Becoming Criollo:

Relational Agrodiversity and Sovereignty in Highland Guatemala

By

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Abstract

Which beings count in agrobiodiversity? Rather than centering only 'native' plants or 'improved' crops, three ancestrally-Mam communities in highland Guatemala are defining diversity in their own terms. *Criollo* plants—as well as *monte*, *nativo*, *mejorado*, and more defy binaries, transcend dominant ways of knowing, and present alternative paths for humanplant relationships. Through community-based, participatory methods, this research narrates what these communities' growers are experts in: forming and re-forming relationships with a diversely-originating array of plants. Tracing plant stories of *milpa* and *maíz*, *papa*, *hierbamora*, *bledo* and *amaranto*, *ruda*, *café*, and *tomate* reveals how these varied and changing relationships create grounds for fluid identity, hidden agencies, and land-connected movement of people and seeds. In the relational agricultural diversities of Chichum Majadas, Los Limones, and Unión Reforma, myriad plants hold the possibility to become welcomed, to become criollo.

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Chapter 1

The View from the Highlands

The sun beats down, casting shadows across the land as it hits the mountain peaks and the spreads of trees. Early October is too soon for the rainy season to end, so the series of days of clear skies has been the talk of Chichum Majadas. What will come of the harvests, everyone wonders, if the rains come no more this year? This concern will subside and give way to others in a few days when *la lluvia* (the rain) makes a forceful return on the back of a coastal tropical storm and starts to landslide soils and plants down the communities' steep slopes.

As we navigate the inclines, curves, and rich growth of his *parcela* (agricultural land), Emanuel worries for a moment for his *frijoles*¹ (beans). Without more rains, they might not bear many plumped-up pods. "Here in the *milpa* are the *frijol negro de barra*. And over here are the *frijol grande*. *Criollos!*" he narrates. As we keep trundling along past the *maíz* (maize) of the milpa field and into the thickness of trees and lower-lying plants all intermingling, we spot a *frijol isich* vine twisting up a *manzana* (apple) tree he gained through collaborations with the organization Red Kuchub'al.

When I ask him what kind of manzana it is, Emanuel says it is "from some other place" and is maybe "*medio mejorada*." Catching my interest, Emanuel—enthusiastic, energetic, and sprightly even in his 60s—picks up speed. I try not to trip over myself, dodging branches and sliding on the earth beneath my feet while scrawling madly to keep up with my note taking.

"This *durazno* is *nativo* from here! That is *hierbamora nativa*, a *monte*. And this *banano*, "*vinagre*" it's called, I have had for 5 years. It's criollo. This here is an *agucaate criollo*. That one over there is an *aguacate Hass* from Red Kuchub'al. That *guineo* is criollo, of the name "*manjuche*." It's *nativo* in some other place but it produces here. This *granadilla* is monte, is nativa. Here is *quixtan criollo*. This *amaranto* is *sembrado* (planted). The seed is from

¹ See Table 2 in the Methods section of the Appendix for chart of all local plant names from this paper, with English translations and scientific names.

Totonicapán, so I plant it so as not to lose the seed. These *apazote* and *hierbamora* are *sembrados* too, from seed from a neighbor. I went to the coast to get the seed for this *plátano* to see if it would grow here—no one has grown it here before. I bought the seed for this *chile pimiento* and that *tomate guajillo* in Tacaná. This is *tomate 'cheri,'* brought from someone from the U.S. last year. Oh, and there's *miltomate nativo*—it just grows! Here is a *jocote* tree, *criollo*. That is called *malanga* or *camote*, also criollo. Look, this is the *café criollo*! See how it looks different than that *café Sarchimor*? This *chalum paterno* is to shade the *café*—but there is also a different *chalum* that is *criollo*, *nativo*. And this *caña de azúcar* is *nativo*, *criollo*. I save the seeds to keep planting it."

As my days in Chichum Majadas, Los Limones, and Unión Reforma grew and my relationships with the growers and plants there blossomed, as I started to see the plants around me with eyes reshaped by the local growers, I found myself rooting for unexpected crops, for not only maize and amaranth, but also hierbamora and coffee.

. . .

After all, when I'd first arrived in these three ancestrally-Mam communities in Guatemala's Western Highlands, I was an agroecologist researcher preoccupied with the complexities of how agrobiodiversity plays out on the ground. As I asked community growers about the agrodiversity related questions and concerns which they wanted addressed in a collaborative project, answers included both the desire to understand why certain 'native' plants, like *apazote*, were disappearing or how to revitalize certain 'ancestral' crops, such as *tomate de riñon*, as well as the desire to learn best practices for 'new' crops, like *flores* (flowers), or how to turn 'recently-introduced' crops, such as *café* (coffee), into a way to put a few *billetes* (bills/cash) in their pockets. Our questions seemed to align with my larger lingering inquiryhow can we have an agricultural diversity on *campesino* lands that both maintains the 'traditional' plants so integral to the lives and knowledges of Indigenous communities while also permitting the growth of 'new' crops which help growers to earn enough of a livelihood to stay on their lands and keep farming?

It seemed a well-meaning question, one worthwhile to the communities with whom I was working, to other *campesino* communities in Latin America, and to me as a researcher with a love of diverse plants and the smallholder farmers who tend them in diverse ways. So I set about working with the growers—doing participatory field mappings, conducting interviews, organizing focus groups and surveys, and partaking in myriad forms of agricultural/food practices and in daily life as a participant observer—to trace the stories of different plants across community history and through their present seed to post-harvest worlds. This was an effort to piece together how relationships with certain plants had shifted in the communities across time (Were 'traditional' plants really disappearing and why?) and how different plants interacted with the growers' lives across their existences, not just at the point of harvest (How integral were 'new' crops to growers' livelihoods and could 'traditional' plants continue to play a role in livelihoods too?).

Key to my framing of these questions was the distinction between the 'ancestral' and the 'introduced,' or to put it more candidly, between the 'native' and the 'colonial.' Yet, as I asked people to identify different plants, this distinction slipped further and further from my grasp. Many plants needed only have grown up on their own, saying nothing of their long-ago region of origin, to be called '*nativo*,' most literally 'native.' Crops deemed '*transgénico*' (literally, 'transgenic') and '*mejorado*' (literally, 'improved') also didn't necessarily match my scientific meaning of these words—some plants were even deemed, after a moment's pondering, '*medio*'

mejorado,' 'half improved.' And '*criollo*' plants—a name that can easily be simplified into translating as 'traditional' or 'heirloom' but can mean so much more—emerged all over, including among plants that had recently joined the communities.

What soon became clear was that these inconsistencies in our understandings weren't a simple matter of "Oh, it's just semantics." They were differing ways of knowing plants, of knowing agricultural diversity, of knowing the world.

My proclivity for distinguishing some plants as ancestral and others as introduced is not at all uncommon in the realm of agrobiodiversity, which often polarizes the native and the colonizer. This tendency, when applied to plants, often renders them native, non-native, or invasive, traditional or introduced, heirloom or hybrid. When groups, such as agricultural NGOs, development organizations, and academic research teams, put these perspectives into practice, their projects can be quick to name good guys and bad guys. The plants which they deem worthy versus the ones they'd like to cast aside or eradicate depend on their preoccupations, ranging from conservation-minded organizations fearful of loss of native species to development organizations promoting improved varieties to 'save' campesinos. While my seemingly wellmeaning question sought a middle-ground, it still caught certain plants in the crossfire depending on their origin stories.

Grower groups in Chichum Majadas, Los Limones, and Unión Reforma participate in agricultural projects with organizations across this ideological spectrum. Yet, the agriculture they practice, even through engagement with these projects, both blurs and transcends the goals of saving native crop diversity and of developing toward new and 'improved' crops. The plants in their *parcelas* slide between namings. *Criollo*, *nativo*, *monte*, *mejorado*, *híbrido*, *transgénico*, and names harder to pin down can and often do merge and mingle in the same field, the same plant species, even the same plant. On these communities' grounds, the boundaries are intricately blurred into a distinctly '*criollo*' sort of agricultural diversity. In this agriculture, diversity—and how to name it—shifts with time, space, and relationship. In this agriculture, growers recognize the role of origin but don't get stuck on it, don't let it prevent them from the more important work of *forming relationships* with a diversely-originating array of plants.

The 'criollo' is at the heart of agricultural diversity in these communities. Emanuel's pride in his criollo beans was a pride found over and over again among other growers in their criollo plants. Why does the criollo matter so much in the communities? And what exactly does it mean? Its meaning (further explored in later chapters) in the communities is not exact but fluid—often overlapping with 'monte' and 'nativo' plants. This fluidity allows not only for plants to *be* criollo but also to *become* criollo. At the heart of the complex meaning of criollo is relationship. Plants become criollo as they and growers form relationships together. Thus, growers do not restrict the criollo only to the 'traditional' (and 'native' in the Western sense of the word) plants, such as maize and beans, but also to plants, such as coffee and rue, who growers have come to know and recognize as part of the family, plants who have made a home for themselves in the communities.

Recognizing the criollo, and its continual potential for becoming, calls for recognizing relational agricultural diversity. Relational agriculture complexifies agrobiodiversity by holding rather than erasing tensions—tensions between tradition and change, tensions between local and global, and tensions between difference and similarity. By knowing through relationship, this type of agricultural diversity makes space for the interplay of agency of the plants, the growers, the groups to which they belong, and the landscape itself.

Such tensions and agencies often slip through the grasp of numerical measures of agrodiversity, whose strength is building images of dominance, loss, recovery. As I mapped fields, talked in kitchens, and lived daily life with the growers of Chichum Majadas, Los Limones, and Unión Reforma, it was the complex tapestry of narrative that gave room for the community's relational agricultural diversity to more fully express itself. This work is an attempt to put that expression into writing, to re-tell what the communities told me. While this retelling is inevitably imperfect (as it comes indirectly, from me), it prioritizes listening to the communities. It prioritizes mutual sharing over taking or extracting. It prioritizes understanding plants according to the stories of the people who know them best, the people in intimate relationship with them.

