The particularities of how residents in Southern Belize encounter the vagaries of what is commonly referred to as a "global food crisis" (between 2006 and 2008) are explored in this paper. Belize, like many other nation states around the globe, has been structurally (and sequentially) "readjusted" by transnational lending institutions over the last several decades. Cyclical shifts in agricultural practices have taken place in many Maya communities in Southern Belize in the last decade, partly in response to migration, a severe hurricane, land tenure conflicts, and within the last year, skyrocketing staple prices and food scarcity. The costs of basic staples such as corn, wheat, and rice have nearly doubled, in parallel with much of the rest of the globe during the same time frame. Shifts in subsistence strategies have significant implications for the power and politics of land use, access, and mobility. Furthermore, they reflect centuries-old ways of adjusting to changing circumstances in global markets and colonial and postcolonial realities. I conclude by emphasizing the importance of incorporating political and historical ecologies of land use and food production when considering the local impacts of global food crises.

Keywords: food crisis, Belize, Maya, Q’eqchi’ Maya, environmental change, migration

Reflecting on the set of events now commonly referred to as a “global food crisis” that emerged between 2006 and the end of 2008, Solomon Katz, chair of the American Anthropological Association Task Force on World Food Problems, recently issued a challenge for anthropologists who hope to ameliorate its far-reaching effects: “The challenge for all of us will be to bring clarity and understanding to the forces underlying the food crisis to enable policymakers to establish a sustainable, food secure future” (Katz 2008:5). The discussions presented here cannot begin to meet this Herculean charge, but the aim is to illustrate the messiness, and more importantly, the situated nature of global-meets-local with regard to food provisioning in one particular place, following a similar call by Lois Stanford for “analysis of the complex linkages between global and local food systems” to counter “short term solutions proposed at the international level” (2008:10).

For the purposes of this discussion, that particular “place” is the farms, kitchens, corner shops, and grocery stores of the Toledo District in the small Central American nation state of Belize,1 in the tropical lowlands and uplands that Q’eqchi’ and Mopan Maya families call home. Belize, like many other nations around the globe, has
been structurally (and sequentially) “readjusted” by transnational lending institutions over the last several decades. Some shifts in agricultural practices have taken place in many Maya communities in Southern Belize in the last decade, partly in response to rural-to-urban and rural-to-rural migration, a severe hurricane, land tenure conflicts, and within the last year, skyrocketing staple prices and food scarcity. The costs of basic staples such as corn, wheat, and rice have nearly doubled, in parallel with much of the rest of the globe during the same time frame. A growing number of families who have been relying primarily on participation in the wage economy travel seasonally or biweekly for jobs away from home (which means they typically buy corn and rice instead of growing it) are considering a return to small-scale milpa maize farming (and a variety of other crops) to feed their families because their wages do not begin to cover extremely high food costs. However, shifts in subsistence strategies over the last several decades have had significant implications for the power and politics of land use, access, and mobility—affecting the flexibility of Maya families to return to full-time farming. Is this most recent turn of events any different from their previous engagements with the global economy? I argue, building on prior work in the region, that the response of Q’eqchi’ Maya residents reflects centuries-old ways of adjusting and “readjusting” to changing circumstances in global markets and colonial and postcolonial realities (Wilk 1997). This becomes even more significant in the face of public discourses and analyses of the “roots” of the current food crisis that only go so far back as the 1970s for a better understanding of underlying causes and likely impacts.

In my analysis, recent spikes in staple food prices and the resulting turmoil are locally and regionally contextualized through a discussion of the ways Maya in Belize have created a flexible, responsive “mosaic” of livelihood strategies over time (Carter and Snedaker 1969; Dunham et al. 1989; Fedick 1996; Grandia 2006; Jones 1982; Schwartz 1990; Wilk 1997). Many development organizations, lending banks, and other international actors tend to ignore such cyclical encounters in assessing how small farmers and poor families can and should respond to such a rapidly changing crisis. However, I also suggest that despite the flexibility of this mosaic strategy, pushes toward even greater privatization and territorialization of farm and forest lands used by Maya residents in Belize (cf. Wainwright 2008:20) may begin to reduce local options for shifting seasonally between subsistence farming, wage labor, cash cropping, and use of forest resources in response to global commodity prices. In addition, I explore the ways current patterns of mobility in Maya communities may differ in some respects from strategies of the past, creating an additional approach to historically described patterns of stepwise migration in claiming new farmlands and moving entire households and family groups to newly available fertile, forested lands for the primary purpose of farming (Grandia 2006; Zarger 2002b; Wilk 1997; Sapper 1985). These new patterns of migration, when combined with territorialization of communal lands by state and nonstate actors, may limit the possibilities for Maya returning to farms in response to escalating food prices.

Attempts to “link” global and local scales are in reality extremely difficult, and, although these efforts “lie at the heart of contemporary political ecology” (Paulson et al. 2005:25), they often remain elusive as Vayda and Walters (1999) have argued.
Robbins notes that instead of focusing on links in a metaphorical “chain” of cause and effect between humans and the environment, another possibility is a “comparative anatomy of networks” (2004:212). This is the approach taken here to create a historically grounded analysis of Maya families’ “webs” of negotiations with prohibitively high food costs over the last two years. In addition, the insights of historical ecology, whereby human-modified environments are envisaged as cultural landscapes, mutually constituted through time at multiple scales, informs the analysis (Baleé 2006; Crumley 2007) of the active relationship between Maya households and the landscape in the creation of dynamic, continually changing, livelihood “mosaics.” I conclude by emphasizing the importance of incorporating political and historical ecologies of land use and food production when considering the local impacts of global food crises.

