Militarism and the environment in Guatemala

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Abstract This paper examines how civil war in Guatemala created and destroyed community cohesion, which, in turn, influences land use practices in the frontier region of Ixcán today. The impact of civil war on the environment and land use in this region takes many forms. Some communities took refuge in Mexico. Other communities refused to take refuge in Mexico and also refused to submit to military rule. These communities of "people in resistance" formed highly cohesive units in order to evade military detection. The lessons of cooperation and the high levels of cohesion they developed during their years in hiding have carried over to their successful management of natural resources in post-conflict Guatemala. Return refugees accumulated higher levels of cohesion while in refuge because they often participated in workshops organized and funded by outside relief agencies. Higher levels of community cohesion have allowed return refugee communities to better organize and use their land in more sustainable ways. Other communities did not flee and thus endured military rule. They were forced out of their dispersed land parcels into concentrated model villages. Concentration of community members forced intensive use of the environment in the zone immediately surrounding the new settlement. Often, distrust permeated these occupied communities and community cohesion dipped. Today, these low levels of community cohesion lead to a lack of consensus on how to use land and resources in the community. The overall goal of the paper is to point out the community level variation in the relationship between military actions, community cohesion, and the environment.

Keywords Civil war · Guatemala · Ixcán · Refugees

Introduction: war, livelihoods, and the environment

Civil wars leave multiple and indelible scars, physical and psychological, on civilians who are often tangled in the conflict (Green 1999). Wars also take a heavy toll on the environment and natural resources upon which civilian populations often rely upon for their survival. Studying the effects of conflict on natural resources and the land base (i.e., land that people need for survival) is important in a country like Guatemala where over 60% of the population is directly tied to the land and/or natural resources for their daily survival. Guatemalans hold land close to their hearts because on that land they grow maize, beans, and other subsistence crops. War then, especially a war that restricts access to land and natural resources, has a significant impact on Guatemalans and Guatemala.

The effects of Guatemala's 42 years of conflict (1954 to 1996) on Guatemalans and their environment

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are still felt and seen today. Landscapes are shaped through time and by many players (Lewis 1983; Lowenthal 1985). This paper provides the details of how war shaped, and continues to shape, people's livelihoods and, consequently, their use of the environment. The examples for this paper are taken from the Ixcán region of Guatemala that suffered some of the most brutal blows of Guatemala's insurgency and counterinsurgency actions.

In presenting the examples from Ixcán, I not only deal with the different ways in which the environment and use of the environment today was changed by civil war, but how these changes were wrought by groups of people who reacted differently to violence in their midst. Their different reactions to civil war are, in turn, a result of the unique history of each community in the Ixcán region. This entails, then, an examination of the settlement history of three representative communities and then a further study of how war ripped into these communities. Their reaction, or survival tactic, resulted in a different use of and impact on the environment upon which each of these communities survived(s). In this paper I argue that researchers must examine how war influences the cohesion of each community because, along with community origins and history, war created, destroyed, or transformed community cohesion. Changes in community cohesion brought about changes in land use, the stock of natural resources, and the ways in which the environment is managed today.

The effects of war on people and their environment are far from static. Livelihoods environments in Ixcán continue to evolve, but they evolve heavily influenced by the war and its influence on community cohesion and structure. To achieve the goal of explaining changes in community cohesion and how it relates to community-scale effects on the environment, I first outline my methods. Then I describe the settlement of Ixcán's dense rainforests from the early 1960s to the early 1980s and how these communities became embroiled in the battle between the Guatemalan military and revolutionary forces. I then move on to present examples of war, community cohesion, and environment in three Ixcán communities. I finish with a discussion of how we can and should continue to examine the impacts of war at the community scale if we want to better understand the complex relationships between humans and their environments, especially in the times of extreme stress and pressure presented during wars.

Methods

To examine environmental and social realities in rural Guatemala I completed 41 in-depth interviews with 30 rural residents in the Ixcán communities of San Lucas, Kaibil B'alam, and Primavera. These interviews varied according to the informants' age, experiences, and expertise. For example, older residents felt more comfortable relating stories about initial settlement, subsequent repression, and rebuilding life today. Younger informants enthusiastically related migration experiences and their adaptation to life back in Guatemala after years of refuge in Mexico.

For a more quantitative assessment of resources use and views about how war changed Ixcán communities, I completed 168 household surveys in three communities (San Lucas, Kaibil B'alam, and Primavera de Ixcán) in the remote Ixcán *municipio* (equivalent to a U.S. county) (Fig. 1). I conducted household surveys after at least six months of intensive participant observation, informal interviews, and in-depth interviews. This steady accumulation of knowledge allowed me to construct valid survey instruments (Bernard 1995). Some of the results of those surveys, especially responses to questions about community cohesion, are presented in this paper.

This research has taken place over the last six years and I lived in the each of the study communities for at least four months. Therefore, the statements I make, that are backed up by in-depth interviews and household surveys, are based on close connections with the communities. I did not simply wander into war-torn communities and ask them to tell me stories of the past. As any good ethnographer should, I was aware of inconsistencies in stories told to me about changes in community cohesion. It is only through time in a community, however, that a story of past and present life emerges.

Ixcán land and history

In this section, I provide a brief history of settlement of the once-forested region of Ixcán. This history is



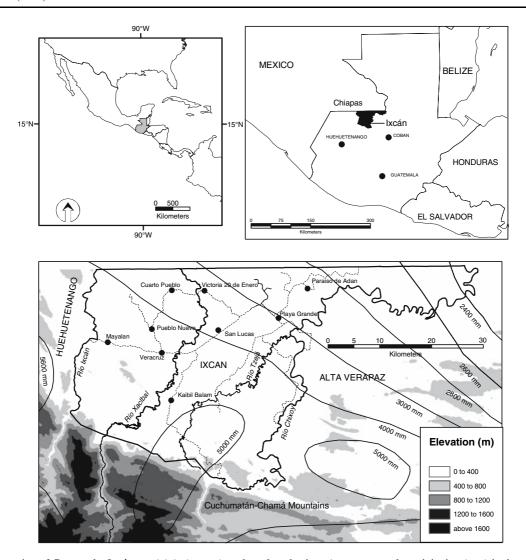


Fig. 1 Location of Guatemala, Ixcán *municipio* (county), and rural study sites. Average annual precipitation (mm) is shown for the Ixcán study region. Source: Author's fieldwork

important because it shows the origins of different communities in the region, which, in turn, helps explain how cohesive communities were prior to the conflict and why they reacted the way they did to the war that engulfed their lives in the 1980s and 1990s.