The communities' plant stories illuminate the shifty nature of diversity and its tensions from seed to post-harvest, from *parcela* to beyond, from relations among plant, grower, and land. These stories take on a distinct voice emergent from the human and more-than-human actors participating in them. Many Western narratives of agrobiodiversity center on linear trajectories of loss, stories that elicit fear and prompt human saviorism of plants. In these three communities, loss does emerge. So do cycles, change, recovery, newness, nuance, divergence, paradox, resistance, acceptance, care. There aren't simple villains or heroes, no singular savior, human or otherwise. Plants new and old become criollo, welcomed into diversities made more diverse by the tensions they hold.

So what does this mean for the initial question of how agricultural diversity on campesino lands can both maintain the 'traditional' plants integral to the lives and knowledges of Indigenous communities while also permitting the growth of 'new' crops which help growers to diversify their income and become more resilient to environmental, economic and social shocks? In the case of this research, it means discarding the simply 'traditional' or simply 'new.' Rather, this work will follow the stories of plants who represent the complexity of a relational agrodiversity—milpa and maíz, papa, hierbamora, bledo and amaranto, ruda, café, tomate tracing how they are more-than disappearing/emerging across time, how they belong to both here and beyond-here, and how their lives intricately interweave with the growers and the communities in ever-evolving relationships.

Chapter 2

The View from the Tower

What does agrobiodiversity look like on the land? Does its make-up of plants resemble conservation, or progress, or revitalization? A combination of all of these? On Indigenous agricultural lands where colonialism drastically reshaped the landscape and continues to do so, the answer is rarely singular or fixed. Guatemala, a country where the *campesino*, *Indígena* majority still live on lands of rich biological and cultural diversities in spite centuries of oppression by *ladino* elites, is a dynamic ground on which to ponder these questions. The intricate tapestry of agricultural diversity, organizational engagement, and land-community change in the communities of Chichum Majadas, Los Limones, and Unión Reforma bring these very questions frothing up to the surface of everyday life.

Amidst representations of Indigenous Guatemalan campesinos as, at worst, backwards and in need of 'help' and, at best, empowered and in need of systems transformation, organizations working in Guatemala try to mediate changes in local communities' relationships with land and plants. Biodiversity conservation groups make studies of native plant species, often looking to spare ecosystems from agriculture and finding Indigenous campesino communities to be an 'issue' to solve (Martinez-Reyes, 2014; USAID, 2021; World Bank, 2006). Standard development institutions sponsor top-down transfer of 'improved' crop varieties and purchased, often chemical, agricultural inputs among 'poor' Indigenous farmers (Grandia, 2022). Agroecology organizations champion Indigenous campesino initiatives for agricultural diversification, resilience, nutrient cycling, solidarity economies and other aspects of the '10 elements of agroecology'(FAO, 2018). Yet, many of these organizations often fail to engage the specific communities' ways of knowing in conceptions of who they are, what they want, and what agrobiodiversity 'looks like' on their land (Einbinder et al, 2022). This not only recreates colonial relations of knowledge and power that have stifled and continue to stifle sustainable agricultural lifeways for historically marginalized Indigenous peoples, but it also critically neglects to see the dynamic agency of communities and their lands.

Projects—of development, of conservation and in between—and research have yet to grapple with the meaning of agrobiodiversity among Indigenous growers who welcome plants old and new, ancestral and (post)colonial onto the land. Meanwhile, grower communities like Chichum Majadas, Los Limones, and Unión Reforma are navigating these external actors alongside additional socioenvironmental shifts, like climate change and migrations.

How such communities are navigating, engaging, resisting, and/or coopting these forces of change could carve paths toward agrobiocultural diversities which empower decolonization and food sovereignty in communities in Guatemala and far beyond (Bohn et al, 2014). Yet to start on and support these paths, we—who are a part of research, projects, organizations, the hive-mind of the settler-colonial world—must value explicitly the knowledges of these communities. We must let their stories tell of different, relational, agrodiversities and then pay attention.

Thus, this research sought to ask:

1) How does shifting agricultural diversity in Chichum Majadas, Los Limones, and Unión Reforma create space for tensions of tradition and change, of the local and global, and of difference and similarity?

2) How do the local growers, plants, and land—as they navigate engagement with external organizations and forces—act as agents in the creation of relational agricultural diversity?
3) How do narratives animate the dynamic relationships with longstanding, recently-established, and everywhere-in-between crops in smallholder communities in highland Guatemala?

This research formed these questions (and their in-context, ever-evolving 'answers') onthe-ground with three ancestrally-Mam campesino communities in the Guatemalan highlands in the San Marcos district of Guatemala. Centered around a community-based participatory approach, this research was steered, shaped, and shifted through ongoing dialogues with participants on their own questions and interests and on how this research could serve them. Across four trips from 2018 to 2022, methods incorporated interviews, focus groups, surveys, participant observation and ethnography, and participatory field mappings. A main aim of the research was to co-create—with the communities of Chichum Majadas, Los Limones, and Unión Reforma—'plant stories,' illustrating the seed-to-root-to-postharvest narratives embedded within communities' agrodiversities.

Yet, to begin to try to share these stories and the re-understanding of agricultural diversity taught from their perspectives requires first unpacking how the stories of people-plant communities like those of Chichum Majadas, Los Limones, and Unión Reforma have historically been conceptualized, for better or worse, from 'the tower' of academia.

Indigenous Identity and Ways of Knowing

Many Guatemalans have argued that racism is deeply engrained in the country's institutions and society, a truth even acknowledged in the country's post-Civil War Commission for Historical Clarification (CEH, 1999; Sigüenza, 2018; Velásquez Nimatuj, 2008). With the country's strong divide between *Indígenas* (Indigenous peoples) and *ladinos* (non-Indigenous people), Indigenous peoples end up bearing the brunt of this racism, whether on the large-scale in State policy or in the small-scale of daily social interactions (Velásquez Nimatuj, 2008). Yet,

despite over 500 years of intentional repression, marginalization, stigmatization, and erasure, Indigenous identity persists in Guatemala.

In the face of intense pressure, this identity has shifted and taken many ever-evolving, fluid, and complex forms. Guatemalan Indigenous identity has long been about much more than genetic heritage (Falla, 2001). The performance of Indigeneity also heavily shapes identity, and group acceptance (by other Indigenous people or by ladinos) is at stake in such performance (Cook & Offit, 2013). Clothing and language have historically been key elements for signaling Indigenous identity in Guatemala (Falla 2001; Noval, 1967). Women in particular have been tasked with carrying on Indigenous culture through the wearing of the *huipil* (colorfully-embroidered tunics with designs varying among different Indigenous communities) and *corte* (intricately-woven wraparound skirts) (Falla, 2001). In Guatemala, a diversity of Indigenous languages, many of them Maya, live alongside the language of the colonizer and the country's official language², Spanish. As visual and vocal identifiers of Indigeneity, dress and language have both been fields of tension for Guatemala's Indigenous populations who have had to navigate expressing their Indigenous identities with pride while also acclimating to *ladino* culture in order to survive in a racist system (Velásquez Nimatuj, 2008; Ybarra, 2008).

Guatemala's Civil War heightened this tension. The Commission for Historical Clarification recognized the Guatemalan military's strategic targeting of Mayans led to pressure to conceal external Mayan identity, especially language and clothes (1999). Thus, Indigenous identity, already long under pressure since Spanish colonization, became deeply disrupted as cultural transmission across generations was interrupted (CEH, 1999). The effects continue to be

² Guatemala's 2003 law Decreto 19-2003 "Ley de Idiomas Nacionales" still declares Spanish the country's official language but also now 'recognizes, promotes, and respects' the languages of the Maya, Garífuna, and Xinka pueblos (El Congreso de la República de Guatemala, 2003).

felt today, with feelings of shame (paradoxically both about being Indigenous and about not maintaining Indigenous cultural practices of ancestors) continuing cultural loss (Calderón et al, 2018; Velásquez Nimatuj, 2008; Ybarra, 2008).

In the San Marcos communities in which this research takes place, younger generations have often not been taught the Mam Maya language or to wear the traditional dress (Calderón et al, 2018). While some official records do not count these areas as Indigenous, the people's own understandings of identity in Chichum Majadas, Los Limones, and Unión Reforma are more complex. In my conversations with some community members, I found that adult children of Mam parents (who still know/speak the Mam language) did not identify as Mam when they themselves had not learned to speak Mam. Whether they identify as Indígena is more complicated (and will be further explored in the chapter on "Changing Traditions and Traditions of Change"). However, they generally scoffed at being regarded as *ladinos*.³ Understanding Indigenous—or more-than-Indigenous—identity in the communities, especially in current times, requires looking beyond external markers. Much harder to directly see or hear, distinct ways of understanding and engaging the world are key in the continuance of distinct cultural identities. The struggle to maintain distinct ways of knowing in Chichum Majadas, Los Limones, and Unión Reforma and other communities like them is a crucial stand to their continued perseverance.

Ways of knowing (epistemologies) and knowledge were—and continue to be—key sites of the colonial project for domination, because epistemology is where one can stake claims about "what distinguishes justified belief from opinion" (Teves et al, 2015, p. 339). The colonizers, or

³ For this reason, I generally refer to "Guatemalan Indigenous peoples" throughout this section and use the term "Maya" or "Mayan" specifically when echoing the language of a source text.

the 'West,' violently created a world in which their lifeways and ways of knowing were dominant—and thus the only 'justified' belief—and where all those who did not fit into or cede to this hegemony came to constitute the 'Other' (Ramos, 2001; Trouillot, 1991). As the West claimed its superiority and solidified its dominance, this position of dominance came to be naturalized in larger society through the subtle workings of epistemic homogenization and thus often goes unseen in today's everyday world (Smith, 2010; Teves et al, 2015). This is the project of 'colonization of the mind' (Smith, 2010).

The smothering out of conflicting ways of knowing was meant to establish hegemony (Teves et al, 2015; Prado Córdova, 2021). Those knowledges which live on the edges of, outside, or beyond this hegemony—those which resist it—are noticeable and strange. Thus, the Indigenous 'Other,' objectified and dehumanized, continues to be seen as a source of contrast, a way of affirming the West's identity by representing its foil (Ramos, 2001). While this is a false dichotomy, it has been and continues to be a powerful one. It solidified the West's ways of knowing—scientific, positivist, and reason-based—as legitimate while deeming all other ways of knowing as lesser and illegitimate (Smith, 2010; Teves et al, 2015; Velásquez Nimatuj, 2008).

