo Agrícola e Instituto Interamericano de Cooperación para la Agricultura; 1995.
- Diaz JAJ, Sanchez MJA. Estados Unidos, lugar de destino para los migrantes chiapanecos. *Migraciones Internacionales*. 2007; 4(1):5–38.
- Durand J, Massey DS, Zenteno RM. Mexican immigration to the United States: continuities and changes. *Latin American Research Review*. 2001; 36(1):107–127. [PubMed: 17595734]
- Eakin H. Institutional change, climate risk, and rural vulnerability: cases from central Mexico. *World Development*. 2005; 33(11):1923–1938.
- Eakin, H. *Weathering Risk in Rural Mexico: Climatic, Institutional, and Economic Change*. Tucson, AZ: The University of Arizona Press; 2006.
- Eakin H, Tucker C, Castellanos E. Responding to the coffee crisis: a pilot study of farmer's adaptations in Mexico, Guatemala and Honduras. *The Geographical Journal*. 2006; 172(2):156–71.
- Edelman M. Agricultural modernization in smallholding areas of Mexico: a case study in the Sierra Norte de Puebla. *Latin American Perspectives*. 1980; 7(4):29–49.
- EMIF-Norte (Encuesta sobre Migración en la Frontera Norte de Mexico). Serie anualizada 1995, 1999–2006. 2006.
- Enciso, GF.; Navarro, SM.; Velasco, GM. *El Señuelo del Norte. Migración Indígena Contemporánea en Chiapas*. Chiapas, MX: Consejo de Población Chiapas, Fondo de Población de las Naciones Unidas, and Asesoría, Capacitación y Asistencia en Salud, A.C. San Cristóbal de las Casas; 2007.
- Flood M. Changing patterns of interdependence: the effects of increasing monetization on gender relations in Zinacantan, Mexico. *Research in Economic Anthropology*. 1994; 15:145–173.
- Fluharty, TE. *Applied Research Projects*. Texas State University-San Marcos; 2006. Implementing economic reforms in Mexico: The Washington Consensus as a roadmap for developing countries. Paper 183
- Gates M. Codifying marginality: the evolution of Mexican agricultural policy and its impact on the peasantry. *Journal of Latin American Studies*. 1988; 20(2):277–311.
- Gerber, J.; Kerr, WA. Trade as an agency of social policy: NAFTA's schizophrenic role in agriculture. In: Randall, SJ.; Konrad, HW., editors. *NAFTA in Transition*. Calgary: University of Calgary Press; 1995.
- Gitter, S.; Weber, JG.; Barham, BL.; Callenes, M.; Lewis, JA. Fair trade-organic coffee cooperatives, migration, and secondary schooling in southern Mexico. Towson, MD: Department of Economics; 2010. Working Paper Series, Working Paper No. 2010-14
- Harvey, N. *Rebellion in Chiapas: Rural Reforms, Campesino Radicalism, and the Limits to Salinismo*. San Diego: Center for U.S. Mexican Studies, Ejido Reform Research Project; 1994. Transformation of Rural Mexico Series, Number 5
- Hausermann H, Eakin H. Producing “viable” landscapes and livelihoods in central Veracruz, Mexico: institutional and producer responses to the coffee commodity crisis. *Journal of Latin American Geography*. 2008; 7(1):109–131.
- Howard, PN.; Homer-Dixon, T. *Occasional paper: Project on Environment, Population and Security*. Washington D.C: American Association for the Advancement of Science and the University of Toronto; 1996. Environmental scarcity and violent conflict: the case of Chiapas, Mexico.
- INEGI (Instituto Nacional de Estadística y Geografía Mexico). *Perfil Sociodemográfico, I & II Conteo de Población y Vivienda 1995 & 2005*. 1995 and 2005.
- INEGI (Instituto Nacional de Estadística y Geografía Mexico). *Censo General de Población y Vivienda 2000*. 2000.