Expelled from their communities in the Guatemalan highlands by increasing population pressure on atomized land parcels and returning from the dead end alleys of the Green Revolution, smallholders sought a new life in the forested lowlands of Ixcán. Prior to their migration to Ixcán many settlers worked every year on coffee or sugar plantations and desired liberation from

the drudgery of working another person's land. Settlers relate their escape from Guatemala's despotic modes of production in terms similar to those of "the great exodus from Egypt, *para salir de la esclavitud en que vivimos* (to escape the slavery in which we lived) and of a journey to the Promised Land in the early 1970s" (Le Bot 1995, p. 123).

Using the words of settlers and a compilation of secondary sources, I first present a history of Ixcán that helps to explain the wide diversity of indigenous and ladino (non-indigenous) communities and their use of the environment. But first, I describe the land Ixcán settlers inhabit.



Ixcán: rain and rainforests

Ixcán is one of the most remote and least developed regions of Guatemala. This patchwork of forests and fields (1575 km²) occupies the northernmost extremes of the departments (states) of Quiché and Huehuetenango. The Mexican state of Chiapas and the vast Lacandon Forest form the northern border of the Ixcán municipio (county). The southern limit of Ixcán abuts the 3000 m-high Cuchumatán-Chamá mountain range. Rivers draining these mountains bound and flow through Ixcán. The Ixcán and Chixoy Rivers form the western and eastern boundaries of the municipio, respectively (Fig. 1). Most of Ixcán lies below 400 m elevation. Much of the land, however, is hilly with steep karst slopes. Average temperature ranges between 25 and Annual 28°C. precipitation increases 1,500 mm in the northeast of the region to 5,600 mm at the base of the Cuchumatán Mountains. The area experiences a short "summer" (dry season) in March and April.

The thin rainforest soils of Ixcán are extremely susceptible to erosion upon removal of vegetation. Only 16% of Ixcán contains fertile alluvial soils. The rest of the area is made up of deeper oxisols (38%), thin oxisols on moderate to steep slopes (35%), and the remainder (11%) is comprised of slopes too steep for cultivation (Garst 1993). Most settlers cultivate corn, beans, and rice for subsistence. Many settlers also cultivate cash crops like coffee and cardamom (Elettaria cardamomum; a valuable cash crop used in Indian cooking and in Turkish coffee blends). Of the natural subtropical humid forest that covered 100% of Ixcán in the 1960s, less than 50% remains (CHF 1999, UVG 2003). Clearing of land for cattle pasture is increasingly common in Ixcán (see Taylor et al. 2006). Human population in Ixcán grew from a few thousand in the 1960s to over 70,000 today. The current growth rate, including migration, is 3.47% (Naciones Unidas 2001).

Before I delve into a presentation of differing resource use and settler adaptive strategies in the face of war, I increase the understanding of these landscapes by presenting a history of the region, a history of concurrent colonization and guerrilla warfare.

Settlement for survival: cooperatives, massacres, and life beneath the trees

The history of settlement, oil exploration, guerilla insurgency, state counterinsurgency, and the response of the local population to war in their midst, played a vital role in molding today's landscape. Guatemala's rise in population over the last 50 years, continued inequality of land distribution, and perpetual fragmentation of smallholdings led to documented internal migration to forest frontiers beginning in the 1960s (Handy 1984; Schwartz 1990). Later, massive streams of migrants, on the order of 10% of the population, headed to the United States (Taylor et al. 2005). In addition to spontaneous internal migration to the Petén and the Northern Transversal Strip (which includes Ixcán), church-sponsored settlement schemes in Guatemala's unpopulated Ixcán region began in the late 1960s and continued through the mid 1970s (Manz 1988a; CEIDEC 1990; Garst 1993). State organized and U.S. AID funded migrants made their way to Ixcán in the early 1980s, paradoxically, at a time when violence peaked in the region (Dennis et al. 1984).

Beatriz Manz succinctly depicted the settlement history of Ixcán in her powerful book "Refugees of a Hidden War" (1988a):

In the 1970s thousands of highland Indians successfully colonized the Ixcán, an impenetrable, isolated, and unpopulated rain forest. During this period, the area became the stronghold of the largest guerrilla organization, the Ejército Guerrillero de los Pobres (EGP). The military conflict between the army and the guerrillas escalated, leading to a fierce counterinsurgency campaign in which communities were massacred, most villages were abandoned or destroyed, and thousands fled. Ixcán today [mid to late 1980s] is a development pole. The military tightly controls villages, while the EGP remains in the outlying areas. Armed clashes occur regularly. There are also thousands of villagers living in the jungle beyond military control (127).

The first settlers in the late 1960s were homogenous indigenous groups from Huehuetenango (i.e., from the same ethnic group and geographic area) who



occupied national lands west of the Xaclbal River in a cooperative called Ixcán Grande. These pioneering Indian groups were sponsored by the Catholic church and demonstrated *high levels of cooperation in order to survive* the rigors of settling a virgin rain forest infested with malaria carrying mosquitoes: "...social responsibility, *community cohesion*, and leadership responsibilities were paramount in the original settlements... tasks were rotated and resources pooled and, in fact, the economic, social, and political activity revolved around the cooperative" (Manz 1988a, 129–130, emphasis added).

This search for land and life involved separation from places of origin and the formation of a new community of new people. Settlement, in addition to enduring heat and tropical diseases, meant learning to adapt to new cultures and environments. The cooperatives sat in direct contrast to the traditional model of life in rural Guatemala. In the traditional model of rural life poor farmers lived in the economic and social shadows of the state and operated on the margins of the national economy. They truly live(d) on the periphery (Lutz and Lovell 1990). In contrast, cooperative members tried to establish a society that combined religious tenets, pioneer fervor, community spirit, egalitarian ideals, and finally, something unheard in Guatemala's countryside—socioeconomic development for Guatemala's poor. Colonists formed a new life, without, and in spite of the state. The utopian feeling was enhanced by success in the face of a non-committed state and by overcoming enormous geographic and ecological disadvantages (Manz 1998a; Manz 2004; Le Bot 1995).

Settlement in the Ixcán continued in the 1970s as landless Guatemalans heard about available land in the area. Potential settlers applied to the National Institute for Agrarian Reform (INTA) for a land parcel in areas where they knew land was available and then awaited a response. This resulted in nonhomogenous communities made up of people from all regions of Guatemala. These spontaneously settled communities, mainly located east of the Xaclbal River, differed from the church-organized cooperatives to the west in that settlers came alone and often lived and worked in isolation on their designated parcels (Fig. 1). The settlers in the church-sponsored and organized settlements described above lived in village centers with community meeting halls, small cooperative shops, rudimentary schools, and often an airstrip (the only means, other than walking, of getting to the region in the early days of settlement).