The effects of colonialism in Guatemala have been particularly violent, first 'othering' Guatemala's Indigenous peoples and deeming them inferior to the *ladino* population (who wielded institutional power and Western favor), then trying to violently separate Indigenous peoples from Indigenous identity and subsume them into the ladino identity as part of the project to erase them entirely (Ybarra, 2018; Velásquez Nimatuj, 2008). Guatemala's public and private institutions continue to be structured to prioritize Western knowledge (Prado Córdova, 2021; Sigüenza 2018; Velásquez Nimatuj, 2008). The profound effects of this epistemic homogenizing project are beginning to be more vocally and commonly seen by Indigenous peoples and the West itself. The dominant knowledge and the epistemology which produce it are being questioned. Despite long histories of studies of the Indigenous 'Other,' especially in anthropology, academia—the main space for creation and dissemination of supposedly 'legitimate' knowledge—is only recently beginning to recognize the idea of an 'Indigenous epistemology' as legitimate and valuable (Gombay & Palomino-Schalscha, 2019; Trouillot, 1991; Velásquez Nimatuj, 2008).

This recognition of Indigenous epistemology seems to open potential to rebuild the legitimacy of other-than-Western ways of knowing. Yet, this begs the difficult question: What is Indigenous epistemology? The question is perhaps flawed in that there is no single epistemology. The earth is home to a diversity of Indigenous peoples—diverse both among and within Indigenous groups—with different ways of knowing (Teves et al, 2015; Trouillot, 1991; Wilson, 2008). Guatemala itself has a diversity of Maya peoples and communities who, despite common misconceptions due to the popularization of the K'iche' Popol Vuh, have diversity too in their ways of knowing (Falla, 2001; Nelson, 1977; Noval, 1967; Velásquez Nimatuj, 2008). The communities of Chichum Majadas, Los Limones, and Unión Reforma do not limit their knowledge formation to a singular way of knowing.

As Jane Hill points out, "invoking the homogenizing dichotomies" of "cyclical versus linear, relational versus individual, local versus universal, contextual versus decontextualized, oral versus literate," as Native studies and other Indigenous-focused literature often do, cannot fully encapsulate the meaning of Indigenous epistemologies (Teves et al, 2015, p. 319). Indigenous epistemologies do not simply represent the opposite or the 'Other' epistemology to the dominant epistemology, but rather are space-times where distinct ways of knowing can operate, interact, and be simultaneously valued (Niezen, 2009). In parallel to their identities, Chichum Majadas', Los Limones', and Unión Reforma's ways of knowing ping-pong between, cut across, and/or defy the dichotomies which seek to define them.

As I embarked on this research with the communities, I had to put aside the temptation of searching for findings resulting in a single knowledge or a correct answer. Time spent with the communities does not birth a single, static truth. Rather, as in Indigenous ways of knowing, multiple universes of truth exist simultaneously (de la Cadena, 2015; Gombay & Palomino-Schalscha, 2019; Teves et al, 2015; Viveiros de Castro, 2012). Community members are not on a search for the kind of knowing which asserts absolute certainty. They create space for uncertainty, not just "one, coherent true narrative" (Smith, 2010, p. 31).

'Knowing' does not exclude 'believing.' Spirituality and religion are intimately tied to ways of knowing (LaPier, 2017; McGregor, 2004; Wilson, 2008). *Zahorines*, Maya community spiritual leaders, could interpret the 260-day Mayan calendar to find the nonempirical reasons for misfortune (Falla, 2001). Under pressure from Catholic priests and Westernization, *zahorines* have declined in most communities to near total disappearance. Yet, Maya spiritual beliefs continue to live on in many Guatemalan Indigenous communities, not in opposition to Catholicism but rather often in conjunction with it (Cook & Offit, 2013; Noval, 1967). In the communities around Sibinal and Tacaná, Catholic ceremonies commonly align with ancient Mam Maya rituals and *curanderos*, traditional healers, are still called upon to perform rituals to heal particular ailments that Western doctors don't fully understand (Calderón et al 2018). In these areas, Mam religion and Catholicism, 'Indigenous' and 'colonial,' tradition and change can exist in relationship. Indigenous knowledges grow out of the paradoxes and fluxes of the lived and experienced world, manifesting in respect for contradictory or conflicting forces (McGregor, 2004).

As a researcher, embracing the wisdom of paradox requires neither unequivocally accepting *nor* rejecting dualities, categories, and distinction (de la Cadena, 2015). Nicole Gombay and Marcela Palomino-Schalscha suggest the way to address difference without "falling back into essentialisms" is to embrace knowledge as never being "fixed or complete" (2019, p. 6). Thus, to impose a uniform definition to Indigenous identities or Indigenous epistemologies themselves seems paradoxical, because identities and ways of knowing are heterogeneous across Indigenous peoples and are constantly changing (Gombay & Palomino-Schalscha, 2019; McGregor, 2004; Teves et al, 2015).

Hill challenges researchers to see Indigenous epistemologies "not as a set of dots…but as a kaleidoscope web of human connection that may provide a richer expression of unity than do the labels now available to us" (Teves et al, 2015, p. 323). The current limitation of dualistic labels often leaves researchers explaining Indigenous epistemologies through the dominant colonial way of knowing (usually presented under the guise of 'science'). Growers in Chichum Majadas, Los Limones, and Unión Reforma challenged me—with their fluid use of the terms 'criollo,' 'nativo,' and others fleshed out in the "On Namings and Agency" chapter—to see the relationships and complex connectedness hidden in limited labels.

While Western academia is learning to see the kaleidoscope, Indigenous peoples are not waiting. They are leveraging the language of dualities and difference to create pathways for non-dominant ways of knowing to affect policy, law, institutions—in other words, to shape the world (McGregor 2004; Smithers, 2015; Ybarra, 2008; Velásquez Nimatuj, 2008). It is only with the increased strength of Indigenous activism in recent decades (not simply from the historical

'othering' of the colonial oppressor) that united, transnational Indigeneity has come to be conceptualized.

Alongside this global trajectory and as a reaction of united resistance after the brutality of the Civil War, the pan-Maya movement has also bloomed in recent decades (Nelson, 1999; Velásquez Nimatuj, 2008). Transnational Indigeneity is a movement as much as it is an identity. Dian Million describes how we have every reason to see 'Indigenous' as a "*positionality* pointing to ways of life in places that are incalculably different from each other—and every reason not to think of indigenous as a Western universal without specificity or root" (Teves et al, 2015, 340). Indigenous practices of knowledge—rather than just being fodder for theory in academia—are animated through on-the-ground struggles to keep them alive and breathing at the borders and interfaces with the dominant colonial hegemony (Teves et al, 2015).

Indeed, many scholars, especially Indigenous, assert that one of the key qualities of Indigenous epistemologies is an action-orientation, that Indigenous ways of knowing are action itself (McGregor, 2004; Teves et al, 2015). The Indigenous 'body of knowledge' is a body in motion, not a sterilized cadaver ready to be picked apart under the scientific microscope. This undermines Western academia's knowledge authority since the 'experts' in Indigenous epistemologies are not those who study a concept. Rather, to become an expert—as the growers who appear in these pages are—requires practicing and *doing* of the knowledge (McGregor, 2004; Velásquez Nimatuj, 2008). Indigenous peoples *do* knowledge re-creation and re-formation through embodiment, performance, and daily life practices. They dream, dance, and sing their knowledges (Cook & Offit, 2013; Teves et al, 2015,). In Chichum Majadas, Los Limones, and Unión Reforma, people often plant, grow, and tend their knowledges (Sigüenza 2018; Ybarra, 2018). Knowledge is a process, not simply a product. It is produced from and reproduces the responsibility to maintain relationships which sustain Creation, the land, other beings (Berkes, 1999; McGregor, 2004; Wilson, 2008). More than a romanticized notion, growers of Guatemala's Western highlands often do demonstrate an ethic of care in the way they relate to their land and this has been linked with pre-colonization values of reciprocity and collective action (Calderón et el 2018; Prado Córdova, 2021).

These relationships themselves are the root of Indigenous knowledges. Many Indigenous scholars emphasize the importance of focusing on relationships and reciprocity in attempts to understand or operate from Indigenous epistemologies (Kimmerer, 2013; LaPier, 2017; McGregor; Smithers, 2015; Wilson, 2008; Velásquez Nimatuj, 2008). Relationships are key in reaching Indigenous knowledges, because Indigenous peoples and the beings with whom they live are the 'keepers' of the knowledges, inseparable from the knowledges themselves (McGregor, 2004). Thus, researchers who claim to learn *about* Indigenous peoples are mistaken (Gombay & Palomino-Schalscha, 2019; Wilson, 2008). I have learned *with* and *from* the people of Chichum Majadas, Los Limones, and Unión Reforma only through an ongoing building and tending of genuine relationship, even friendship.

Explicit requirement of relationship formation challenges conventional notions of objectivity in research (LaPier, 2017; Wilson, 2008). This work, in the vein of others moving toward more participatory and less colonial research, chooses relationship and the reflexivity it necessitates over attempted objectivity. The relationships which have emerged—between me, the communities, and the plants—bring stories to the surface and become parts of the stories themselves.

In Indigenous epistemologies, story is the entry point for deep engagement with knowledges and relationships among all beings (de la Cadena, 2015; Gombay & Palomino-Schalscha, 2019; Kimmerer, 2013; McGregor 2004; Smith, 2010; Smithers, 2015; Wilson, 2008). Storytelling has been a critical component of healing for Indigenous peoples in the aftermath of the Guatemalan Civil War which tried to silence them (Lovell, 2008). Moreover, the prominence of oral tradition among Maya peoples makes story an important mode for passing on knowledge from generation to generation (Cook & Offit, 2013; Nelson, 1977; Sigüenza et al 2018)

By glossing over critical translation tensions between oral history and written accounts and between community knowledge and academic scholarship, research has a historical tendency to remove Indigenous stories from their imagination and their deep human and more-than-human relationality (LaPier, 2017; Velásquez Nimatuj, 2008). As a non-Indigenous researcher, to engage the narratives of the communities in this work, I had to listen without automatic mental translation to 'reason,' learning to be silent and to simply listen (McGregor, 2004). Its refusal to be decontextualized from the entangled, contingent, and specific worlds from which it arises is exactly where the 'disruptive power' of Indigenous storytelling lies (Teves et al, 2015).