- Keleman A, Hellin J, Bellon MR. Maize diversity, rural development policy, and farmers' practices: lessons from Chiapas, Mexico. *The Geographical Journal*. 2009; 175(1):52–70.
- Lee E. A theory of migration. *Demography*. 1966; 3:47–57.
- Lindstrom DP, Lauster N. Local economic opportunity and the competing risks of internal and U.S. migration to Zacatecas, Mexico. *International Migration Review*. 2001; 35(4):1232–1256.
- Massey DS. Understanding Mexican migration to the United States. *The American Journal of Sociology*. 1987; 92(6):1372–1403.
- Massey, DS.; Alarcon, R.; Durand, J.; Gonzalez, H. *Return to Aztlan: The Social Process of International Migration from Western Mexico*. Berkeley and Los Angeles, California: University of California Press; 1987.
- Massey DS, Arango J, Hugo G, Kouaouci A, Pellegrino A, Taylor JE. Theories of international migration: a review and appraisal. *Population and Development Review*. 1993; 19(3):431–66.
- Monto, A. *The Roots of Mexican Labor Migration*. Westport, Conn: Praeger; 1994.
- Nadal, A. *Maize in Mexico: Some Environmental Implications of the North American Free Trade Agreement (NAFTA)*. Montreal: Commission on Environmental Cooperation; 1999. (Environment and trade series #6, Issue study 1)
- Nadal, A. *The Environmental and Social Impacts of Economic Liberalization on Corn Production in Mexico*. Gland, Switzerland and Oxford, United Kingdom: World Wildlife Fund and Oxfam; 2000.
- Nadal, A. Zea Mays: effects of trade liberalization on Mexico's corn sector. In: Deere, CL.; Esty, DC., editors. *Greening the Americas: NAFTA's Lessons for Hemispheric Trade*. Cambridge, MA: The MIT Press; 2002.
- NCDC (National Climatic Data Center). [Accessed on August 30, 2010] Mitch: The Deadliest Atlantic Hurricane since 1780. 2010. <http://www.ncdc.noaa.gov/oa/reports/mitch/mitch.html/>
- Nations JD. The ecology of the Zapatista revolt. *Cultural Survival Quarterly*. 1994; 18(1):31–33.
- Navarro, LH. *To Die a Little: Migration and Coffee in Mexico and Central America*. Silver City, NM: Americas Program; 2004.
- O'Brien, KL. *Sacrificing the Forest: Environmental and Social Struggles in Chiapas*. Boulder, CO: Westview Press; 1998.
- Ochoa, EC.; Lorey, DE. *Estado y Agricultura en Mexico: Antecedentes e Implicaciones de las Reformas Salinistas*. Mexico, DF: Universidad Autónoma Metropolitana; 2000.
- Oxfam. *Bitter coffee: how the poor are paying for the slump in coffee prices*. Oxford, UK: Oxfam; 2001.
- Perez-Grovaz; Cervantes, E.; Burstein, J. [accessed on 3 November 2010] Case study of the coffee sector in Mexico. 2001. Available online at: <http://www.maketrade-fair.com/en/assets/english/MexicoPerez-z.pdf>
- Ponte S. The latte revolution? Regulations, markets, and consumption in the global coffee chain. *World Development*. 2002; 30(7):1099–1122.
- Ravenstein EG. The laws of migration. *Journal of the Royal Statistical Society*. 1889; 52:241–305.
- Renard MC. The Mexican coffee crisis. *Latin American Perspectives*. 2010; 37(2):21–33.
- Rus, J. The “Comunidad Revolucionaria Institucional”: The Subversión of Native Government in Highland Chiapas, 1936–1968. In: Joseph, GM.; Nugent, D., editors. *Everyday Forms of State Formation*. Durham, NC: Duke University Press; 1994.
- Rus, J., et al. *Abtel ya pinka/Trabajo en las fincas*. San Cristóbal, Chiapas: INAREMAC; 1986.
- SAGAR (Secretaría de Agricultura, Ganadería y Desarrollo Rural). *Edición especial de la Revista de Apoyos y Servicios a la Comercialización Agropecuaria, ASERCA*. México, D. F: 1999. Claridades agropecuarias; p. 36
- Sanchez, AC.; Garza, AM.; Paz, MF.; Ruiz, JM. *Voces de la historia: Nuevo San Juan Chamula, Nuevo Huixtán, Nuevo Matzam*. San Cristóbal de Las Casas, Chiapas, MX: Universidad Autónoma de Chiapas; 1989.
- Saldana-Zorrilla, SO. PhD Dissertation. *Wirtschaftsuniversitaet; Wien, Vienna, Austria*: 2006. Reducing economic vulnerability in Mexico: natural disasters, trade liberalization and poverty.