Yet another type of settlement took place in the early 1980s. At the height of the government scorched earth campaign in Ixcán in 1981 and 1982, Guatemala's National Institute for agrarian reform (INTA) with funds from USAID saw fit to settle the northern areas of Ixcán between the Xaclbal and Chixoy rivers in a project they called *Proyecto* 520 (Dennis et al. 1984). The government trucked in Ladinos en masse from eastern Guatemala and promised migrants 10 hectares each. The "520 scheme" ended spontaneous settlement of Ixcán because the government now claimed unused national lands for their project. The government aimed to settle over 5,000 families in northeastern Ixcán, but only about 1,800 families settled before the scorched-earth campaign curtailed further settlement (Dennis et al. 1984; COINDE 1993).

The settlers of this scheme received no prior training or advice about settling in a strange environment. Moreover, because they arrived in the midst of massacres, the army restricted their movements. They relied on the army for food and made weekly treks to the store at the Playa Grande military base for provisions. The harsh conditions imposed by the military upon these new settlers and insufficient parcel sizes, pushed many original settlers back to their hometowns in eastern Guatemala. In contrast to the indigenous cooperatives of western Ixcán, these communities lack infrastructure and a sense of common purpose-settlers came from different towns and lack a common history. Moreover, today aid agencies do not work in these communities because they believe that these folks suffered less than the cooperatives during the war.

Although the three distinct settlement phases, church, spontaneous, and government, produced different types of communities, all settlers encountered similar conditions upon arrival to Ixcán and endured onerous military rule in the 1980s and 1990s. It is to those years of onerous military rule that I now turn to reveal how war ripped into Ixcán communities and destroyed years of accumulated trust and social relations amongst community members. In some cases, however the war perversely resulted in higher levels of community cohesion as residents of some communities came together simply to survive. The military deliberately targeted any form of



organization for destruction. First, they eliminated priests and community catechists. Later they killed cooperative leaders, teachers, and health workers. Finally, the military lashed out on the whole population. After brutal massacres, the army forced remaining people to police themselves by creating *Patrullas de Autodefensa Civil* (civil defense patrols).

Destroying communities and controlling lives in Ixcán

Guerrilla insurgency and subsequent military repression radically altered the lives of Ixcán's residents. The hopes and realities of the settlers came head to head with the hopes and realities of another group that of the guerrillas who followed the path of armed struggle against the state. In the eyes of the guerrillas, the search for land by the settlers was an aspiration condemned to failure if it was not framed in a revolutionary project (Le Bot 1995; Payeras 1998). Unfortunately for the settlers, the guerrillas chose the Ixcán for their new base simply because the dense forests afforded good cover and because of proximity to Mexico (Payeras 1998). Guerrilla presence and action in Ixcán, whether settlers sided with them or not, unleashed a fierce counterinsurgency campaign that focused on any form of organized life in Ixcán. In the eyes of the Guatemalan military, settlers were the sea that provided the fish (guerrillas) with sustenance. The military posed a simple solution—dry up the sea.

The *tierra arassada* (scorched earth) campaign of 1981 and 1982 forced tens of thousands of Ixcán surviving settlers to abandon their prized parcels, take what they could carry, and make the arduous journey into refuge across the border into Chiapas, Mexico (Manz 2004). Most families left behind at least one dead family member. Some families were completely eradicated though (Falla 1992). Other residents refused to abandon Guatemala and survived in the dense forests in the northerly most territory between the Ixcán and Xaclbal rivers. Finally, some settlers stayed in their communities hoping to endure military rule.

The cooperative centers of Ixcán Grande, because of their high levels of organization, were singled out for elimination by military forces. For example, Ricardo Falla (1992), a Jesuit priest and anthropologist,

documents in minute detail the massacre of over 400 people in Cuarto Pueblo just west of the Xaclbal River. By 1993, only 242 of the original 1,834 families still lived in the Ixcán Grande cooperatives (Garst 1993).

Some refugees returned to Ixcán after two or three years and occupied their abandoned parcels alongside fellow settlers who did not flee. Refugees who returned after 1985 found their land parcels occupied by new settlers. Military-sponsored migrants now farmed the "voluntarily abandoned" land. The army undertook a radio campaign advertising the availability of already cleared land in an attempt to bring in a population that they could control (Manz 1988b; CEIDEC 1990).

War not only ripped into the lives of people but also physically molded a new landscape. Under the guise of development poles and model villages, the military concentrated all land owners into centralized communities where they could control the daily lives of residents (CEIDEC 1990). Community centers, clear of trees and set out in a grid pattern, permitted the Guatemalan air force and ground troops to maintain better control of the population.

During the years of observation, community members banded together to cultivate parcels nearest to the center resulting in a zone of intensive land use and deforestation around many community centers. Today many population centers live with this legacy. Paradoxically, the concentration of the population into centers facilitated certain types of post-war development such as the introduction of electricity and potable water to each household.

In sum, this period of "unrest," arguably one of the most turbulent and bloody conflicts in recent Latin American history, led to a complete unraveling of civil society. Community members who would not, or could not flee the conflict, eked out a living under the tight grip of the Guatemalan military. Refugees slowly returned to devastated home communities during the 1990s and began to reweave the fabric of everyday life (Taylor 1998; Manz 2004). Today, four-fifths of Ixcán residents live in poverty and more than 95% lack basic services like potable water, drainage, and electricity (Taylor 2005). From this hopeful and then horrific history we can point to several types of communities that evolved in Ixcán and how those communities use their available resources.



Ixcán communities today: the results of community history, war, and community cohesion

Documentation of the results of the conflict between the Guatemalan military and the insurgents in Ixcán reveals at least three types of communities: *mixed* (both ethnically and temporally), *stable* with mostly original settlers, and *new* settlements on large farms purchased by the government for the landless. I illustrate each type of community with an example.

Kaibil B'alam: a mixed community

Kaibil B'alam is made up of original inhabitants from the 1970s, new settlers brought in by the military in the early 1980s to occupy "voluntarily" vacated land parcels, and refugees returning in the 1990s. The ethnic and temporal diversity of mixed villages like Kaibil B'alam, local non-governmental organizations (NGOs) state, makes attempts to organize socially almost impossible (CEIDEC 1990; CHF 2000). The difficulty in organizing cannot be attributed solely to ethnic diversity. It is the combination of ethnic and temporal mixing of residents that makes organizing difficult in communities like Kaibil B'alam.

Military control and propaganda instilled high levels of tension and mistrust among Ixcán residents during the 1980s and 1990s (Manz 2004). Kaibil B'alam is typical of many communities where original inhabitants who endured military rule in their communities were cautious of return refugees and regarded them as potential guerrillas. Likewise, new military-sponsored settlers, many of whom were non-indigenous, typically viewed original inhabitants as guerrilla sympathizers and as "Indios" (a derogative used to denigrate indigenous people) who do not understand anything and who are not civilized (CEIDEC 1990). Heterogeneous communities

composed of original, returned, and new settlers are characterized by "divisiveness, fragmentation—not the elements of a well-functioning rural community... the villages are unable to pursue independent initiatives, develop networks or establish the necessary contacts with cities and organizations of their choosing" because of direct army control and presence in the area (Manz 1988b, 141).