The deeply-contextualized stories which the people of Chichum Majadas, Los Limones, and Unión Reforma share disrupt Eurocentric constructions of time and space. Rather than a matter of chronology, fixed dates, and forward linear marching, time in their stories is alive abundant, nonfixed, and multidirectional. Colonial 'othering' tried to cast off Indigenous peoples' ways of organizing or de-organizing time as a product of their 'laziness,' because it conflicted with Western ideals of maximum productivity, where time is organized into limited units of opportunity to produce and where each moment passed without production is 'lost' or 'wasted' (Smith, 2010). The Guatemalan State has framed Indigenous peoples as unproductive, an impediment to capitalistic development, and in doing so, has justified rerouting development projects away from Indigenous communities in order to keep them at the margins as part of the project of Indigenous erasure (Noval, 1967; Prado Córdova, 2021; Ybarra, 2018; Velásquez Nimatuj, 2008). Moving beyond this scarcity mindset of time, the communities involved in this work implicitly challenge supposed divisions between the old and the new, between tradition and development, between preservation and change.

Distinct relationships with space and the land are often the primary distinguishing features by which scholars, Indigenous and otherwise, identify Indigeneity (Berkes, 1999; Kimmerer, 2013; McGregor, 2004; Teves et al 2015; Ybarra, 2018; Wilson, 2008; Velásquez Nimatuj, 2008). Colonial concepts of land, though, quickly turn toward 'property' and 'territory,' which perpetuate the concept of land as a contained and possessed unit of location (Teves at al, 2015). In Indigenous ways of knowing, land goes beyond property. In Chichum Majadas, Los Limones, and Unión Reforma, land is a 'storied site' of interspecies relationships, a placemaking, a dynamic and 'dialectic' narrative of different time orientations playing out in the shapings of mountains and rivers, plants and peoples (Teves et al, 2015).

In these communities, as others in Guatemala, the people and the land are wrapped up in each other. Knowledges live in the land (McGregor, 2004; Ybarra, 2018). In Guatemala, the stakes of land tenure are thus high and ongoing attempts by State and capitalist actors to separate Indigenous peoples from their lands must be seen as no less than attempts at Indigenous erasure (Ybarra, 2018). Land is the site of layers of interrelations and their rememberings (Berkes, 1999; Gombay & Palomino-Schalscha, 2019; Kohn, 2013; Teves et al, 2015). The land is a storykeeper, as became clear in this research as new stories bubbled up while walking along and working with the land with growers.

Relationships with land in Chichum Majadas, Los Limones, Unión Reforma and similar communities resist Western notions of a nature-culture dichotomy (Prado Córdova, 2021). In Indigenous epistemologies, all beings, humans included, live deeply-entangled existences with land and knowledge which form them into an 'integrated whole' (Kimmerer, 2013; Kohn, 2013; McGregor, 2004; Prado Córdova, 2021). Humans are 'distinguishable but inseparable' from the more-than-human world around them (Kohn, 2013). There is no 'wild' nature and 'domestic' culture. Humans are part of nature and the more-than-human world participates in the production of culture.

Indigenous epistemologies thus interact distinctly with more-than-human beings by including them in the knowledge formation process (Kimmerer, 2013; Teves et al, 2015). While a recent turn toward multispecies scholarship is trying to do this work in academia, Indigenous epistemologies have a history of thinking beyond hierarchies where humans are at the top and all other beings are below them to be exploited as 'resources' (Hall, 2011; Kimmerer, 2013; Kohn, 2013; Prado Córdova, 2021; Teves et a, 2015). In Los Limones, Chichum Majadas, and Unión Reforma, many growers plant maize not only as a food crop to be consumed but also because they question, without the plants of their *milpa* agricultural system, their own identities as persons. In many Indigenous epistemologies, animals, plants, and other beings are considered 'relatives' or fellow 'persons' with agency to see, speak, represent, and even know (Hall, 2011; Kohn, 2013; Teves et al, 2015). According to the K'iche' Popol Vuh, humanity arose from maize (Nelson, 1977).

This should not be confused with anthropomorphism, but rather understood as

interspecies attempts and struggles to communicate (Kohn, 2013; Viveiros de Castro, 2012). Indigenous ways of knowing can incite learning from "animals, plants, the moon, stars, water, wind, and the spirit world" without boxing Indigenous peoples into the archetype of the 'noble savage' who lives in perfect harmony with the land (McGregor, 2004; Smithers, 2015; Ybarra, 2018). It is within this context that Guatemalan scholar Pablo Sigüenza, without falling into the traps of Indigenous essentialism, can begin to make claims that "in the case of Guatemala, it is imperative to see in campesino Indígena cosmovision elements central to a sustainable present and future" (2018, p. 232).

Recognizing the power and importance of the cosmovisions of the communities involved is how stories and relationships, of growers and plants, of 'old' and 'new,' of here and beyondhere, have become the center of this work.

History, Land, and Colonization in Guatemala

Indigeneity has a distinct history and shape in Guatemala. Entrenched in the country's social imagination is the idea of the Indigenous-ladino schism (Gandin, 2000; Nelson, 1999; Noval, 1967; Velásquez Nimatuj, 2008). Rather than focusing on *mestizaje*—racial-cultural mixing—Guatemala's population and culture is largely imagined as bisected into an Indigenous world and a *ladino* world (*ladino* most simply being defined as not-Indigenous) (Gandin, 2000; Konefal, 2010; Mollett, 2016; Nelson, 1999; Noval, 1967). Part of this division emerges from the colonial history in which the Spanish colonizers 'maintained' a subjugated Indigenous

population to serve as cheap or enslaved labor on Spanish haciendas (FUNDEBASE, 2012; Mahoney, 2003; Mollett, 2016; Noval, 1967).

Despite the colonial project of erasure, Indigenous peoples were not and have not been disappeared or made invisible. They account for, according to varying sources, 45% to 70% of Guatemala's population (Nelson, 1999). While the Indigenous-ladino dichotomy can obscure diversity, there are 23 ethnolinguistic groups within the Indigenous population, 21 of which are Maya. Between and even within the same ethnolinguistic groups there is historic and present heterogeneity of kinship, land, and agricultural systems (Falla, 2001; Gandin, 2000; Noval, 1967). Despite the diversity, the violence of Spanish colonization and colonial rule indiscriminately inflicted subjugation, oppression, and disempowerment on Indigenous peoples (Nelson, 1999; Velásquez Nimatuj, 2008).

Land was and continues to be a critical playing field for this violence. Colonial restructuring of lands was based in total control of land, forced labor, and separation of Indigenous and *criollos* (*criollos*, in this context, meaning Spanish descendants born in Guatemala) (FUNDEBASE, 2012; Ybarra, 2018; Velásquez Nimatuj, 2008). The seizing of land with the initial conquest (in 1524) and rule of the Spaniards is clear, but Guatemala's independence from Spain after 1821 did not stop land seizure, rather changing its forms (FUNDEBASE, 2012; Ybarra, 2018; Velásquez Nimatuj, 2008). A series of dictatorships followed under which maintaining power in the hands of the wealthy elite was typically a main priority.

In Guatemala's agricultural economy, large swathes of land represent the main source of wealth and thus power. Laws and political mechanisms were put in place which privatized more land and further restricted communal lands, dispossessing Indigenous peoples to the gain of elites (FUNDEBASE 2012). *Latifundios* (large agricultural landholdings, many of which were coffee plantations) owned by Guatemala's few elites, European immigrants, and wealthy foreigners served to concentrate productive land in the hands of an ever-decreasing minority (FUNDEBASE 2012; Velásquez Nimatuj, 2008). The majority of the country's campesino and Indigenous population was thus left with (or pushed onto) small allotments of less productive land, preventing them from earning too much wealth and gaining enough power to challenge the elite's hegemony.

The reality of the *latifundio* system lives on. State policy has continued to accentuate land-wealth inequalities (CEH, 1999; FUNDEBASE, 2012; Prado Córdova, 2021; Tramel, 2019; Ybarra, 2018). Capitalism and globalization engender *latifundio* production methods that exploit the land and the people who work it (Sigüenza, 2018; Prado Córdova, 2021; Tramel, 2019). As the Guatemalan population has grown so have land shortages in Indigenous and campesino communities, including Chichum Majadas, Los Limones, and Unión Refroma (Falla, 2001; FUNDEBASE, 2012; Tramel, 2019). The poorest farmers have only a few *cuerdas* (a *cuerda* is 441 meters²) of land to plant, limiting or entirely undermining the cultivation of maize so critical to Indigenous and campesino culture and diet (Calderón et al, 2018; Falla, 2001; FUNDEBASE, 2012). Lack of sufficient high-quality land drives waves of campesino migration (Calderon et al, 2018; Sigüenza et al, 2018).

While seasonal migration from the Western highlands to the coast or to Mexico used to be the most common practice—around Sibinal and Tacaná, community members typically went across the Mexican border to labor harvesting coffee from September to January—many campesinos now find they need to migrate further, often as far as the United States, and for longer periods in order to earn sufficient pay (Calderón et al, 2018; Falla, 2001; FUNDEBASE, 2012) While the communities in the area around Sibinal and Tacaná have long had a 'border culture' which permits labor and resource solidarity, the separation of families and communities required of these longer migrations have become disruptive to culture, collectivity, and agriculture (Calderón et al, 2018). Community members in Chichum Majadas, Los Limones, and Unión Reforma have complex relationships with migration (as will be further explored in the "Migration and Movement" chapter). Many told me they would rather stay within the community and farm, if they had sufficient land from which to make a living, but they often feel financial pressure for a family member(s) to migrate in order to send remittances.