GLOBAL TO LOCAL: SPIKING GLOBAL FOOD PRICES AND FOOD SHORTAGES IN BELIZE

According to the World Bank, the international food price index nearly doubled between March 2006 and March 2008, rising 82 percent (World Bank 2007a). The Bank, along with many other international lending entities, economists, and other scholars suggest that a sea change in “global supply and demand” is behind these drastic increases in the world’s basic food staples such as wheat, corn, and rice that has not been observed since the 1970s (Katz 2008; Marchione 2008; World Bank 2007a). Typically, explanations tend to focus on linkages between increased biofuels production, such as the quantum leap in the amount of corn being produced for ethanol in the United States and Brazil, skyrocketing fossil fuel prices, increased consumption, and climate change (Loewenberg 2008; World Bank 2007a); all against a requisite backdrop of population growth and resource scarcity (Brown 2005).

As several anthropologists have recently argued, there are certain contributions that a grounded, historically, politically, and ecologically informed approach to understanding this crisis can make (Himmelgreen and Romero-Daza 2008; Messer 2008). First, it is significant to note that the explanations posited by major economic development and lending organizations often do not address the specific ways that “structural adjustment” policies intersect with people’s everyday lives. In the 1960s and 1970s organizations like the International Monetary Fund (IMF) replaced tariff barriers that had been imposed by “developing” nation states to support growth in production of agricultural exports and promote food self-sufficiency (Stanford 2008). Loans from the IMF and the World Bank demanded a reduction in tariffs, greater dependency on imported, cheap foods, and increased exports to industrialized countries. All this means that the doubling and tripling of food prices affects small farmers most significantly (who, unlike agribusinesses, did not receive benefits from being “readjusted”; see Clemmitt 2008; Marchione 2008; Stanford 2008). Meanwhile, the U.S. government continued to subsidize the production of wheat, citrus, sugar, corn, and other foodstuffs that resulted in prices well below what farmers (and even agribusinesses) in the global South could
ask in exchange for their products. Providing analysis of the structural causes of food inflation, shortages, and scarcity—engaging a long-term perspective that pays close attention to the flow of power within and between actors concerned with agroecological production—is one contribution ethnographically informed studies can make (Crumley 2007).

Second, anthropologists and other social scientists have argued that there are alternative explanations to the primary narratives that are often told about food shortages, food scarcity, and poverty. The dominant narratives tend to focus either on neo-Malthusian, and subsequently, neoliberal, models of competition over scarce resources that loom in the not-too-distant future without immediate regulation of “the commons,” or the continually escalating need to intensify agricultural production through technological fixes like genetically modified crops and newly developed pesticides and herbicides (Harper 2004). Drawing on political economic analyses of uneven distribution of power and access to resources, anthropologists (and others) have questioned these narratives and argued that hunger on a global scale is a result of stark inequalities in the distribution of food to the world’s population (Arizpe and Velazquez 1994; Sen 1994). Recognition of such inequalities in light of the ineffectiveness of current IMF and World Bank policies may have contributed to the construction of initiatives such as the International Assessment of Agricultural Science and Technology for Development (IAASTD), and the growing awareness of “right to food” as a basic human right in international policy arenas (Messer 2008:22).

During the spring, summer, and fall of 2008, this series of cascading events resulted in protests and violence over skyrocketing costs of food—referred to as the “food crisis of the new millennium”—continued to worsen. Then, in October 2008, the bottom fell out of the U.S. stock market and it became widely acknowledged in mainstream media outlets that a global financial meltdown was in progress, just on the heels of the food crisis, creating ripples across the fabric of many nation states’ hold on political power and outcries from people who could no longer afford to buy staple commodities like bread. At this time, double-digit inflation of food prices, including processed goods like prepackaged corn masa and wheat flour, as well as a sack of dried corn or beans, were creating a parallel scenario in the small Central American nation of Belize (population 322,000 [Statistical Institute of Belize (SIB) 2009a]). For 2007, the inflation rate for food, beverages, and tobacco was high at 5.3 percent; but in 2008, food inflation hit 13.3 percent, the biggest spike for the last 25 years (SIB 2008), with a peak of close to 18 percent in August of that year (see Figure 1). Most families I interviewed in 2007 and 2008 described the dire straits they were in with regard to meeting their households’ basic staple food needs—Maya, Creole, and other ethnic groups alike.

Historically, many Maya families in southern Belize do not have much margin in the form of excess cash income to absorb such rapid rises in basic food costs, as they are the economically poorest ethnic group in the country (SIB 2001). The Gross National Income (GNI) for Belize is $3,800 (in current U.S. dollars). This figure is well above the average income in the Toledo District, where 40 percent of the poorest households in the country and the majority of the Q’eqchi’ and Mopan Maya in Belize live (Belize
Central Statistics Office [now SIB] 2000). However, the conversations I had with people during this time frame were quite different than during any of my previous eight years of work studying local environmental knowledge and practice—which involved spending many hours with residents at their farms and extended discussions about agricultural production past and present.

By July 2008, these conversations became extremely urgent, and the felt need was so great that individuals explained that because the price of a sack of corn had almost doubled, from approximately $55 Bze (US$27.50) to between $80 and $90 Bze (US$40–$45), they were unsure how they would be able to put any food on the banquet, particularly until the fall (matahambre) corn crop matured in a few months. For Maya families who average less than US$1,000 per year in cash income, this was an untenable situation, especially because corn, processed to make tortillas, poch or corn dumplings, beverages, and many other food items, is the anchor for any “real” meal, without which long-term survival and healthfulness is not considered possible. Meanwhile, the cost of imported wheat flour had also skyrocketed. White wheat flour is often a substitute for corn to bake flour tortillas when prices fluctuate, and people throughout the country were standing in line for hours to buy sacks of flour (which rose 65.5 percent over the previous year’s prices), purchasing as much as they were allowed to at one time, in turn creating greater demand and panic-driven consumer behavior (SIB 2009b). Grocery stores in Punta Gorda, the regional market town in southernmost Belize, ran out of flour for days, which people found very unsettling, even as they heard about similar crises in other parts of the Caribbean and the globe. The high prices spread from staple items to other food items fairly quickly, as shop owners blamed limited supplies and higher fuel costs to transport imported foods.
Meanwhile, in response to similar stories from many other places, the World Bank has puzzled over the connection between inflation of international food prices and parallel inflation in locally produced food and consumer goods:

International food prices are now affecting the price of Latin America food staples, even in countries where local food is consumed more than imported foodstuffs. This may be the result of Latin American and Caribbean countries’ integration into the world economy, although there is no research to prove or disprove this. [World Bank 2007a, emphasis mine]

The idea that Belize (or any other nation state in Latin America and the Caribbean) is not currently “integrated” into the world economy is preposterous. Global commodity chains of exchange have existed for centuries, linking the Caribbean to other regions of the world through the trade of crops such as sugar, bananas, cacao, coffee, and annatto. Recent studies of the politics, history, and semiotics of commodity chains demonstrating the complexity of local “integration into the world economy” include research on olive oil (Meneley 2007), sushi (Bestor 2001), tea (Holtzman 2003), green beans (Freidberg 2004), and of course, pioneering work on sugar by Mintz (1986). With regard to Belize, Wilk (2006b) has carefully documented changes in food preferences, diet, and the emergence of a national cuisine from the 1700s to the present. Wilk (2006b) explores specific relationships between foodways, identity, ethnicity, and nation-building from the colonial period of the early “Buccaneers” to the ubiquitous ecocultural tourists of postmodernity who are now trundled in on cruise ships. Regardless of the causes of the current global food crisis, Belize is now one of a small number of Central American countries (with Honduras, Haiti, and Guatemala) listed as a “priority” country for World Bank assistance, based on an ongoing needs assessment of the impact of food shortages on residents (World Bank 2007b).

How are Maya in rural Belize experiencing this current iteration of food inflation? More specifically, what can historical and political ecologies of agricultural production in the region tell us about how Maya families are now confronting the specific circumstances of the recent “global food crisis” in southern Belize? Is this most recent fluctuation in regional, national, and global economies any different from those recorded in the past? Finally, what are some of the ways that the insights from historicized discussions of food production, commodification, and crises could inform policymaking aimed at ameliorating the all too painful realities of food shortages and food insecurity, particularly if such events may occur more frequently in the future given the interconnectedness of global food supplies and commodity chains?

AGRICULTURAL DEVELOPMENT AND MAYA FARMING IN BELIZE

To begin to address these questions, a brief look at the ways agricultural development has shaped and been shaped by Maya farming practices in Belize will provide one backdrop against which to analyze the current crisis. Critiques of green revolution agricultural technofixes abound for most areas of the globe, and Central America and Belize are no
exception. Although it is widely acknowledged that large scale agricultural “improvements” (cf. Li 2007) between the mid-20th century and the present have left a legacy of increased poverty, failed intensification schemes, and greater dependence on expensive chemical inputs that have disastrous effects on health, even today, some academics and practitioners continue to turn to greater capitalization of agricultural production as the answer to perceived problems of poverty and food crises (see, e.g., Spencer 2000, World Bank 2007b).

This process is what Wainwright, who has chronicled various forms of agricultural development in southern Belize through a postcolonial lens, calls “capitalism qua development,” whereby capitalism becomes development, reproducing a particular form of power and ways of making a living as necessary and inevitable (2008:12). As a means to illustrate capitalistic development practices in action, Wainwright explores the ways colonial administrators, archaeologists, geographers, anthropologists, and government officials repeatedly constructed notions of Maya agriculture as in need of “improvement.” He analyzes historical documents and texts that describe Maya subsistence practices, a diverse set of agricultural techniques commonly generalized as milpa agriculture. His argument is that there are “fundamental elements” to development narratives surrounding Maya farming, including the observation that is it a “cultural system,” which is “primitive and inefficient” as well as “destructive,” and “leads to abandonment of the land,” which is characterized by an “unsettled” population (Wainwright 2008:80–87). Fundamental to this characterization is the British colonial notion of the need to “improve” the land through modification for agriculture, agroforestry, or other extractive uses. These assessments of the need to figure out how to change or “modernize” Maya agricultural practices to fit colonial ideologies of centralized settlement and privatized land use continue to the present, especially prominent in protected areas planning by conservation organizations and proponents of sustainable development who have taken such descriptions at face value without understanding the ecological contours of milpa farming, or how it encompasses a wide variety of practices that have been modified over time throughout the region (Grandia 2006).

How do structural adjustment policies of the IMF, the World Bank, and the Caribbean Development Bank translate into everyday realities for farmers and families? Grandia (2006, 2007), in one of the first treatments of the way CAFTA (Central American Free Trade Agreement) is affecting Q’eqchi’ farmers in Guatemala, explores the consequences of privatization of large tracts of land by cattle ranchers and other actors who seek out the fertile river-bottom land that Q’eqchi’ farmers in the Petén prefer for establishing villages and farms next to permanent water sources. The effects of privatization and territorialization are further explored below, focusing on how one particular Q’eqchi’ Maya community in southern Belize responded to a particular set of events (a severe hurricane and the construction of a hydroelectric dam). Before turning to the specifics of that case, I present a brief overview of what we know about the history of Maya livelihoods in the Verapaz, Petén, and Izabal regions of Guatemala and the Toledo District of southern Belize to set the stage for later analyses of the impacts of high food costs on Maya families.
In addition to reflecting on the ways Maya in southern Belize have experienced agricultural development agendas, a historically grounded look at economic and agricultural change in the larger region provides a way to make sense of the precarious food inflation problem that now confronts residents of Toledo District. One way to conceptualize the transformation of cultural landscape activities is to consider the ways Q’eqchi’ Maya living in southern Belize, Peten, and Alta Verapaz created a flexible, responsive “mosaic” of livelihood strategies over time (see Figure 2; see also Carter and Snedaker 1969; Dunham et al. 1989; Fedick 1996; Grandia 2006; Jones 1982; Schwartz 1990; Wilk 1997). The term mosaic has been previously applied to Maya subsistence practices by archaeologists working in the region (Dunham et al. 1989; Fedick 1996; Scarborough 1996), who through an accumulation of data about ancient Maya societies’ interactions with their environment revealed a “mosaic of landscapes which were perceived and managed in various ways in different places and times, often in response to changing political, as well as economic, pressures” (Fedick 1996:14).