The community of Kaibil B'alam is difficult to see from a distance. It is hard to discern where the village begins and ends because trees on the 1-hectare household lots and the hummocky karst terrain prevent complete views. A 450 hectare forest reserve surrounds the 153 household lots. Individually owned and managed 30-hectare parcels (153 parcels) surround the reserve. Trees appear to dominate the landscape. Several factors explain this verdant landscape. Family lots in the village center are larger than in most communities, which permits the preservation of useful trees in the form of kitchen gardens. Also, the initially cohesive original settlers did not follow military orders to clear the community of trees. They petitioned the local commander and he ordered that settlers clear only 3 hectares in the very center of the community where all community members were forced to live. Third, an agrarian committee ostensibly regulates use of the surrounding forest reserve. Households with distant land parcels are allowed to extract firewood (fallen limbs) from the reserve. Permission for whole tree extraction is given only to families with distant parcels who need large boards for house construction. Seventeen of the forty-six households interviewed claim that all the better wood for fuel and construction in the forest reserve has already been depleted, however.

Kaibil B'alam's turbulent past has shaped the social and physical landscape today. In May, 2003 I sat in the shade of a newly constructed house porch. I shared this spot with Mardoqueo as he recounted stories of Kaibil B'alam.

In 1970 the majority of the *antiguos* [original settlers] were already established in Kaibil. We dispersed in our town lots or on our parcels.

troops, "they were so used to killing that, you know how here there are no rocks to sit on—just mud, they would take their breaks and eat their food sitting on the cut off heads of the indios."



¹ Ladinos in one of the government settlement scheme villages joked about the naïveté of Indians in Ixcán. They told me, "those *indios* are so stupid and many of them could not even speak Spanish. At the same time they wanted to please the military, so when the troops asked those poor *inditos* something, the idiots would always agree. For example, the troops would ask the indios if they were *comunistas* (communists), and because they did not speak Spanish, the indios answered 'si, si' (yes, yes). And with that the troops would shoot them." At the same time, however, these Ladinos realized the extent of the killings in the area and recounted the callousness of the

Footnote 1 continued

When the conflict se puso duro [became intense] and we were all concentrated by the military in the very center—todos amontonados [all on top of each other]. A military outpost also occupied this place. As violence increased half of the community fled to Mexico or to their places of origin in Huehuetenango. During this time other people—nuevos [new settlers] came and occupied the "empty" parcels. The original and new settlers were divided because the new settlers came from a different area of the country and they were just shoved on usthe army told us to help and feed them. They [the new settlers] took advantage of all the hard work done by the original settlers—they harvested the coffee and cardamom that was there. In the early 1990s and all the way up until 1996 those living in refuge tried to return, but their passage was blocked by the new settlers, who were backed by the military. The community could not agree what to do with the returnees. The original settlers wanted them back, but the new settlers did not want to give up their land. Also, nobody wanted to divide up their land to make space for the returnees. Eventually, the government arranged for the purchase of an estate. They ended up with a good deal. They accepted and that is how Kaibil today is now made up of old and new settlers-about fifty/ fifty. We still don't get along and cannot agree on anything. So here we are all fighting for what we can. Really this place is good and the cardamom that the land gives is more than anywhere else. That is why there is still forest here, because people still make money on cardamom. Business is good. But, for some reason, people want cattle and over that we are divided because with cattle we know there will be no trees and those who want to still grow cardamom will suffer because it will be too dry and hot from all of the cattle pastures.

This short excerpt illustrates how settlers recognize that their community is not cohesive. The sentiments expressed above by Mardoqueo were repeated by many members of this community. Their awareness of their lack of cohesiveness is sharpened by the fact that they know that they have to decide on which development projects to side with. For example, the

government in 2000 offered the choice of roofing material, solar panels, or concrete building blocks. "We could not even, as a community, decide on what to accept from the government, even though there was no charge to us," Mardoqueo recounted.

Most residents appear to uphold the agreement that the reserve is a common area for the families who do not have easy access to wood resources and for the future of the community. In spite of this common agreement, some informants reported abuse of the forest reserve, especially by people who own cardamom dryers who are not picky about the type of wood they use in the furnaces.² This illegal practice occurs because no sanctions exist for abuses of the norms that are based on a common understanding and trust. Despite acknowledgment among residents of Kaibil B'alam that forest stocks are declining, there are no programs or plans to reforest or otherwise manage trees. Most community members repeat the common refrain that trees "self generate."

Kaibil B'alam residents and non-governmental organization (NGO) employees recognize that lack of community cohesion is an impediment to development and has direct consequences on the environment in terms of lack of regulation of the standing tree stock. In Kaibil B'alam resources appear to be abundant and



² Cultivation of cardamom and the fuel required to process this valuable cash crop presents many paradoxes. Residents of cardamom growing communities understand the environmental conditions needed for sustaining healthy cardamom plantations, but their very actions often contradict this knowledge. Cardamom grows in the shade, but wood is required to dry harvested fruit before sale to distant markets. The wood used to fire the furnaces comes from areas close to the cardamom dryers and also from the very parcels where cardamom is grown. Farmers recognize micro-climate change (hotter and dryer) through time and its damaging affect on cardamom production. They identify deforestation for agriculture and cattle as the cause of micro-climate change, but take little action to secure the future of this valuable cash crop. Upon inquiring what people did with the earnings from cardamom, I was informed on several occasions that landholders invested in cattle. In other parts of the world, such as Eastern Nepal, Cardamom is seen as a secure investment because it can be grown on marginal land not used for annual crops. Zomer and Menke (1999) report that villagers in Nepal actually reforest marginal or severely degraded areas so that they can cultivate cardamom in the shade of the forests that provide all the wood needs for drying the crop and for household consumption. The Nepalese farmers are in a win-win situation: they do not rely exclusively on cardamom, they grow it on land that is otherwise unproductive, and provide themselves with a secure fuel future.

well managed "on the surface." The number of negative comments I received from residents about wood consumption by cardamom dryers, however, is an issue for concern. Ostensibly a committee regulates wood use, but residents place little trust in the committee or their fellow residents to observe regulations surrounding resource use. Kaibil B'alam's landscape may change quickly as those with money gained from cardamom invest in cattle. Also, several "strong men" now dominate the community. Indeed, one of these strong men, Raúl Martínez, is a "new" settler and was involved in the kidnapping of United Nations peacekeepers in 1998, who were trying to negotiate the return of original settlers from their time of refuge in Mexico. Raúl Martínez and other new settlers refused to allow entry to the return refugees because the return of the refugees might have resulted in the loss or subdivision of land now in the hands of "new" settlers. Tension between old and new residents still exists and results in a divided community that does not have a strong stand on natural resource use and conservation. Levels of community cohesion and how it has evolved through time as reported by residents during in-depth interviews, are also reflected in the results of household survey questions about community cohesion (see Table 1). The information presented in Table 1 also shows that residents of Kaibil B'alam are reluctant to participate in aforestation programs. Moreover, in-depth interviews with residents reveal that they see the low levels of trust in the community as a significant impediment to organizing to use communal environmental resources in a better war to benefit all members of the community.