There was a period of great hope for land justice in Guatemala after the revolution of 1944, a popular uprising resulting in the overthrow of dictator General Ubico (FUNDEBASE, 2012; Velásquez Nimatuj, 2008). The following election of Colonel Jacobo Arbenz began the process of land reform with the 1952 Agrarian Reform Law (FUNDEBASE, 2012; Gandin, 2000; Nelson, 1999). However, the reforms were cut short when the U.S. CIA—inciting communist terror narratives but actually fueled by the ire of the United Fruit Company as well as by fears of land reform and the rise of the Indigenous *campesinos*—helped spur the 1954 military coup (CEH, 1999; FUNDEBASE, 2012; Nelson, 1999). The Civil War, or *el Conflicto Armado*, and its enormous, even genocidal, violence followed.

The Comisión para el Esclarecimiento Histórico (CEH) found that 93% of the war's violations were committed by state forces and their paramilitary groups, while only 3% were committed by the guerilla (1999). While historians and scholars debate how much the military, in its brutal scorched-earth campaign, specifically targeted Indigenous peoples for presuming their alliance to the guerilla counterinsurgency, the evidence of army destruction of from 400 to 626 Maya communities is stark (Alburez-Gutierrez, 2019; Falla, 1992; Konefal, 2010; Nelson, 1999).

The majority of the approximately 70,000 killed, 40,000 disappeared, and 1,000,000 displaced peoples during the most violent years of the war, 1978 to 1984, were Indigenous (Comisión para el Esclarecimiento Histórico, 1999; Nelson, 1999).

Tellingly, the first widely-noticed violence of the Guatemalan Civil War was the 1978 massacre of Q'eqchi Maya campesinos who had gathered to discuss land claims (Konefal, 2010). Maya peoples were beginning to unite across ethnolinguistic groups to advocate for their land and cultural rights when the Civil War began its crackdown on all organizing, even within communities. Further, as the government forced and coerced some Indigenous campesinos to serve first in the army and then in community patrol guards while other Indigenous campesinos joined the guerilla forces, paranoia, distrust, and deep fear infiltrated rural Indigenous communities (Falla, 1992; Konefal, 2000; Lovell, 2008; Nelson, 1999). The result: Indigenous communities gone silent.

The official end of the Civil War in 1996 did not simply undo the damage. Diane M. Nelson describes Guatemala after the war as a 'wounded body' (1999). Their suppression during the war left social organizations—such as campesino agricultural groups as was the case in Chichum Majadas, Los Limones, and Unión Reform and other rural communities—dismantled (Konefal, 2010). More slow-to-heal perhaps were the psychological wounds: trauma from the war's myriad forms of violence, fear of speaking out, and struggles over the meanings of the recent past (Falla, 1992; Lovell, 2008). The physical wounds, to people and to land, by way of killing, burning of villages and crops, uprooting, and resettlement further compounded the complexity of a healing process (Falla, 1992; Lovell, 2008; Nelson, 1999). The war's impacts on the land-based and relationship-based lives of the Indigenous peoples were profound—so
profound that academics the world-over feared that Guatemala's Maya cultures might dissolve (Nelson, 1999).

However, the Guatemalan peace process, started in 1994, and the 1996 Peace Accord to which it led were an opportunity—seized by Indigenous and *ladino*—to reconcile the past, with "some striving to close over those wounds and others insisting that only by opening them up would the body political be healed, be 'fixed'" and would the "role of Indigenous people in the nation's future" be determined (Nelson, 1999, p. 12). A new, revitalized wave of Maya rights activism arose and with it the nascent pan-Maya or *Pueblo Maya* movement reemerged and grew (Nelson, 1999; Ybarra, 2018; Velásquez Nimatuj, 2008). At the same time, the global attention turned to Guatemala during the peace process brought a flood of development projects, including agricultural, to the Indigenous countryside.

Thus, a neoliberal export-oriented development model—the entrenchment of which was a project throughout Latin America in the 1990s—collided with the post-war mounting Maya movement (Akram & Lodhi, 2000; Nelson, 1999; Prado Córdova, 2021; Wainwight, 2008). It was likely not a coincidence then that the Maya movement was pushing not only for land rights—a long-standing historical demand—but also to no longer be marginalized in national and international development (Konefal, 2010; Nelson, 1999; Wainwright, 2008).

Pablo Escobar's description of a similar process at the same time in the Colombian Pacific is apt too in the case of Guatemala: "Introducing the imaginary of development required further elaboration: it was necessary to create a collective consciousness of marginality and an awareness of exclusion, which would open the way for intervention by the state and other actors, from entrepreneurs to international development agencies" (2008, p. 160). Indigenous peoples wanted to be included in development projects rather than for development to be the next incarnation of the colonial project to force them onto the margins out of reach of resources (Prado Córdova, 2021). Previous to neoliberalism's farther-reaching environmental extraction, many 'untamable' or 'low-resource-value' landscapes in Latin America were considered spaces to 'colonize' but not to 'develop' (Escobar, 2008). Notably and not accidentally, these marginal lands, such as the Guatemalan highlands, are also where higher proportions of Indigenous peoples live.

Yet, in the postcolonial period, the line between colonization and development has blurred or, arguably, dissolved (Wainwright, 2008). Development narratives fuel work with "Indigenous peoples which still conveys a sense of innate superiority and an overabundance of desire to bring progress to the lives of Indigenous peoples" (Smith, 2010, p. 58). The 'logics of development' and its use for 'appropriation of nature' continue the colonial effects of 'ethno- and ecocide' (Perreault et al, 2015, p. 323). In other words, development, by providing an attractive veil for the spreading of modernization and capitalism, continues colonial hierarchies of superiority (the 'developed') and inferiorization (the 'developing,' 'underdeveloped,' and 'undeveloped') (Smith, 2010; Wainwright, 2008).

Yet, even as development has taken on the guise of the triumvirate package of colonialism-modernism-capitalism which purports to impose its reign on the world entire, Guatemalan Indigenous campesinos see development has neglected them. In all three communities, but especially the most-removed Chichum Majadas, I listened to people lament how the government forgets them and many projects don't reach them. Wainwright, despite all his criticism of development itself as a project, proclaims that "the promise of development has gone unfulfilled for most of the world, and we must criticize the development policies that have failed to create the conditions for local capital accumulation, social investment, and sustainable

livelihoods" (2008, p. 4). What's more, Guatemalan Indigenous campesinos have experienced not only neglect by but also direct damages from development. Mining projects, often funded by U.S. and Canadian companies, have torn up much of the Guatemalan countryside (Laplante & Nolin, 2014). The reason mining and other extraction projects (sponsored by the World Bank and other powerful international actors) don't steal more of the landscape is due the strong and storied resistance of Guatemala's Indigenous campesinos (Laplante & Nolin, 2014).

This resistance resonates with conservationists and environmentalists. The 1990s were not only the time when neoliberal development and the pan-Maya movement were deepening their roots in post-war Guatemala—they were also a time of expansion of global environmentalism (Escobar 2008; Perreault et al, 2015). Biodiversity conservation projects proliferated in Latin America (Escobar, 2008; Sundberg, 2004; Williams, 2018; Ybarra, 2018). They turned their eyes toward Indigenous peoples and their knowledges due to the representation of the Indigenous as nature-keepers leading 'traditional' lifeways in connection with the environment (Escobar, 2008; Perreault et al, 2015; Sundberg, 2004; Williams, 2018). Thus, the Maya movement, development, and conservation all converged and reshaped each other in postwar Guatemala.

On the ground and in policy, both development and conservation were pressured by Indigenous campesino demands. In response, the strange bedfellows of development (rooted in ideas of human progress, economic growth, and continual forward motion) and conservation (rooted in ideas of static states of nature and protecting ecosystems from change by limiting human impact) came together. Development needed conservation to assuage critiques of its environmental degradation. Conservation needed development to provide its local social merit. The result was the beginning of attempts at 'sustainable' development which integrated conservation and development projects (Escobar, 2008; Sundberg, 2004; Williams, 2018; Prado Córdova, 2021). Sustainable development, though, has arguably continued to perpetuate "exclusionary, oversimplified, racialized, and technocratic" colonial conceptions of relationships between people and the land (Gombay & Palomina-Schalscha, 2019, p. 2).

During my time in the communities, I watched certain sustainable-development-oriented organizations engage with the Chichum Majadas, Los Limones, and Unión Reforma communities from a more paternalistic than participatory operations framework. While the communities are already adept at navigating such projects to suit their needs, more participatory and community-based projects—i.e., projects which require the building and maintaining of relationships—hold potential to realign alternatives to development to match with Guatemalan Indigenous communities' contexts, interests, and concepts of agricultural diversity (Perreault et al, 2015; Prado Córdova, 2021). Perhaps this could head us in the direction of decolonial ways for engagements and collaborations between Indigenous communities and external researchers and organizations.

Or could it? Decolonial theory itself is ripe with debate, primarily about what decolonization specifically entails and what processes it necessarily requires (Figueroa-Helland et al, 2018; Gill et al, 2012; Mignolo, 2007; Rivera Cusicanqui, 2012; Schulz, 2017; Tuck & Yang, 2015; Wainwright, 2008). While most scholars agree that decolonization entails undoing the colonially-imposed hegemony by re-legitimizing Indigenous knowledges, lifeways, and connections to the land, Tuck and Yang have asserted that decolonization entails first-andforemost the return of Indigenous peoples' lands (2012). Yet, Teves et al. remind that colonial history shaped land by "claim(ing) land mak(ing) it readable as property" and, thus, decolonization requires "reclaiming the land physically and ideologically" (2015, p. 77). Linda Tuhiwai Smith similarly finds the ideological power of defining the meaning of and relationship with land as on-par with the effects of physically reshaping it (2010).