The way I apply the term mosaic here encompasses these insights from contributors to Fedick’s volume, but also integrates colonial and postcolonial histories of Q’eqchi’ economies described by Wilk (1997), Grandia (2006:174),10 and Wainwright (2008), with my own work on environmental knowledge and practice in Q’eqchi’ communities in Belize (Zarger 2002b). The result is a construct that acknowledges an amalgam of
different approaches to making a living that is “flexible” (cf. Wilk 1997:141), shaped by a local–regional–global intersect of power relations and material and semiotic exchanges, and continually shifting across the physical landscape, maintaining some continuities but also manifesting in unique formulations in particular locales (such as the differences between Q’eqchi’ farming practices in Guatemala and in Belize, noted by Grandia (2006); and the variability between more rural villages in Toledo District when compared to those with easier accessibility to main transportation arteries (Wilk 1997; Zarger 2002b).

Through the addition of these elements to the “managed mosaic,” it is conceptualized here to include, among many other possibilities: (1) a greater recognition of the historical integration of colonial market trade and postcolonial economic exchanges as a vital part of Maya livelihood strategies for the last four centuries; and (2) a conceptualization of mobility that more broadly includes temporary within-country migration for work outside of home communities. This is in addition to the common depiction of Q’eqchi’ household migration patterns as “leapfrogging” from one locality to the next (which I describe in more detail below). Wilk reflects on the fact that mid-20th-century ethnographies often portrayed engagement with the global economy as a progressive march toward “modernization;” while more recent work depicts the process as a unidirectional movement toward becoming global consumers (Wilk 1987, 2006b). However, the experience of Toledo residents is much more chaotic and layered than this depiction allows (Gregory 1987; Wilk 2006a).

The milpa system, a subsistence strategy based on the cultivation of maize in swidden plots, enriched by either chopping secondary forest and burning to enhance the soil prior to planting, or mulching and planting nitrogen-fixing legumes, is a way of life for Maya in southern Belize. Diet and subsistence practices are much more diverse than typically noted, however. The characterization of Mopan and Q’eqchi’ diets in colonial documents and development reports as based on corn, beans, and rice, does not account for many important forest and farm-based resources, such as wild palms and mushrooms, or greens and tubers that families consume regularly (Grandia 2006; Zarger 2002a, 2002b). Most households make a living from the local landscape through a combination of maize farming (either intercropped or monoculture assisted with fertilizers and herbicides), gathering noncultivated resources, hunting, fishing, and nurturing diverse home gardens that contain an average of 34 different varieties of herbs, vegetables and fruit trees (Zarger 2002b). Key subsistence crops include corn, rice, cacao, citrus, beans, annatto, and bananas.

However, Maya farmers have been engaged in the global economy for 400 years, at times more and less reliant on cash crops in response to changing power dynamics, exploitive regimes, forced labor, and available land (Wilk 1997). Cash crops have come and gone over the last century in a boom and rapid bust cycle (Wilk 1997:66, 2006a:157). Maya farmers supplied national demands in Belize for corn, beans, and rice for many decades, but in the mid-1980s, this changed and rice became the only major cash crop. Mechanized rice was abandoned and nonmechanized rice production is on the decline over the last ten years as prices have dwindled below viable levels to get much profit. Most households cultivate small, five-acre plots of land at a time because of the scarcity
of “reservation” land, fewer available farmlands not under protected-area status, and time constraints when combining farming with various types of seasonal wage labor. Typically in villages within a few miles of the main highway, many men under the age of 50, and young men and women in their teens, twenties, and thirties, seek work outside the community as it is available including in citrus and banana farms, shrimp farming, tourism, and teaching primary and secondary school (Wilk 1997; Zarger 2002b).

In describing the mosaic of livelihoods that Q’eqchi’ Maya in particular have relied on for centuries, an important construct that feeds into this analysis is the “crunch and rachet” process that Wilk describes, where he captures the frustration of the “boom and bust” cycles of cash crops that Q’eqchi’ in Toledo District have produced and exported through engagements with national and international economies from the 1850s to the 1980s (Wilk 1997:67). The “crunch and rachet” is a process of “long-term change” that he observed based on research on household production and environment in the region between the late 1970s and mid-1990s (Wilk 2006a:160). The exports subject to the whims (and subsidies in the United States and Europe) of the global market have included cacao (1890–1915; 1990–93; 2006–?), rubber, sugar (1870–1910), corn and beans (1910–20; 1950–80), bananas (1890–1910), rice (1950–2002), annatto (2001–?), and petroleum (1970–78 [2006–present petroleum exploration]).

The boom portion of the cycle involves avid promotion of certain crops (initially by colonial actors and later by government agencies, as well as development officials and consultants) as lucrative cash crop options in addition to, or in place of, milpa farming. Extensive plantings and labor investments follow such promotion, and typically once slower growing crops such as cacao, citrus, or annatto are finally producing at peak levels, the prices that growers receive drop to a fraction of what they were when the decision was made to invest in that particular crop. This crash in market prices is the “crunch,” while “the rachet” comes from increased cash flow and change in what consumer goods are considered necessities, raising “standards of consumption” with each boom and bust cycle (Wilk 1997:140–141).