San Lucas: a "stable" community

Stable communities witnessed less flight of residents, saw little occupation of abandoned parcels by new settlers, and avoided the painful reintegration of return refugees. We can divide the stable communities into two groups: independently or church-settled communities, that demonstrate higher levels of community cohesion, and government organized settlements of northeastern Ixcán. Nonetheless, these communities, simply by deciding to stay and not seek refuge in Mexico or in the forests of Guatemala, endured the onerous rule of the military, which controlled and permeated every aspect of rural life.

"San Lucas está bien pelado" (San Lucas is without trees) lamented Joel Ramón, a Kanjobal Maya who settled in the area in 1974. Another resident, who owns several cardamom dryers, states that San Lucas no longer produces much cardamom and now he buys cardamom from other, higher elevation areas (to dry and sell at a higher price). He, along with other community members, attributes the lack of cardamom in San Lucas to the increase in longer and hotter dry seasons that dry out the cardamom plants. These longer dry seasons contrast to conditions in Ixcán when they first arrived. Then the rain fell *trece meses al año* (thirteen months a year). In turn, they cite clearing of land for cattle and crops as the main cause of climatic changes.

Indigenous and ladino settlers from Huehuetenango and Quiché formed the community of San Lucas in 1974 with a land grant from the government. A mere six or so years after creating San Lucas, men and women started running into guerillas and began to live in fear. San Lucas residents, however, decided to remain in their community and weather the storm of revolution and repression because, in their words, "we were not a cooperative like the other communities around us, and therefore we had nothing to fear from the army—we stood and defended our land." San Lucas residents own and privately manage their individual 30-hectare parcels.

During the intense war years in San Lucas (1980 to 1990), levels of community cohesion increased. Basically, community members had to cooperate to survive. They all had to present a united front and the same "story" before the military to avoid persecution. San Lucas residents all also had to band together and communally cultivate land around the village center because the soldiers who controlled San Lucas would not let villagers venture out into distant land parcels for fear that they make contact with guerillas. This cooperation was new for members of San Lucas, who previously led isolated lives on their distant land parcels. Prior to the conflict, residents of San Lucas had little need for cooperation at the same level as they did during the years of conflict. Prior to the war each family lived on their land parcels, often isolated from other families by a two hour walk through the forest. They did not live in a town center and rarely came together as neighbors or as a community.

Today San Lucas residents enjoy the benefit of a health clinic and the attention of a nurse several days a



Table 1 Community cohesion in three Ixcán communities

| | Primavera $n = 40$ | San Lucas $n = 82$ | Kaibil B'alam $n = 46$ |
|---|--------------------|--------------------|------------------------|
| Questions about community cohesion | | | |
| Is your community united? % Very | 91 | 63 | 27 |
| Did conflict decrease community unity? % yes | * | 21 | 63 |
| Can you trust majority of people in your community? % yes | 89 | 64 | 59 |
| Do people from different ethnicities cooperate? % yes | 94 | 71 | 44 |
| Do you participate in communal projects? % yes | 96 | 88 | 58 |
| Do you participate when the whole community meets? % yes | 98 | 82 | 78 |
| Are you a member of a committee or organization? % yes | 95 | 53 | 46 |
| Is the committee (above) made up of diff rel. & eth? % yes | 97 | 72 | 61 |
| Does the committee have contacts outside the community? % yes | 96 | 57 | 59 |
| For everyday help, ask neighbors for help? % yes | 98 | 69 | 43 |
| For help when you are sick, ask neighbors for help? % yes | 97 | 44 | 48 |
| Do you sell crops communally? % yes | 99 | 2 | 14 |
| Do you trust the government and its projects? % yes | 78 | 49 | 72 |
| Do you trust NGO projects? % yes | 83 | 68 | 84 |
| Would you work on a communal forestry project? % yes | 92 | 62 | 35 |
| Do people respect community rules on forest reserve? % yes | 79 | 14 | 51 |

* Primavera de Ixcán did not exist during the war. Their history suggests that the conflict increased community unity when they lived in the communities of population in resistance (CPR)

week. Children attend a government-funded elementary school staffed by four teachers. Other than the two above-mentioned government services, life in San Lucas remains much as it did when they founded the community in the early 1970s. Residents see the government and aid agencies getting involved in reforestation projects, alternative cash crop schemes, constructing meeting halls, building improved houses, creating access roads, providing diesel generators for street lights, and laying pipes for potable water in surrounding communities that fled during the war. People in San Lucas claim that governmental agencies and NGOs ignore them because they "sided" with the army during the conflict and thus did not "suffer" to the same degree as refugees. Settlers in San Lucas, however, state that they only sided with their land.

In San Lucas there are no or very few community rules concerning resource use (see Table 1 which asks residents if there are any rules about using the

forest reserve). The communal forest reserve gave way to clearing for agriculture and to fuel household stoves and commercial cardamom dryers. Today, the land where the forest reserve once stood has been divided up to provide children of original settlers with a place to build their own houses.

Characteristic of many communities in the Ixcán where families now live concentrated in a village center,³ San Lucas residents who own land far from the center (13 of 82 respondents) report wood



³ Although the military forced concentration of dispersed households into village centers, most families have elected to remain in the center because of access to amenities such as schools, stores, and medical facilities that were not available during initial settlement. Families are now free to live on their parcels. Indeed, many farmers, especially those with parcels distant (2–3 h walking) from the center, reside on their parcels for several weeks at a time during periods of intense agricultural work.

shortages for construction and cooking. In a rainforest setting it may be surprising to see families purchasing wood. But as researchers show in other parts of the world, "woodfuel scarcities" are often a result of labor shortages, land endowments, and social constraints even if the fuel itself is not physically scarce (Mearns 1991).

Development, especially less tangible and slowreturn projects like reforestation, in Guatemala and Ixcán often depends on community committees that, after agreement, must submit pedidas (proposals) to request certain types of aid. Communities that are particularly organized and united have a distinct advantage. San Lucas residents participate in committees and groups that maintain links to groups outside the community. Older residents, however, feel that there is less community cooperation now than during the war years. Settlers report that the conflict bought people together to survive and "now that the necessity has ended, everybody drifts off on their own again." The dip in community cohesion, many report, is also because more and more people migrate to the United States and can send good money home. This money from the outside makes them less reliant on good relations with neighbors because they can now simply buy labor (Taylor et al. 2006). There is a sense in the community that the heydays of outside funded projects in Guatemala is coming to an end and that the youth of the community do not care to participate in community events, ni trabajar la tierra con sus manos [or even work the land with their hands]. Although two thirds of San Lucans say they can trust the people in their community, they also say that few people respect the norms of resource use on the communal land near the river (Table 1).