Given this academic disjuncture, a singular definition of decolonization seems inappropriate for the diversity of Indigenous peoples' visions for a decolonial world. Perhaps questioning development, its alternatives, even conservation, starts with an engagement with specific Indigenous communities' distinct conceptions of how to reclaim relationships with the land (Ybarra, 2018; Velásquez Nimatuj, 2008). Such local conceptions could reverberate into change across the local-global scale (Perreault, 2015). In the case of post-war Guatemala, turning to local Indigenous communities for their alternatives to neoliberal and sustainable developments and conservation could be the starting point for true reconciliation for long histories of violent silencing. In the case of Chichum Majadas, Los Limones, and Unión Reforma, as I turned toward to the growers, they showed ways of thinking beyond 'improving'/'developing' or 'saving'/'conserving' certain plants, of thinking towards ways of diverse relating.

Agroecology and Agrobiodiversity

As academics look for answers, many of Guatemala's Indigenous campesinos may already be building alternatives on the ground through agroecology. As Pablo Sigüenza explains, "Agroecology today in Guatemala is realization and possibility, an everyday practice and a political commitment, it's local knowledge and scientific aspiration, it's cosmovision and it's resistance" (2018, p. 229). According to Altieri and Toledo, "the core principles of agroecology include recycling nutrients and energy on the farm, rather than introducing external inputs; enhancing soil organic matter and soil biological activity; diversifying plant species and genetic resources in agroecosystems over time and space; integrating crops and livestock and optimizing interactions and productivity of the total farming system, rather than the yields of individual species" (2011, p. 588). Growers in Chichum Majadas, Los Limones, and Unión Reforma are realizing these principles in practice every day, through continuation of ancestral knowledge and aspirations to ever learn and experiment, in order to persist in their own cosmovision of community and resist historical and present politics of oppression.

The history of agroecology in Guatemala is also the framework of the history of agroecology in Chichum Majadas, Los Limones, and Unión Reforma. As an outcropping of the Green Revolution, chemical fertilizer and hybrid seeds began to enter Indigenous campesino communities in the 1950s but were not accepted by many growers until the 1960s (Falla, 2001; Holt-Giménez, 2006; Murray, 1994). The gradual adoption of chemical fertilizers and 'improved' seeds shifted smallholders' growing patterns and made them more dependent on external inputs which were often difficult to access, especially for isolated mountain communities who quickly fell into cycles of debt and began to lose their ancestral seeds (FUNDEBASE, 2012; Holt-Giménez, 2006; Murray, 1994). From the 1980s onward, international and national development organizations, including USAID (United States Agency for International Development), have promoted high-value vegetable production in the Western highlands (Hellin et al, 2017). While few communities outright rejected these influences, most (such as the communities of this work) neither accepted them at the complete cost of their own agricultural practices nor did they accept them without cooptation, resistance, and creation of alternatives.

In 1972, when Kaqchikel Maya campesinos began to experiment with the alternative agricultural practices U.S.-based NGO World Neighbors aimed to teach them, they too began to

guide their neighbors in the practices which, through experience, they decided made sense for them (Holt-Giménez, 2006). The Campesino a Campesino movement was thus born in the Guatemalan highlands and spread throughout the 1970s and onward (Holt-Giménez, 2006). As campesinos inspire and encourage each other, farmer-led shaping and reshaping of agroecology continues in the present-day Guatemalan countryside (FUNDEBASE, 2012; Holt-Giménez et al, 2021; Sigüenza et al, 2018). San Marcos organizations, such as Red Kuchub'al⁴ and Pastoral de la Tierra (associated with the Catholic Church), as well as international organizations, such as Ireland-based Trócaire, have worked to promote agroecology in the communities around Sibinal and Tacaná (Calderón et al, 2018). Many of these communities—including Chichum Majadas, Los Limones, Unión Reforma—now have their own agroecological farmer associations, whose members often have a strong land ethic and social activism (Calderón et al, 2018). To call these aid organizations' projects successes is an oversimplification. Rather, they are a part of a larger tapestry of renewal and change in which the campesino communities are agents and visionaries.

In this context, agroecology becomes resistance, lifeway, and resilience. Indigenous campesinos' use of agroecological practices of their own shaping resists histories of dispossession, ongoing repression, hegemonic modern (Western) agriculture, and complete assimilation into the capitalist economy (Calderón et al, 2018; Sigüenza, 2018). Agroecology provides a way for farmers to make a living from their land—by growing both their own food and crops to sell—so that they continue to live on it without degrading it or needing to migrate away to earn sufficient income (FUNDEBASE, 2012; Calderón et al, 2018; Sigüenza, 2018). Agroecology provides resilience to campesinos in the face of external influences that could alter

⁴ A collaborator in this research, Red Kuchub'al works with 12 grower organizations in the southwestern region of Guatemala in efforts to construct equitable, just, sustainable economies in order to achieve 'el buen vivir' (good living) for all involved members, families, and communities.

their relationship to the land (Calderón et al, 2018; Hellin et al, 2017) Holt-Giménez, 2006; Holt-Giménez et al, 2021).

In Guatemala, Indigenous campesino agroecology is able to play all these roles, because it is not exactly traditional nor exactly novel. It is a mixing of the old and the new, the ancestral and the introduced. The use of soil conservation techniques, hedgerows, and terraces is so common in smallholders' fields, both agroecological and semi-conventional, around Sibinal and Tacaná as to point to a seeming link to ancient practices (Calderón et al, 2018). These same communities utilize moon phases to time agricultural activities, while their K'iche' campesino counterparts use a complex K'iche'-language soil classification system (Calderón et al, 2018; Falla, 2001). The *milpa*, a maize-centered polyculture system as old as Mayan civilization, continues as the backbone of Indigenous campesino agriculture in Guatemala, but takes no rigid form (Falla, 2001; Hellin et al, 2017; Holt-Giménez, 2021; Sigüenza, 2018). According to Sigüenza, as more families are finding income and *buen vivir* through agroecology, more farmers are reclaiming concepts and practices that were part of past generations' knowledges (2018).

As old and new practices intermingle to create unique forms of agroecology, so too do old and new intermingle to create diverse formations of life in the fields. It is through this lens rather than from a fear of imminent loss of the 'native,' a romanticization of conserving traditional crop varieties, an attachment to Western agronomy's valuing of high yields, or a sense of competition between market and subsistence crops—that an open exploration of the agrobiodiversity on Guatemalan Indigenous campesino's lands can begin (Hellin et al, 2017; Holt-Giménez, 2021; Sigüenza et al, 2018).

Agrobiodiversity is a subset of biodiversity (the full variety of life, in all its forms, in a given space or ecosystem up to the global scale) focused on agricultural spaces (Wood & Lenné,

1999). Agrobiodiversity, as it explicitly recognizes human influence as part of ecosystems, is especially important in a world where the separation of the sociocultural and the natural realms has come into question and where fears over the degrading effects of globalized modernization and development on biodiversity continue to mount (Montenegro de Wit, 2016).

Agrobiodiversity is the variety of all crops and their relatives, livestock, and interacting forms of life (including other plants, animals, pollinators, pests, microorganisms, etc.) at the genetic, species, ecosystem, and/or landscape level (Abbott, 2005; Jarvis et al, 2007; PAR, 2018; Wood & Lenné, 1999). While the definition of agrobiodiversity is broadly inclusive, conventional research often ends up excluding certain organisms or plants deemed less 'functional' or relevant due to its need to narrow its focus and isolate variables (Jarvis et a, 2007; Wood & Lenné, 1999). While it may be impossible for any research project to look at the full range of what constitutes agrobiodiversity in a given space, by embracing a more multispecies approach, agrobiodiversity could move past the limiting concepts of 'services' and 'resources' that fit into the ecosystem-evaluated-via-functionality approach toward a less human-interestoriented approach (Kohn, 2013; Montenegro de Wit, 2016). By looking beyond what is assumed is 'good' or 'bad' for farmers' agricultural production, unexpected multispecies interactions might reveal themselves as having roles in agrobiodiversity.

'Planned' agrobiodiversity—involving the dominant crop species/varieties intended by the farmer(s) to grow on the land—is perhaps most commonly investigated, since it is the most directly controlled and most straightforwardly scientifically-meaured (Jarvis et al, 2007; Love & Spaner, 2007; Wood & Lenné, 1999). 'Associated' or 'unplanned' agrobiodiversity includes plants living in relation with the 'planned' organisms, including 'weeds,' 'invasives,' volunteer plants, 'wild' or semi-wild plants, and other not directly-planted plants (Wood & Lenné, 1999). In Chichum Majadas, Los Limones, and Unión Reforma, the intricate relationships between growers and plants, in which both have agency, blur the line between planned and unplanned, rendering it unfitting and hard to find. The plants who growers called 'monte,' 'nativo,' and 'criollo' cannot automatically be fitted into categories of planned and unplanned, of crop versus weed.

Research also frequently focuses on specific scales or levels of diversity: genetic, species/variety, landscape and ecosystem (Love & Spaner, 2007; PAR, 2018). Species and variety level agrobiodiversity are of especial interest to ethnobotanists and agroecologists. Each agricultural plant species can contain a high diversity of varieties within the species. These diversities become especially complex on farms, such as those in the communities around Sibinal and Tacaná, where 'native' varieties, landraces, and introduced varieties all grow simultaneously. Despite the slipperiness of their definition, landraces (many of which might be called 'criollo' plants in Chichum Majadas, Los Limones, and Unión Reforma) have received a particularly high degree of study for their role as locally-adapted crop varieties specific to particular socioecological regions (Abbott, 2005). Landraces cause challenges for measures of agrobiodiversity due to misunderstandings and mal-translations between the Latin or scientific crop names and the local varietal names (Abbott, 2005; Jarvis et al, 2007). Even within and across the communities of this research, I witnessed growers calling the same plant by different names (like *chayote* and *guisquil*) and different plants by the same name (like *camote* as both sweet potato and sometimes taro). While some scientists consider folk taxonomies a research barrier to be overcome, ethnobotanists often consider folk taxonomies-their overlaps and contradictions both with Latin names and with different farmers uses of the folk names themselves-the point of study itself (Abbott, 2005; PAR, 2018). Much of this work evolved out

of initially trying to understand the seemingly-simple (but actually essential and revelatory) question of what growers in the communities mean when they call a plant or its variety 'criollo.'