In considering the relationships between cash crops and noncash crops, corn is considered “sacred,” and it is suggested that corn would rarely be sold as a cash crop. For example:

Values associated with corn production and consumption (and with . . . other homegrown foods and forest products) are a stable core that provide an alternative to the values of the marketplace. They are an anchor and can become a refuge . . . a Kekchi farmer caught in the . . . market crunch can return to tradition, a viable alternative set of values instead of just the negation of market values. [Wilk 1997:141]

In this way, Wilk argues that Maya farmers—in corn production—have had a constant to return to, regardless of the success or failure of cash crops. Grandia makes a similar observation:

No meal is ever complete without corn; even rice, yuca, spaghetti, or any other starchy carbohydrate gets served with tortillas in Q’eqchi’ households . . . Unless there is a bumper harvest, wage labor is generally more profitable . . . but farmers nonetheless always plant at
least some corn for the household ("para el gasto"). To grow another more profitable crop and purchase corn with the cash is almost unfathomable. [Grandia 2006:172]

During my research in San Miguel, a primarily Q’eqchi’ community a few miles off the now-paved Southern Highway, I have noted a similar perspective on corn production, central to both subsistence and identity. However, during the 19 months I spent living in San Miguel and Big Falls villages between 2000 and 2001, and in subsequent shorter periods of fieldwork between 2003 and 2008, I saw the dual characteristics of corn—stability and sacredness—that Wilk and Grandia describe changing in some households. Approximately one quarter of families in 2000–01 purchased corn during part or all of the year instead of producing it themselves. At that time, these families typically had a fairly stable cash income from at least one family member (usually the male head of household), often working as a teacher or a shop owner. The decision was not one made lightly, nor without some angst or feelings of frustration, but working several hours bus ride away from home and traveling back and forth each day made it close to impossible to manage a farm the same way it was done in the past. Some families confronted this situation by making the decision to hire laborers to do the preparation work of chopping and burning the plot for them, and they would still plant corn themselves. Others hired laborers from more rural communities or from Guatemala to harvest corn. Still others, particularly young men in their twenties, were eager to find work so that they did not have to rely on farming to feed their families. As some older men often explained to me, “The sun is too hot for them, they don’t like working long hours at the farm; they just want to go for a walk in town (Punta Gorda) and find things to buy.” This is not an entirely new development, as a farmer remarked to Wilk in 1990, “It’s the young men. Some of them don’t even want to farm anymore!” (2006a:163).

By describing such generational shifts in the desirability of farming, and the greater frequency of the need and willingness to purchase corn, as well as other staples, with increased job opportunities away from home, I don’t mean to suggest this is a unidirectional progression in the sense that traditional modernization studies have imagined (e.g., Gregory 1987:7). Instead, the idea is to add another layer to the mosaic of strategies available to Maya families for making a living—one that is employed flexibly, seasonally, in response to ever-changing realities. So, in addition to the boom and bust cycles for cash cropping, there is another type of “ratchet” that has increased over the last two decades, which is within-country rural to rural and rural to urban migration. I argue that such mobility is affecting the relationships between subsistence farming, cash cropping, and land tenure in significant ways.

MAYA MOBILITY

Mobility has characterized Q’eqchi’ history, while new forms of mobility in southern Belize may shape the options for farming in the future, especially in response to recently escalating food prices. As families have invested more heavily in wage earning jobs in place of subsistence and cash crop farming, they have become much more reliant on
purchasing staple food items. When costs rose rapidly between 2006 and 2008, some households were caught in an extremely difficult position. Situating mobility historically is useful to better understanding the current dilemma. “From the time of conquest, loss of political independence, land, control of labor, and even the most basic human rights” have forced Q’eqchi’ into choosing between “either staying put and resisting . . . or picking up and moving to a remote area.” (Wilk 1997:72).

Previous studies of the migration of Q’eqchi’ and Mopan Maya communities have documented the ways entire families have moved across and settled throughout the regional landscape, spanning what is now Guatemala and Belize, for 400 years (Grandia 2006; Sapper 1985; Wilk 1997). Young and middle-aged men and women from many Maya communities in Toledo District are now engaged in an alternate pattern of migration, whereby they travel weekly or longer periods of time to rural and urban areas for work as teachers as well as in the tourism, banking, aquaculture, banana, and construction industries; creating new lives away from family and birth community, yet returning “home” on weekends, monthly, or every few months. This mobility, although common throughout Latin America and the Caribbean, stands in contrast to a historically and ethnographically documented pattern alternately described as “leap-frogging” or step-wise migration patterns where small hamlets are established at a distance away from a settlement for political, land access, or to escape forced labor in coffee fincas (Grandia 2006; Osborne 1982; Wilk 1997).

In 1924, the government began to establish Indian “reservation” lands in Toledo, in keeping with a version of the Spanish alcalde system and previous efforts by colonial administrators in Guatemala to centralize indigenous populations into towns through reducciones (Bolland 1986; Sapper 1985; Thompson 1930). One aim of the creation of bounded lands for Maya villages was to restrict the mobility of the population. Throughout the past 150 years, Maya families have tended to move frequently, within village sites and between villages, or to establish new villages near newly farmed areas. The pattern was to explore land for new milpas in primary or older secondary growth forest, known as “high bush,” to ascertain soil fertility and viability, and then move the whole family to the new site—usually four or five houses called an alkilo, which grew into new villages (Wainwright 2008; Wilk 1997). In southern Belize the search for new land was often spurred by poor production in existing sites, interfamilial tensions because of politics, religion, or lack of available land (Osborne 1982). One effect of this system is that even today, most of the land on which Maya communities are situated and the majority of their farmlands were claimed by the state as government lands (Berkey 1994).

**MAYA MOVEMENT IN BELIZE AND RECOGNITION OF CUSTOMARY LAND TENURE PRACTICES**

Maya societies in the 21st century are a complex amalgam—a legacy of ancient civilizations, the colonial experience, and nation-states of the 20th and 21st centuries. “The Maya,” whether or not they see themselves, individually or communally, as a part of a pan-Maya identity, are shaping the futures of the nation states where they live. As a
consequence, as indigenous scholars such as Montejo (2005) have noted, Maya identities are dynamic, not static. For example, in Belize perhaps only a decade ago, the term Maya was often used to refer to Mopan speakers, while Q’eqchi’ were referred to in government documents and educational reports as Ketchi or Kekchi, even as Q’eqchi’ and Mopan villages were established at nearly the same time in the 19th century, and marriages across the two linguistic groups has been common (Sapper 1985). This has changed significantly between the early 1990s and today, with an influx of ideas from the pan-Maya movement in Guatemala and Mexico, and as details of Q’eqchi’ history and migration become more widely known in Belize.