This slow disintegration of civic engagement does not stop older residents from trying to bring better things to the community. For example, older settlers banded together and formed a potable water committee. They petitioned the government for pipes and paid a surveying company to chart a route from source areas in the mountains to the village. Many San Lucas residents provided labor for the project. Many residents criticized the project when it ran into technical snags, seeing this project as another failed dream and a waste of labor.

In the case of San Lucas I have illustrated how residents recognize how their environment is not in

the "best" of conditions and how their cardamom is "burning" due to the deforestation by neighbors as they create pasture for cattle. So, if we were to measure the "shape" of the environment in San Lucas we would find that it is in a worse state than both Kaibil B'alam and Primavera because of military-directed deforestation around the town center, intensive land use in the areas just outside the community center during the years of conflict, and now because of lack of consensus on how best to use the environment and the lack of any sort of committee to regulate land use on private plots (they recognize that land use on one private plot of land influences the climate on adjacent plots).

San Lucas, however, possesses potential because of past experience in organizing during the conflict, to make improvements in their environment and management of resources through the formation of groups to control and manage resources like trees (see the question in Table 1 about willingness to participate in communal forestry projects). San Lucas possesses the potential that the next case study, Primavera, has put into action.

Primavera de Ixcán: a new community

During the massacres and subsequent repression in Ixcán many settlers sought refuge from the army in the dense forests of northwestern Ixcán, creating the base for communities that I label new. Dispersed groups of farmers and their families from many Ixcán communities slowly combined to form Comunidades de Población en Resistencia or CPR (communities of people in resistance).⁴ These communities, comprising hundreds of families, survived 12 years of hardship living in the forest with few resources. Extraordinary levels of cooperation and community cohesion evolved to ensure a minimal food supply for subsistence while constantly evading the military (Falla 1992). These communities were comprised of multiple ethnic groups, including Ladinos, but ethnic diversity did not prove an obstacle to survival. Most

⁴ Ironically, the army used the same initials (CPR) to refer to this population, but with quite a different connotation: Comunidades de Población Retenida (Communities of People being Retained). The military viewed these communities as non-civilian populations under guerrilla control (CEIDEC 1990).



of the CPR members, however, were members of the cooperatives in western Ixcán. These cooperatives were "wiped off the map" by the Guatemalan military during the early 1980s. Finally, these communities *salieron al claro*, meaning literally, came out into the light after existing 12 years in the darkness under the trees. This "leaving of the forest" in 1994 took place after the Guatemalan government agreed to recognize the CPR as civilian communities (Primavera 1999).

To illustrate the evolution of the CPR, I recount the story of Esteban from Primavera de Ixcán.

When the massacres began we fled into the mountains with whatever we could carry. We took refuge in the forest because we could not return to our communities—the army burned and looted our houses and land. That was back in 1982. Throughout 1983 the army followed us into the forest and destroyed the few crops we managed to plant. They also burnt our straw huts and destroyed the few items we saved from when we first came to the forest. Man, we suffered that year. We were forced to eat berries off the trees and eat a young plant that we call caña de cristo (Christ's cane) because it saved our lives. During that year as we hid from the army we often bumped into other groups of families. They had fled from different communities and were also trying to survive in the forest. Since we all had experience in cooperatives, we tried living together. But when the groups reached a size of 150 to 200 families, we made too much noise and the army could track us down.

So we had a meeting to discuss options. Some families decided that exile in Mexico would work best. We decided against that, we wanted to be near our land, our little parcels, our country. At the same time we could not go back to our parcels because we knew the military would take us to reeducation camps and then make us serve in the PAC [Civil Defense Patrols]. So we decided to live in the forest and mountains and avoid the control of the Mexicans and the Guatemalan army. So that is how we lived for almost fourteen years—in resistance.

We decided to break into lots of little groups scattered in the forest. About 25 families in each group. In smaller groups we could escape quickly if the army found us. With a committee in each community, each person had an assigned task to make escape easy. We learned how to avoid machine gun fire and bombings from above. We organized production of food in a better way with lookouts to watch while we tended the fields. We learned about the best wild food to eat. That way we always had food, even if the army destroyed our crops. Also, the army did not notice these wild foods from the air, whereas with maize and beans they can spot those easily from a plane or helicopter. We also planted our crops in many small places to avoid the army destroying all of our crops at once. Just to be on the safe side, we also moved location of our community every now and then.

So we began to improve our lives—even there in the forest. We taught children up to the fourth grade and even had literacy classes for adults. We did the same with health care. Each little group had a person responsible for health. Because we did not have access to enough modern medicines, that person discovered certain herbs and roots that could be used to cure some ailments. And also, we cooked at night so that the army did not spot smoke from our fires during the day.

And that is how we lived in the mountains. We were thousands of people, not just a few stragglers. We were *campesinos* (peasants), children, old people, widows, orphans-not armed young men. We were Indians and Ladinos. We came from the Mam, Kanjobal, Chuj, Cakchiquel, and K'ekchi' people. But we all learned to care about each other. The life we led in the forest gave us the strength to continue and form this new community along the same lines that we lived in the forest. That is why we call the community Primavera (Spring), because we have a new beginning here. Here we respect all of our neighbors. We include women in all of our decisions. Look, there are several women on the central committee. Maybe our life here will give birth to a new society.



This story of life related by Esteban clearly illustrates how members of the CPR came together and how community cohesion was required for survival. We see how these communities were not just random groups of families living together, but instead were a highly organized group of people who did everything communally and through committees. This way of life and intense organization saved their lives. This then, like San Lucas, is an example of how the pressure and hardships of war forced an increase in community cohesion. Each community in the Ixcán region dealt with the war in different ways and community cohesion resulted from slightly different circumstances (but with the more distal cause of war), however, both San Lucas and Primavera ended up more organized in their attempts to deal with the war that surrounded their everyday life. Both communities, quite simply, organized to survive.

CPR members could not return to their original communities after they came out of hiding from the forests because their plots were occupied by new settlers. Caritas Europea, an European aid agency, purchased a large farm on the banks of the Chixoy River for many CPR families. These families started life once again. This time in a community they called Primavera de Ixcán. Although Primavera de Ixcán may appear anomalous, I focus on this community because other Ixcán villages witness the success of Primavera and wanted to know their secrets. The positive attention Primavera now receives from other communities stands in contrast to how they first viewed the residents of Primavera—as communists, indios, and guerrillas who bring trouble to the region.