Agrobiodiversity studies have continually attempted to develop a standardized and meaningful form of quantifiable agrobiodiversity measure, such as the Shannon-Weiner's index or Simpson's index (Love & Spaner, 2007; PAR, 2018). But the focus on numbers in agrobiodiversity research, typically fueled by a fear of diversity loss, requires critical inspection (Gotelli & Colwell, 2001; Montenegro de Wit, 2016). The many dimensions of agrobiodiversity make quantifications or categorizations of diversity as 'high' or 'low' difficult, especially if variance across time and space are additionally taken into account (Jarvis et al, 2007; Montenegro de Wit, 2016). So much variability within and between measures exists because of the innate complexity of agrobiodiversity. By their various attempts to simplify complexity, researchers using exclusively quantitative approaches often fail to express the larger picture of agrobiodiversity (Montenegro de Wit, 2016).

When researchers allow themselves to see the "almost limitless combinations of more or less intensive management, the varied local biotic and abiotic environments," and the ability of plants and humans to continually reshape each other, they begin to see agrobiodiversity not as a ranking, not as something which can only go up or down, be saved or lost, but as a mosaic of relationships in every community, every farm, every quadrat sample (Wood & Lenné, 1999, p. 29). Multispecies perspectives and Indigenous agricultural knowledges remember the agency of plants and the land (Kohn, 2013). Often in Chichum Majadas, Los Limones, and Unión Reforma, the growth of life in fields is so abundant and intermingled as to appear 'disorganized,' 'unruly,' 'weedy' to an unknowing outside observer. Rather than a lack of management, such fields are the manifestations of growers recognizing the power of plants and seeds and allowing the interactions between different plants to play out into synergies which can benefit both grower and beings in the field. The milpa, with its shifting interrelations of corn, squash, beans, and often many more plants, is a pre-colonial example of this which continues into the present because the wisdom of interrelationship perseveres (Lopez-Ridaura et al, 2021).

Space for heterogeneity is integral to the communities' ways of knowing and agrobiodiversity is the practicing of this heterogeneity in relationship with the land (McGregor, 2004). Indigenous peoples and campesinos in general who have long lived on and worked the land carry lived, embodied connections to their agrobiodiversities (Williams, 2018). Agrobiocultural diversity work recognizes that plants cannot be segregated from their relational, peopled context (Cocks & Wiersom, 2014; Johns & Sthapit 2004; Maffi, 2010; Pimbert, 2018; Veteto & Skarbo, 2009).

This context shifts with time and space. Agrobiodiveristy will look different across different seasons, and seasonality itself will vary in different ecoregions (Williams, 2018). Guatemala's Western highlands are characterized by a dry season and a rainy season which, especially in the case of rain-fed fields, largely determine the timings of planting, growth, and harvest of different crops, especially maize, throughout the year. However, even which exact weather patterns characterize each season and the timings of its starts and ends could vary between and within communities, as is the case with the varying elevations in San Marcos's highland landscape.

When mapping fields with growers in Chichum Majadas, Los Limones, and Unión Reforma, the tapestries of plants I saw were a particular snapshot in time. While changing throughout the year and across the years, local agricultural knowledges also emerge from deep history. Through growers tellings of the land, I began to understand histories of agrobiodiversity change which I could not directly see.

Growers' stories not only moved me through time but also through space. Where is the space of the agroecosystem? Where do agrobiodiversity researchers draw those boundaries? They are often more fluid than agrobiodiversity measures present them to be. In tropical and subtropical agroecosystems especially, there is not an obvious line of distinction between fields and fallows and forests (Wood & Lenné, 1999). Home gardens-common among many Guatemalan campesinos—are sometimes discounted from being part of the farm. Yet, while many Indigenous and campesino communities do distinguish their fields (known as *parcelas* among San Marcos communities) and gardens, this does not exclude them from being important sites of agrobiodiversity, sometimes even more frequent homes of rare varieties than 'farm' fields (Aguilar-Støen et al, 2015; Williams, 2018; Wood & Lenné, 1999). The space of agrobiodiversity can move beyond the farm field and doing so engenders a fuller picture of agrobiodiversity's entanglements in communities' biocultural worlds. This research, unconfined to the field, followed growers' stories (and often their footsteps) from origins of agrobiodiversity-places of seed-sourcing, seed-saving, seed exchange networks-to plants' post-harvest lives-involving household consumption, points of sale (local and export), medicinal values, and non-food uses of agrobiodiversity (Isakson, 2009 Love & Spaner, 2007; PAR, 2018).

Agrobiodiversity which moves across time and space disrupts dichotomies by opening up spectrums and finding relationships (Jarvis et al, 2007). In Chichum Majadas, Los Limones, and Unión Reforma, there are plants whose seed growers collect, plants who growers do not plant but intentionally leave to grow, plants who sprout on their own but who growers then tend, and a

myriad of other plant-grower relationships that defy the terms 'crop' and 'management.' Despite the misconception that Indigenous agricultural knowledges are about only 'traditional' crops, growers give home to a diversity of crops along the spectrum of long-established and new (Abbott, 2005; Isakson, 2009; PAR, 2018).

Long-established crops often fill ecological niches in the communities' and the farmers' distinct agroecosystems, but they can also have deep ties to identity, spirituality, lifeways, and food customs (Wood & Lenné, 1999). This has led much agrobiodiversity and biocultural diversity research working in Indigenous and campesino communities to focus on 'traditional' crops to the exclusion of 'new' crops. Yet, as Thurston et al articulate, "Some traditional farmers have demonstrated considerable skill in utilizing a mix of modern and traditional (crop) varieties to their advantage...This approach may be a more sustainable alternative for traditional farming systems in the future" (Wood & Lenné, 1999, p. 236). In Chichum Majadas, Los Limones, and Unión Reforma, I have met many growers who are seeking to learn how to grow both plants only recently existent in their communities and plants grown in previous times by themselves, their parents, or their grandparents. While the reasons behind their desires to grow these different kinds of crops vary, they don't see the need to choose between them. Importantly, women—who are often primary keepers of fields and gardens despite frequent lack of recognition—in these communities are often especially innovative and intentional in their mixing of old and new practices, and merit deliberate attention in agricultural research.

Growers in these communities do not see the need to exclude plants from their agrodiversities based only on their origins or historical timelines, because plants are not viewed only as metaphors for conservation or loss. They are viewed as beings, each with unique and uncertain potentials, each with possibility to come into relationship, with possibility to become criollo. In these communities, relationality is central to their agrodiveristies. And the relationships between growers and plants are constant sources of change, transition, and evolution.

Chapter 3

Traversing the Gap

This research is an ongoing attempt at community-based participatory work (MacKinnon, 2018; Méndez et al, 2017). In order to examine the diversities of diversity, this research was composed of a mix of methods, including interviews (preliminary, primary, and follow-up), surveys, participatory field mappings, and participant observation, begun in the spring of 2018.

Process and Methods

I met the communities with whom I would later come to work on a trip to the region with my future co-advisor, Claudia Calderón in April 2018. Already having become connected with the communities through Red Kuchub'al—a Quetzaltenango-based agroecology-focused organization with a network of 12 grower associations in western Guatemala—she was in the midst of her own research project about mycotoxins in maize. I rode with her in a rental car across many communities in the Sibinal and Tacaná areas over the course of a week and a half, helping to process maize samples in growers' homes usually alongside a local grower who was a *promotor* (promoter) with Red Kuchub'al.

It was in those homes, in conversations amidst sample collections and over continual offerings of *atol*, *galletitas*, *almuerzo*, that the roots of this research began to form. As I talked with growers about the plants they were growing in their fields, I came to grasp more of their questions and concerns about agriculture as it was intricately interwoven into questions and concerns in their communities and lives. In the last days of this first trip, I sat in a hotel lobby with a few of the *promotores* who represented their communities to discuss the possibility of a research collaboration between us, to ponder initial topics and themes of mutual interest. The interest to do research together emerged from the ideas and information shared by the

promotores and all the other growers I'd met, but also from the connection budding between us and my desire to build those connections and come back with something to offer.

We remained in touch through Red Kuchub'al until my return in September through October of 2019. Through discussions with Red Kuchub'al leadership and the local *promotores*, we organized for me to begin work with three communities—Unión Reforma in the municipality of Sibinal, and Los Limones Pin Pin and Chichum Majadas in the neighboring municipality of Tacaná. We selected these communities for a number of reasons. They have distinct ecologies, distinct crops, differing distances from the '*centro*' (nearest town) which made for overlapping but distinct and complexified stories across the communities. They also all have their own local grower organizations through which they participate in Red Kuchub'al projects. Socios (members) of these local grower organizations have chosen to engage with Red Kuchub'al—and thus to some degree with agroecology-and often a number of different organizations. While this engagement with organizations would eventually become a larger part of the picture of this research, initially the pre-existing not only willingness but also interest of these growers to collaborate on projects predisposed me to working with them. After all, key to a communitybased participatory project are communities who want to participate. For this reason, the coproducers/participants of the research are growers who participate in some form in their local grower organization, generally socios or their family/household members. I focused on working with these growers with an interest in engaging in partnership rather than trying to impose that interest on folks who didn't have it.

During this September/October 2019 preliminary research trip, I stayed in each of the three communities, in homes of growers, and conducted preliminary interviews, did field walks with farmers, and participated in daily life and conversation. The aim was both to co-form

research questions with the communities, to get to know the growers and build relationships, and to gain background understanding on the history of the communities, their evolving landagriculture contexts, and the sort of plants and diversities growing in and beyond their fields.

It was on this trip, upon hearing the range of interests of growers—from understanding why certain plants were disappearing, to learning better practices for 'newer' crops, to continuing to maintaining long-standing crop knowledges across generations—that a shared idea between the growers and me to produce what I would later come to refer to as plant stories for the communities sprouted. The idea of these plant stories was to bring together the abundance of knowledge carried by different growers, within and across communities, about different plants into a shared, accessible place for all growers in the communities. Weaving together information from before the beginning of a plant's life to after harvest, these stories were meant to provide a resource for knowledge-sharing in the present as well as a source for maintaining these knowledges/histories across generations.

My next trip, meant to be my main research field trip, was set to take place in the summer of 2020. As spring of 2020 rolled around, the COVID-19 pandemic spread across the globe. The Guatemalan borders closed to U.S. citizens. The research took a turn.