Throughout the 1990s in southern Belize, environmental activism and cultural heritage formed the crux of widely publicized struggles for recognition of rights to land when the government granted logging concessions to a Malaysian company as well as several other entities and individuals without the input of communities. These events culminated in the Maya Atlas community-mapping project (Toledo Maya Cultural Council, and Toledo Alcaldes Association [TMCC and TEA] 1997), filing a formal petition to the Inter-American Commission of Human Rights, and submitting an urgent appeal to the UN Special Rapporteur on the Situation of the Human Rights and Fundamental Freedoms of Indigenous People on behalf of the Maya Leaders’ Alliance. The IACHR ruled in favor of Maya claims in 2004. The disputes take place against a complex patchwork of land tenure for Maya lands in the district: community or “Reservation” lands, national lands (or former Crown lands), protected areas, and private or leased land. Over the last several decades there has been a push by the government Lands Office and international lenders toward more leased and private lands.

In response to this push by the state to privatize lands that are now communally held, two Maya villages in Toledo put forward a land tenure claim suit with the Government of Belize in 2006, building on over ten years of struggles in national courts, for recognition of their legal claims to village lands. The individuals who brought the case forward on behalf of their communities received a landmark court decision ruling in their favor in October 2007—the first direct implementation of the UN Declaration of the Rights of Indigenous Peoples, passed the month before (Indigenous Peoples Law and Policy Program 2008; TMCC and TEA 1997; Wainwright 2008). The struggle for access to land and more secure land tenure directly relates to Maya households’ options to maintain flexibility in the mosaic of economic activities, as the experiences of residents in San Miguel village attests.13 Specifically, against the backdrop of mobility and the approach that combines subsistence farming with cash crops and working in various industries, families in this Q’eqchi’ community also confronted two additional linked events that fundamentally altered the physical and cultural landscapes they rely on for their livelihoods.

**HURRICANE IRIS AND CHANGES IN VALUE OF THE LANDSCAPE**

Hurricane Iris, a small but very strong category four hurricane, struck southern Belize in October 2001. The storm battered the landscape, flattening houses and destroying farms
and forests as if a mythical giant had used a chainsaw to cut off the tops of all the trees about 20 feet above the ground, ultimately making farming more difficult in the years after the disaster. According to aid reports made by the Belize emergency management agency just after the hurricane hit, about 95 percent of houses in the community of San Miguel were destroyed or very badly damaged. My own experiences of the hurricane certainly confirm the extent of damage that occurred in the wake of the storm, which cut a swath of destruction across southern Belize from Mango Creek in the north toward the Guatemalan border, bouncing across the Maya Mountains, and wreaking similar havoc in a dozen other Maya communities. However, not all villages were affected, and the regional market town Punta Gorda was spared entirely, as were communities to the south and southwest of the district.

After the hurricane, in 2004 and 2005, I carried out interviews with 14 women and 12 men on their perceptions about how local landscapes had changed, building on a set of similar interviews carried out with each household in San Miguel (85 total) in 2001. Interviews were in both Q’eqchi’ and English. Posthurricane interviews represent 15 percent of adults in the study community, in a targeted sampling focused on a range of household economic activities.

The series of posthurricane interviews suggest that the drastically altered landscape created changed perceptions in the value of that landscape, perhaps in part because it was so unusual for that population (there had been no hurricane that had made landfall for 50 years, and the previous one wasn’t nearly as strong). The men and women I interviewed describe that what was once good farmland and productive old secondary growth forest was now denuded of trees with only scrubby growth as result of salvage logging after the hurricane, concessions granted by the State. Interviews indicate that the majority of people perceived the landscape to have diminished value, both symbolic and economic, after the hurricane. People felt powerless because they were told they could not access areas formerly used for collecting forest resources like firewood and palms and were unable to hunt or fish in the same places they did before because it was considered part of the salvage logging concession. Catches of already diminished fish species dwindled. Immediately after the hurricane, access to both forest and farm was a problem, with massive quantities of downed trees and brush blocking trails to farms for months afterward. This was exacerbated by two severely dry seasons, which led to several uncontrolled fires on reservation lands, serving to further degrade what once fairly productive soil on the limestone hills around the village.

The severe hurricane damage created an “aperture” in the shift of further territorial control over unsettled areas by the state government as well as sales to foreign interests. This opening allowed a new, different locus of control over the landscape by the state and foreign industries, which resulted in the granting of access to land and resources to foreign and national interests: providing the impetus for further territorialization of Maya reservation lands. The Government of Belize granted salvage logging contracts immediately after the hurricane and granted a 500 acre parcel of reservation land to two Americans from Texas for the development of a small hydroelectric power generation plant up the Rio Grande River, which bisects the village and is one of the focal points of
everyday life. We know that disasters may cause an alteration or reorganization in power
relations with the state and are important catalysts in creating cultural change (Johnston
1994; Oliver-Smith 1996). Not just a gap or discontinuity, the spaces created by the event
served as a pivotal opening for a change in dynamics of control over the landscape.