Following the meanders of the Chixoy River, the large bus owned by the community of Primavera pushes through mud and potholes large enough to swallow smaller vehicles. After traversing the highly prized flood plains that are intensively managed by Indian K'echi' families, passing through extensive rubber plantations of private farms, and crossing the last remnants of Karst hills, the bus enters Primavera and parks at the cooperative garage alongside two

Primavera is a different place: atop every roof sits one or more photovoltaic panels and chimneys of improved wood burning stoves point skyward, handpainted signs remind residents not to bathe in streams or collect firewood from gallery forests, and the bright yellow cooperative store sells items at cost. Cooperative vehicles that haul agricultural products directly to markets sit as proud reminder of the success and hard work of the community. Indeed, Primavera is unique in the Ixcán, if not the whole of Guatemala.

But here we must be careful not to fall into the trap advertised by Tuan (1990, p. 64), of being the outsider who too quickly "judges by appearance." Apart from solar panels and wood burning stoves in every house, walking into a house in Primavera is no different from a visit to one in Kaibil B'alam or San Lucas. And the landscape surrounding the village center is similar to that managed by residents of other Ixcán communities. The difference here lies in the unseen landscape: a palpable confidence and forwardlooking attitude of cooperative members, the land-use practices that revolve around endogenously created norms and rules that people follow, astute management of development monies, and a knowledge that the cooperative holds the power to manage land in a fashion that will benefit future generations.⁶

communally owned cargo trucks and a pick-up truck. Residents returning from the market in Cantabal file off the bus laden with their purchases. They do not, however, walk home through a pristine environment because the land they now farm on the banks of the Chixoy river was once mostly deforested for cattle pasture by the previous owner of this one private farm. Residents, though, with the spirit, enthusiasm and high levels of community cohesion created during their years of living "under the trees" are beginning to improve their given environment and use their natural resources in the best possible fashion to ensure longevity of their community and its natural resources.

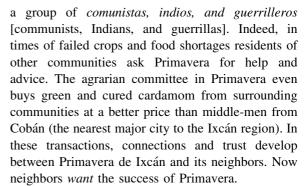
⁵ Of the 380 families making up the CPR, 120 were able to occupy their original parcels because the cooperatives to which the belonged waited for the return of all original inhabitants to occupy their own lands. Repopulation of original parcels was possible because these cooperatives are in the zone that saw sustained and intense conflict and could not repopulated by military-sponsored settlers (Primayera 1999).

⁶ All people who live off the land realize that their actions will have consequences for their children. However, many families do not have the power, in the form of social or material capital, to ensure a sustainable future. See for example in Susan Stonich's book "I am Destroying the Land" (1989) where she illustrates how farmers are fully cognizant of their actions but are powerless to act otherwise.

Daily, the gasoline powered community corn grinder sputtered to life at 3:30 a.m. with an airsplitting expulsion of fumes. Then, the community loudspeaker parts the air filled by the patting sound of women's hands forming corn tortillas to announce: "to the group in charge of the cattle this week, please be informed that the cattle are out of their enclosure and need to be rounded up. Also, a reminder to the wood cutting group that we need two more six by one foot planks at the house of Doña Fulana to finish her house, and...".

Community cohesion and organization, accumulated out of necessity while living twelve years in Communities of Population in Resistance (CPR), contributes significantly to the formation and successful operation of this communally owned and operated 1350-hectare farm (see Table 1, which clearly illustrates the high levels of community cohesion).⁷ Primavera residents organize their lives around a central committee. Committee membership is determined by a community vote every two years. The committee organizes all aspects of communal life, from organization of work schedules to the drafting of proposals seeking aid from the government and the international community. Primavera maintains a permanent representative in Guatemala City to stay on top of national events and to lobby politicians. Also, representatives from Primavera often make trips to Europe and the United States in search of continued financial and technical support for the community.

Life in Primavera de Ixcán also centers on many committees and associations. Community members are free to organize education groups, women's associations to make and market shampoo made from local plants, and soccer teams. Moreover, Primavera residents take turns to help in the community health center, which is staffed by a nurse. Villagers from nearby communities make their way to Primavera to use the health center. Primavera accepts these people and provides services for free or at cost. In this respect, Primavera breaks down the image that outsiders once held about this village once seen as



Norms and values surrounding life in Primavera are clearly detailed in a monograph published by the community. The book codifies the needs and ideals of the community and it contains several chapters outlining the relationships between the community and the environment (Primavera 1999). The book is more than mere rhetoric. Residents generally practice care for the environment as expressed in their publication. While rules governing resource use seem obscure and in their early stages in Kaibil B'alam and non-existent in San Lucas, Primavera has well established norms and rules surrounding the use of their communally held land.8 These rules are not necessarily reflected in the current visible landscape because the community inherited previously used land that included large areas in pasture. The community attempts, however, to reduce tree loss



⁷ Most of the land is communally worked. Each member spends three days a week performing community tasks (a reduction from five when the community was first formed). Each household also has the right to 1.5 hectares of land to use as they wish.

⁸ The book, written by the community with development funds from Japan (Primavera 1999), occupies a space in every house. The text contains many examples about natural resource use and its consequences on the environment: "maybe there is a part [of the farm] that we are clearing for wood, but it is not large area; and it is only now that people have started to talk about looking after the rest of the forested area. Although, like we say, we are a large community, there are so many people [260 families] and there are some that do not have the same mentality—sometimes they cut down trees for construction wood or just for firewood—they always have to cut down a tree, but in this case maybe their actions are justified because in some sections of the community there are not so many trees that can be used for firewood...it has been discussed and understood by the majority that where we have our sources of water we should not clear the forest because it is this very forest that gives us the water" (page 21). Or more succinctly "we protect the forest because it serves us today, tomorrow and for the future of our children. Also we don't just think about cutting down a tree, but about planting more, so that they can give life in the future" (page 22). (I translated both quotes from Spanish).

by using previously cleared land whenever possible (Primavera 1999).⁹

In a survey about wood use in Primavera residents revealed collection and cooking methods similar to other communities. In a fashion similar to other villagers, Primavera residents recognize that sources of fuel for cooking and cardamom drying are not infinite. They also note decline in the availability of favored woods. But here the similarity ends. Primavera possesses the organizational capacity to take action to ameliorate potential adverse impacts on their immediate environment. For example, work parties in the surrounding hills reforested 75 hectares of the farm. Other groups of men and women clear weeds from the 75 hectare heart of palm plantation, and yet others tend the beef cattle which will soon be replaced by a better breed de doble uso (double use cattle that provide both beef and milk). Simply put, residents spend half the week working on the communal farm while the remaining days are dedicated to the cultivation of subsistence and cash crops on individual 1.5-hectare plots. High levels of organization permit the success and sustainability of communally owned and operated land.

With a firm understanding of Ixcán life over the last thirty years, we can now move on to a discussion of land and life on a once war-torn frontier in Guatemala. Current resources use is influenced by ethnic makeup, war-time strategies, and post-war adaptation in each community. This tumultuous history produces diverse landscapes and livelihoods evident in Ixcán today.