- Saldana-Zorrilla SO. Stakeholders' views in reducing rural vulnerability to natural disasters in Southern Mexico: hazard exposure and coping and adaptive capacity. *Global Environmental Change*. 2008; 18:583–597.
- Sanderson, SE. *The Transformation of Mexican Agriculture: International Structure and the Politics of Rural Change*. Princeton, NJ: Princeton University Press; 1986.
- Santacruz de Leon EE, Villalba EP. Atraso económico, migración y remesas: el caso del Soconusco, Chiapas, Mexico. *Convergencia, Revista de Ciencias Sociales*. 2009; 50:57–77.
- Scherr, SJ. *The Oil Syndrome and Agricultural Development: Lessons from Tabasco, Mexico*. New York, NY: Praeger Publishers; 1985.
- Solis DV. Rural Chiapas ten years after the armed uprising of 1994: an economic overview. *Journal of Peasant Studies*. 2005; 32(3&4):461–483.
- Solis DV, Aguilar MDCG. Crisis rural y migraciones en Chiapas. *Migración y Desarrollo*. 2006; 6:102–130.
- STPS (Secretaría del trabajo y previsión social). *Información laboral*. Chiapas: 2010.
- Tellez, MEA. *Papeles de Población*. Universidad Autónoma de Estado de México; Toluca, México: 2008. Chiapas: territorio de inmigración, emigración y transito migratorio.
- Williamson, J. What Washington means by policy reform. In: Williamson, J., editor. *Latin American Readjustment: How Much has Happened*. Washington, DC: Institute for International Economics; 1989.
- Woodward, KA.; Passel, JS. Post-IRCA undocumented immigration to the United States: assessment based on the June 1988 CPS. In: Bean, FD.; Edmonston, B.; Passel, JS., editors. *Undocumented Migration to the United States: IRCA and the Experience of the 1980s*. Washington, DC: Urban Institute Press; 1990.
- Zedillo Ponce de Leon, E. *Segundo Informe de Gobierno*. México, DF: Presidencias de las Republica; 1996.

Figure 1.
The State of Chiapas

Figure 2.
Estimated Number of Chiapan Migrants to the U.S. Source: EMIF-Norte

Figure 3.
Interstate Chiapan out-migration by state of migrant residence (1950–2000)
Source: INEGI. Censo General de Población y Vivienda 2000

	1900-1930	1930-1965	1965-1990	1990-2005
Migration Events	Since late-19 th Century internal migration by Chiapan natives to coastal Chiapas to work on coffee plantations	1930s land distribution retarded population movement 1940s internal migration to la Selva Lacandona and interior lowlands. End of interior migration to Soconusco coast.	Interstate Migration to Tabasco, Campeche and Veracruz to work in petroleum industry Interstate migration to Mexico City to supply labor for construction/ domestic/retail work	Interstate migration to Quintana Roo to work in tourism industry International migration to the US
Migration Theory		Step Migration		
	Forced/Coerced Migration	Multiphasic Response Push-Pull	Multiphasic Response Push-Pull Social Network Theory	Multiphasic Response Push-Pull Social Network Theory Neoclassical Economics
Major Economic, Political, and/or Natural Events/ Conditions Spurring Migration	Columbian Invasion left very little land to native Mexicans Indigenous Chiapans held in debt to <i>enganches</i> under virtual indentured servitude conditions	1930s Agrarian Reform belatedly reached Chiapas 1950s no free land due to population increase (>2.5% annual growth rate) 1950 end of WWII led to a rise in commodity prices and a need for cheap labor on coastal and lowland <i>latifundios</i> .	Major oil fields discovered Greater than 4% average annual population growth rate Agricultural crop prices plummet due to "petrolization" of the economy	1988 Government ends agriculture price supports and subsidizing rural crop insurance and credit 1989 International Coffee Crisis begins 1992 Mexican Constitution rewritten effectively ending Land Reform 1994 Mexico enters NAFTA 1994 Zapatista Uprising 1998 Hurricane Mitch 2005 Hurricane Stan

Figure 4.
Chiapas Event Timeline 1900 – 2005

Table 1

Sociodemographic profiles in 2000

	Chiapas	Mexico
Population growth rate (%) ^a	2.2	1.4
Illiteracy rate (%) ^b	23	9
Speak an indigenous language (%) ^b	25	7
Population (> twelve years old) with six years or less of education (%) ^b	68	48
Live in communities with fewer than 5,000 inhabitants (%) ^b	61	31
Unemployment rate (%)	<2	2.58
Employed in agriculture (%) ^b	47	16
Household occupants without sanitation or drainage (%) ^c	19	10
Household occupants without electricity (%) ^c	12	5
Household occupants without piped water (%) ^c	25	11
Index of marginalization ^c	2.2507	
Rank of marginalization among Mexico's 32 states ^c	32 nd (very high)	

^a INEGI. Perfil Sociodemografico, I & II Conteo de Población y Vivienda 1995 & 2005.

^b INEGI. Censo General de Población y Vivienda 2000.

^c Consejo Nacional de Población (Conapo). Índices de marginación, 2000.