HYDRO-MAYA AND TERRITORIALIZATION

Following on the heels of the hurricane, the details of an ongoing conflict over the
proposed, and then actual construction of a small hydroelectric dam at the headwaters
of the Rio Grande River provide another specific illustration of the ways diminished
cultural values of the landscape resulted in limiting existing farm and forest lands in San
Miguel reservation, enclosing existing farms and preventing expansion of agricultural
and agroforestry practices into the newly privatized lands in the future. In analyzing the
effects of the Hydro Maya dam project, I asked, why did individuals in the community
and Maya rights leaders, who were successful in resisting the proposed dam in 1998
and 1999, choose not to mobilize the same kind of response in 2005? At that time, the
threat of construction of the dam at the mouth of a cave of extraordinary natural beauty,
frequently a site for both ecotourism and community recreation and spiritual activities
was not met with any significant social action aside from the formation of a small group
of concerned youths. Six years earlier, the conflict culminated in the burning of houses,
death threats, a televised protest, and the “cancellation” of the project. But in 2005, the
sounds of dynamite blasted people awake as they lay in their beds in the early morning
hours, and it was met only with silence. I have argued elsewhere (Zarger 2005) that this
was because of a variety of factors, but the shared perception that the lands around the
village had reduced fertility and value contributed to the lack of protests. Another factor
was that some families received cash payments if the access road for the dam crossed their
lands, and a few men secured employment in construction. When a permission letter
to Hydro Maya was originally signed by the alcalde in 1998, San Miguel did not have
electricity—this was an impetus for agreeing to cede a portion of reservation lands to the
hydroelectric project. An environmental impact assessment suggested that the ecological
consequences of the dam would be minimal (Miller and Miller, Ltd. 1998). However,
by 2005, the village had electricity, and contrary to the arrangement promised by the
hydro project whereby a hundred people would be employed in construction, the project
only hired about 20 men and brought in contractors and laborers from Belize City. The
ecological and social consequences of the dam have been significant as the river now
floods at higher levels, is very low during dry season, and lacks aquatic life.

As Oliver-Smith notes (1996), disasters are “likely to accelerate changes that were
underway before the disaster.” In particular, how did young adults, who were already
experiencing a period of transformation in their lives, change their economic behavior?
Migration for wage labor within Belize and a distinct shift away from subsistence farming
or cash crops appear to be significant outcomes of the disaster that have altered human–
environment relationships in this community. Young adults (men and women ages 16 to
are a segment of the population significantly affected by both episodic and gradual changes in political economy, identities, and landscapes. As mentioned previously, young adults are migrating in need of nonfarming work, not just weekly or monthly, as those a decade older than they did, but through permanent moves out of the village. Money is sent home in remittances, and young adults might visit only on important holidays or events—certainly less often than some of their older brothers or sisters who may have maintained residences in their home village.

SHIFTING MOSAICS: MOBILITY, LAND TENURE, AND THE “FOOD CRISIS”

Previous researchers have examined the ways Q’eqchi’ families have responded to exploitation, forced labor, market collapse, agricultural development schemes, or international trade agreements over the last four centuries. One recurrent notion is that, when these sorts of pressures were encountered, Q’eqchi’ were often able to return to milpa farming, agroforestry, hunting, fishing, and collecting wild foods, or what Wilk refers to as a “store-house of knowledge that keeps options open” (Wilk 1997:72). In the face of skyrocketing costs of staple food items as well as consumer goods, what will the options for Q’eqchi’ families be? With increased transportation options now available, are there additional options to the decision to move entire households? I have suggested, based on long-term ethnographic research that an additional option appears to be surfacing, and it is temporary or seasonal in-country migration. This is in some ways encouraging for Q’eqchi’ families, but this new option (for Toledo District in any case) also has fundamental implications for the everyday lives of those who migrate out, and those who are left behind. Mobility is an important aspect of Q’eqchi’ life that has contributed to the resistance and perseverance of shared goals and meanings for generations. However, the other element that is necessary is access to, or desire for, new farm (and subsequently village) lands. Land tenure, in some capacity—whether it is remote forest in Petén or young secondary growth along the Southern Highway—is what allows the flexibility to vacillate back and forth between the different livelihood options that comprise the “mosaic.” The flexibility to plant several acres of corn and beans one season and work in the shrimp farms the next season if work is available, to have cash to pay for high school in Punta Gorda rests directly on having access to productive land. In the past, this problem was often solved by moving.

To return to the changes in land control in San Miguel, where a severe hurricane contributed to the allocation of a sizeable parcel of reservation lands to a foreign-owned hydroelectric company, many families are not willing to or interested in moving their entire household for farming opportunities. They are more interested in participating in the “ratchet” of increased standards of living, higher education costs, and consumption in regional, Belizean, and global economies simultaneously. Ultimately, this has meant that men who lost their jobs, or can no longer afford to buy as many consumer food goods as in prior years were considering a return to subsistence farming. As one 42-year-old father of four, who had lost a good job working in citrus for the last eight years explained
to me, “I’m thinking of planting my lee farm with corn and beans again, since we don’t know what will happen next with all this, and everything’s so expensive at the shop now.” The problem is, after the degradation from the hurricane, logging contracts, and land appropriation by the hydroelectric company, there is decidedly less land for farmers to return to, limiting flexibility for some, but not all families. Not unlike the effects of recessions elsewhere in the world, those who have reserves of some kind, or did not need to rely on chopping high bush to create a new farm, are able to absorb the high food prices a little more easily than those families who only recently became invested in migration out for jobs, and rely solely on the availability of communal lands, thereby creating uneven impacts and exacerbating existing inequalities and conflicts within the community. The scenario described here for San Miguel is not unique, nor is it quite the norm for Maya villages in Toledo. Communities and households that are not located as close to main arteries of transportation may have less invested in the mosaic element of weekly, monthly, or seasonal migration for paid work, and had not stopped farming altogether yet. They will be in a better position to negotiate the current crisis.

DISCUSSION

Considering the historical and political ecologies of agricultural production in the region provides a rich tapestry against which to analyze the ways Maya families are now confronting the specific circumstances of the recent “global food crisis” in southern Belize. Current events are in some ways different from past confrontations, but are largely similar, aside from an emerging migration pattern that at first glance appears to vary from previous patterns. In many ways, given the very long history of human–landscape interactions in the region, it is too soon to assess how significant a departure these new strategies are from previous iterations. One important question for future research in this area is to determine how Q’eqchi’ families see their potential mobilities. What elements of this historically and ecologically situated mosaic are more important to them? Which approaches do they see changing, and why? Understanding the variability in the ways different ethnic and social groups experience food production, commodification, and inflation is one contribution of historical and political ecological analyses. If food shortages and food insecurity occurs more frequently in the future given the interconnectedness of global food supplies and commodity chains, then thinking critically about which strategies allow for greater resilience in the face of such dilemmas is paramount.