Looking past the civil war to future uses of the environment

From the examples provided, I argue that we must look at the history of each community in the national context to better understand how communities use their natural resources today. Past experiences during the war can provide enhanced powers for community cooperation, which in turn can be a means to empower

communities that leads to improved environments and livelihoods (see Table 2 for a summary of each community). All communities want to preserve their environment, but perhaps those with more developed social networks can take steps to secure a similar, if not better, environment for future generations. Communities and their cohesion, however, are not static. The example provided by Primavera, which built on community cohesion accumulated during their years in hiding, may provide incentive for other communities to create stronger social networks and community cohesion expressly to better manage their resources and improve livelihoods. We must then ask how do other communities follow the example of Primavera and create communities where levels of cooperation are higher. Other communities obviously cannot recreate the historical trajectory of Primavera, but they can see the outcomes of higher levels of cooperation and cohesion and then work on ways (unique to each community) to increase community cohesion with the goal of improving their livelihoods by using their resources in a more sustainable way, obtaining better prices for crops, and by setting up community-run institutions like health centers that distribute medicines at cost. Communities around Primavera have, through time, come to see Primavera as a community that is more successful than theirs. Added to this self-realization and awareness about their well being relative to other communities, especially relative to Primavera, aid workers must realize that they cannot enter the diversity of communities in Ixcán with a blanket solution to build better lives. This study shows that each community possesses unique characteristics that must be understood before implementing programs.

Moreover, this study shows that community cohesion can be both destroyed and created during times of conflict. Additionally, we also cannot make broad statements about community homogeneity (that is all indigenous or all ladino) communities and how that is a better predictor of community organization and success. As we have seen in the examples presented here, two communities, San Lucas and Primavera became more organized despite their heterogeneous makeup (see Table 2). Their common point and the resultant community cohesion, however, is more recent and is simply in how they dealt with war in their lives. Guatemala, though, remains a divided state in terms of contrast and conflict between the



⁹ I must refrain from painting a perfect idyllic rural life. When I conducted surveys, families always spoke of other families who cut down wood in inappropriate areas or failed to follow community norms. Life in Primavera de Ixcán is not perfect. Close, but not perfect.

Table 2 Characteristics of three Ixcán communities

| | Primavera | San Lucas | Kaibil B'alam |
|---|---|---|--|
| Settlement history | New community (1990s) made up of former CPR* members | A stable community formed in the early 1970s by individual settlers | Mixed community of original settlers from the 1970s and military-sponsored settlers from the 1980s |
| War experiences | Primavera did not exist during the war. Residents lived in the forest for 14 years avoiding military control | Most residents decided not to flee into refuge. The military occupied San Lucas and controlled lives | Many original residents fled during the conflict. The military also occupied Kaibil |
| Community cohesion | High levels of cohesion formed during years in hiding. Cooperated to survive | Community cohesion in San Lucas peaked during the war also to ensure survival. Cohesion is waning now | Low levels of community cohesion due to the divided nature of the community and low levels of trust between old and new settlers |
| Diversity | High ethnic diversity | Ethnically diverse, but temporally all settlers contemporaneous | Ethnically and temporally diverse |
| Environment management/use of natural resources | Many community created rules regarding use of natural resources. Rules respected | No committees governing resources use | An agrarian committee ostensibly regulates forest use, but rules not respected |
| Environmental condition | Primavera occupies a former cattle ranch. Residents are improving the environment (e.g., reforestation program) | Increase in deforestation for cattle pasture. Center of community and surrounding land deforested during conflict | Slow increase in deforestation for cardamom processing. Forest reserve around community still exists, but is being depleted |

^{*} CPR—communities of population in resistance

indigenous and non-indigenous population, and aid agencies would still find it hard to bring cohesion to multi-ethnic communities. Quite simply, they could not create the conditions that brought about higher levels of cooperation in San Lucas and Primavera. So despite the success of San Lucas and Primavera, even though they are heterogeneous communities, we cannot point to them as an example of multi-ethnic cooperation in Guatemala as a whole.

Society in the Ixcán revolves around village life, thus, norms and rules about natural resources must emanate from the community. If outside agencies are to foster better natural resource management they should focus on activities that increase interaction and mutual trust among community members rather than imposing formal legislation and technological change that may not be appropriate (Katz 2000; O'Keefe 1996). Higher levels of community cooperation may provide one way for farmers to overcome the many constraints surrounding settler life. This path will be difficult, however, because, as illustrated in Kaibil B'alam, the fractures of distrust and

resentment run deep and provide substantial barriers to cooperation.

This discussion about the distinct histories of Ixcán communities and natural resource use takes place in the context of larger discussions of human interaction with the environment. Briefly, I turn to these discussions.

First, because the Ixcán was one of the regions most heavily impacted by the internal war, aid agencies still abound in the region looking for worthy recipients of development projects and funds. This situation is unique within Guatemala. ¹⁰ Therefore, communities in the Ixcán need to take full advantage



Other regions of the country, such as the Ladino-dominated eastern side of Guatemala, receive little attention in both development plans and academic studies. Eastern Guatemala was less heavily impacted during the latter phases of the war, and, more simply, it does not embody the ethnic diversity and romance of the western highlands and its 22 different ethnic groups that have traditionally been seen as the more disadvantaged group in Guatemala's dichotomous society.

of opportunities while they exist. Villages with high levels of community cooperation reap the maximum benefit in securing development monies and in implementing successful programs.

Community participation and cohesion constantly come into play in Ixcán today and communities must pay attention to their own history and image if they want to improve their lot. NGOs and government institutions seeking to promote agroforestry projects constantly comment on difficulties in working in villages that are not cohesive. Agroforestry projects took off in Primavera because aid agencies encountered a willing and organized community. Agroforestry initiatives flounder in Kaibil B'alam and do not even reach San Lucas and other similar communities.

In a larger framework some researchers stress that land use decisions at the local scale are dominated by structural controls; there are few examples of "powerful local producers capable of influencing the very structures in which they operate" (Turner 1997). I argue that Primavera is an example of how development does not necessarily lead to negative environmental impacts, how "sustainable" "development" can coexist, and how a united group of resource users can break traditional modes of production that relegate most smallholders in Guatemala to lives of poverty (cf. Bebbington 1997). As Garst puts it: "the returned refugees and the CPR can again introduce new concepts and models of social organization [acquired in refuge in Mexico and by living in hiding in the forests of Guatemala]...that have the potential to be a positive influence in the democratization and development of the region." (1993, p. 71)

We must temper the optimism provided by the example of Primavera with notes of caution. In Ixcán negative land use change outweighs positive change and sustainable use of resources. The majority of settlers, like many others in rural Latin America, struggle to survive *now*. They take immediate action, regardless of long-term consequences, to feed their families. A better future, for many Ixcán settlers, remains a distant desire.

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