Reflecting on past and present experiences of Maya families creates explanations that form a “web of networks,” as opposed to direct chains of cause and effect (Robbins 2004). Access to farmable land and, ideally, relatively secure land tenure is one criteria that appears vital to creating alternatives to dispossession, forced labor, and other forms of cultural violence that Maya households have encountered over the last several centuries. In Belize and other locales, mapping, privatizing and bounding land has tended to result in the greater exploitation of people who rely on it (Grandia 2006; Robbins 2004; Wainwright 2008). Grandia (2006) remarks on the apparent differences between access
to land for Q’eqchi’ in Guatemala and Belize, and how this relates to a matrix of factors, including lower population numbers in Belize and easier access to land, Guatemalan participation in CAFTA and the Plan Puebla Panama (PPP) and the “squeeze” placed on corn farmers in Guatemala who become sharecroppers or invest in cattle. The process of “unsettling” that Grandia describes resonates with the process of territorialization and dispossession at home that I describe in the community of San Miguel. Q’eqchi’ have always had a “frontier” to move to, and yet, in the Petén, “protected areas and cattle ranches are now effectively closing down the frontier” (Grandia 2006:308). In southern Belize, the development of a hydroelectric dam, hurricane degradation, lack of willingness on the part of the state to recognize customary land uses as legitimate, and displacement through temporary migration all have a similar result: the removal of land from the equation. Land, the one resource that historically allowed such flexibility and resilience for Q’eqchi’ and other Maya peoples is becoming more scarce, while demand for consumer goods and purchased foods is on the rise. If past history is any indication, long and short-term solutions to the food crisis in Belize must incorporate better, more secure access to land; not renewed attempts to promote the latest cash crop or development scheme.

NOTES

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1. Belize is an ethnically diverse nation, with an estimated population of 322,000 in 2007 (SIB 2009a). The focus here is on Maya communities where I have carried out ethnographic fieldwork for the last ten years, but the general experiences I describe here in relation to recent food inflation are affecting Creole, Garifuna, East Indian, Mennonite, and other residents in Southern Belize in much the same way.

2. Throughout the paper, I use the term Maya to refer to Q’eqchi’, Mopan, and Yucatec Maya speaking people, similar to the way the term is currently applied by indigenous leaders and residents of Toledo District, Belize where the research described has taken place. The construction of Maya identity in Belize (and elsewhere in neighboring “Maya regions” of Guatemala, Mexico, and Honduras) is complex and has changed over time, as noted in the discussion here. When referring to information that directly relates to Q’eqchi’, I specify in the text. For a more detailed discussion of Maya identity in Guatemala and the “Pan-Maya movement,” see Montejo (2005).

3. Wainwright summarizes this term as “the fundamental spatial ontology of the modern nation-state” (2008:21). Essentially, it refers to the process of claiming, naming, mapping, and otherwise appropriating space for the purposes of the nation-state.

4. Translating the transnational scale to local experience, this meant that between 2002 and 2005 small farmers in Belize looked around in dismay as their orange crop rotted on the ground, creating a heavy, sickly sweet smell of profits never realized because it cost more to pick the oranges and get them to market in Stann Creek than to just write off the harvest as a loss and let neighbors’ children pick as many as they like.
5. Low wooden tables used to form corn and flour tortillas before firing on a comal over a wood burning, stone and mud-covered, hearth.

6. When I come and go from San Miguel, the Maya village where I’ve spent the most time over the years, people love to joke with me by asking “where do you find your corn tortilla when you’re in the ‘States’?”—assuming that I won’t be able to get very good, fresh handmade corn tortillas there (which is correct), and reminding me that without tortillas, I haven’t really eaten since the last time I visited. Wilk (1997:141) also notes this point.

7. Curiously absent from many international agency reports on the development and current status of the food crisis, is any analysis of the fact that wheat and corn were being traded as commodities just like a barrel of crude oil, and that there are also discussions taking place about the need to remove staple food crops from trade and speculation boom and busts to prevent this sort of crisis from happening again.

8. For a fine-grained analysis of the ways green revolution technologies were promoted in Southern Belize, in the form of an agricultural development program known as the Toledo Resource Development Project (TRDP) that emphasized “settled” agriculture and mechanized rice as a cash crop, see Wainwright (2008:ch. 5).

9. Grandia (2007) notes that Q’eqchi’ Maya are often singled out as the Maya group most in need of “settling” to rely on new means of making a living to slow deforestation and environmental degradation. Academic literature varies in its treatment of Q’eqchi’ farming, ranging from claims that Q’eqchi’ have the “least” local environmental knowledge of any ethnic group in the Petén, Guatemala (Atran 1999; Atran et al. 2002), to sensationalist discussions that refer to them as the “leaf cutter” ants of the tropical forest (Grandia 2006:106).

10. Grandia (2006) also reflects on the “managed mosaic” that Fedick (1996) proposed in relation to present day and historical patterns of Maya agriculture, specifically in its possibilities for a “Q’eqchi’ vision of conservation” that might appear very different from current efforts in the Petén. Although in my dissertation I describe the way Fedick’s edited volume and a “long view of human-environment interactions in the region” informed my own analysis of learning the environment during childhood (Zarger 2002b:62), I was struck as I read Grandia’s discussion that the concept had resonated with each of us as a workable way to describe the managed farms, fields, and forests where Q’eqchi’ reside.


12. For detailed discussions of the history and variability of this pattern of mobility across landscapes see Wilk (1997) and Grandia (2006).

13. The Maya community is home to approximately 520 people, who primarily speak Q’eqchi’, with a few Mopan speakers. Most families make a living from a rotating combination of economic activities: milpa farming, cash cropping rice, cacao, or annatto; fishing, working in shrimp farms, logging industries, or tourism. The Columbia Forest Reserve is adjacent to San Miguel community reservation lands.

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