By that time, I had joined a collaborative project out of the Universitat Autònoma de Barcelona. The LICCI (Local Indicators of Climate Change) project gave me the impetus to try to seek unorthodox ways of continuing the research despite my inability to travel to the field. For LICCI, I was tasked with collecting hundreds of extensive surveys on the local perceptions of, impacts of, and adaptations to climate change. What had seemed like an opportunity for synergistic collaboration became a practice in creativity and of questioning the ethics of doing remote research in a community-based context.

For a period, in some of the most uncertain of COVID times, this work did become remote. WhatsApp became vital. In the first iteration of this remote work, I trained a San Marcos agronomist, introduced to me by Claudia Calderón, to conduct focus groups and preliminary interviews in the communities. As we moved closer to conducting surveys, it became clear that the distance the agronomist had to travel to each community and the local growers' lack of familiarity with him would prove a significant impediment to conducting surveys. Thus, at this point, I pivoted to searching for local growers in each community who might be interested in taking up the job of conducting surveys. In each community, a *promotor* expressed interest and I began training them. In handing off a large degree of control in the surveys, I trusted the promotores with assessing how the survey was being received in each community. In Chichum Majadas, it proved too complicated to get off the ground. In Los Limones, after the promotor conducted several surveys, she reported back that the survey was too long and repetitive for folks to want to respond to the whole thing. In Unión Reforma, the *promotor* worked with me to simplify and iron out the surveys to make them serve the participants as best as possible. He put in a great effort to collect 73 grower surveys from Unión Reforma and nearby Sibinal communities.

These surveys have gone on to represent the area's growers as part of the larger LICCI dataset of local communities from all over the world and will hopefully also manifest in them having some, even if small, voice in global climate change policy work. The results of these surveys, though, will appear largely only indirectly in this paper. They have been useful for providing background, but the heart-and-soul of this work emerges from the more ethnographic methods. The *acts* of working on the surveys provided insight and some benefits through the challenges. As I was made to understand how to make the surveys work for the communities (or

how they simply wouldn't work for them) and as local people came to understand how to conduct the research themselves, the gap between researcher and participant further narrowed.

I was finally able to return for a main research field trip from September through November of 2021. Two years had passed since my last trip there so while this was the trip on which I conducted primary interviews, field mappings, and ongoing participant observation, this was also the trip where I witnessed the difference time can make. Rather than keeping the research arbitrarily tied to years-old conversations, it morphed and adapted to the updated contexts and ideas of each community. Research questions and outcomes for the communities, while not thrown entirely overboard, were allowed to evolve.

By the end of these months living in the communities, we had completed 45 total participatory field mappings and interviews, 14 (with 7 women and 7 men) in Los Limones Pin Pin, 14 (with 6 women and 8 men) in Unión Reforma, and 17 (with 6 women and 11 men) in Chichum Majadas. Participatory field mappings involved accompanying a grower on a walk around their land, both on their *parcelas*—plots of distinctly-agricultural land—and on their interstitially-agricultural spaces, such as home gardens, forest, and 'in between' spaces. During this walk, the grower would point out 'all' the crop(ish) plants growing as I feverishly scribbled out their names in a notebook alongside indicators of range/quantity, slope, homes and animal enclosures, roads, neighboring plants. I also followed each plant mention with a slew of questions—name of variety, how long they'd been growing it, seed source, planting and harvest dates, etc.

The mappings aren't pretty and certainly not neat, nor were they necessarily intended to be (See Images 1, 2, and 3). They also aren't intended to be 'complete.' They are not supposed to provide a comprehensive list of all the plants, crop-like or otherwise, growing on that farmer's land. Since the mappings are based on only a single moment in time, any list they provide would only be able to be very temporarily comprehensive amidst the dynamic plant changes throughout a single season and across the years. What's more, the mappings—rather than trying to fully 'capture' diversity—were intended to be a conversation of-sorts in which grower, plants, land, and researcher all had a voice involved. A way of coming together, of interacting, of trying to see each other, hear each other out. Unsurprisingly, the results were hard to make visible on the page, limited but detailed, ephemeral but honest and eye-opening. They were a reminder of why maps often fail and end up only presenting a partial picture, a distortion (Ulrich, 2021). The mappings were rich beyond 'capture.' And this is precisely what made them worthwhile.





Images 1, 2, & 3: Examples of Participatory Field Mappings

With each grower with whom I co-created a mapping, I also conducted a semi-structured interview after doing the mapping. Interview questions ranged from how agriculture has changed in the community to how a grower engages in specific ways with specific crops, from what happened to Mam language in the communities to how local grower organizations formed and function, from where different seeds and plant varieties originated to how growers use plants upon and after harvest, from where growers are struggling to what they are dreaming.

To paint the picture in this way—I did a mapping with a grower and then interviewed them, on to the next—is a stark enough image as to be misleading. A fuller picture: Me walking up and down the mountainsides of the communities, following in the trail of my main community guide or, not infrequently, their children. Often veering off the single main road of the community onto little trails easily missed by my eyes. Sliding on thick mud and nearly tumbling down steep slopes while my companions remain sure-footed. Children fending off dogs on my behalf. Calling up to a house to ask if so-and-so is home. Sitting and waiting for so-and-so to arrive home. Chatting with their family as they gather *zacate* (forage). Chatting with their neighbor as they gather *brosa* (organic matter) or firewood. Coming back again later. Taking a cup of sweet *café*. Savoring some *atol*⁵. Hesitantly sipping some *refresco*. Sticking around for a lunch sneakily prepared while I'm not looking. Eating three lunches because three homes in a row offer and 'no' is never the right answer. Winding conversations over the meals, on the walks, before, amidst, and after the mappings and interviews.

I don't add this picture only for the delight of imagery. Many of the pages of my field journal are filled with these moments that occurred in the midst, in between. Many key ideas of this research emerged and developed in these moments. Participating in planting and harvesting, in local grower organization meetings or meetings of the organization with external organizations, in harvest celebrations, in farmer-to-farmer visits were modes of participant observation which I had foreseen as important before field work began. However, in staying in the communities, in the homes of community members, I soon found my participation in community governance meetings, late afternoon *Santo Rosarios*, communal work days, trips to

⁵ 'Atol' is a staple in the communities. It is a thick, usually hot beverage which can be prepared from a variety of grains and even nuts. It is often prepared from maize in various different forms.

market, mass, birthdays, baptisms, funerals, and myriad other ongoings that shape daily community life tied up in this research too. Even beyond the *parcela*, the relationships between the growers and the plants kept arising all over.

Analysis

When I returned from this research trip, I began to sit with and sift through the piles of data. With an approach based in grounded theory, I transcribed and coded all the interviews, as well as coding field notes and participatory mappings, to find, distill, and organize emerging themes (Birks & Mills, 2015). The final larger themes (which umbrella-ed other subthemes) which emerged from this coding process were: relationship, change/tradition, identity, organizations, meaning-making, women's roles, migration, and seeds. I also coded all interviews, mappings, and field notes for plant names and terms for describing plant types/varieties (*criollo, nativo, monte, mejorado, híbrido*, and *transgénico* being the main terms which emerged). In this dual coding process too, it began to become clear how certain themes aligned in distinct ways with different plants—how the plants themselves were beginning to tell the stories at play.

Additionally, I created an inventory of all the plants from the field mappings to show, across communities and within individual communities, which and how many growers had which plants represented in their field mappings (See Table 1 in Methods section of Appendix for a community-level summary of this inventory). One hundred sixty-four total plants were represented across all participatory mappings—74 in Los Limones, 103 in Chichum Majadas, and 105 in Unión Reforma. The most plants represented in a single mapping was 48 (in Chichum

Majadas), while the least was 4 (in Unión Reforma). Most of these 164 plants won't get to shine in the spotlight of this paper. Many plants only appeared in a single mapping⁶. Yet, just as these plants intermingle on the land, cropping up where they may, they also intermingle in this research. Even those who won't get to shine are present, parts of the stories to be told here.

So who does get to shine? With these emergent themes and large inventories of plants, I returned to the communities for a follow-up field trip in October of 2022. The aim of this trip was to determine which plants would form the focus of the plant stories at the center of this research and to solidify the shapes which the outcomes specifically for the communities would take. It was also to review my initial analysis of themes and plants with community members to see if my initial results actually aligned with their perspectives and what information needed to be added/adjusted/reconfigured.

Staying in the communities again, I made visits with a subset of the growers who partook in the mappings and interviews of my last trip. In interviews, I read through the list of plants specific to their community to have the grower clarify whether they recognized the plant name (or not), whether some names were in fact the same plant, whether they knew of different varieties or types of the plant (including whether the plant had '*criollo*' or '*nativo*' types), and any other relevant qualities they had to say about the plant (sourcing, medicinal properties, uses, prevalence, etc). I then asked the grower which of these plants from the list would be most of interest to them to have as the focus of the plant stories or other research outcomes/tangibles for the communities. We then also returned to discussing what form those research tangibles could

⁶ Plants who only appeared in one mapping: ajenjo, ajo, altamiz, apio, arbeja, árbol camaros, arbol comida de paloma, árbol de hierro, árbol de salvia simorrante, árbol de yaca, árnica, baricuote, boraj, campana, cedro, chicajol, cola de caballo, cola de quetzal, crisantemo, escoba rejan, eucalipto, flor nora, flor de pascua, fresa, gladiola, hoja blanca, inciensio, isote/guinte, labio, latse, lechuga, lengua de vaca, malva, mania, mashan, mecate, mich/piñon, mish, moquillo, nectarina, pacaya, pachan, pajon, palma, palo de reina, papaya, paruts, pasto de napier, pasto heno, pasto morero, raigrás, sacumuj, salvavida, salvia santa, sauco, tamarindo, uchuva, vics/vaporub, yuca

take, to make sure we were still on the same page and to make room for adjusting these plans to meet their present needs/desires.

I integrated these 2022 interviews and conversations into the analysis of the emergent themes from the entirety of the research. Thus, from an attempt at community-based participatory process, the spotlight turned to certain plants who you will read about in the chapters to come: milpa/maíz, papa, hierbamora, amaranto and bledo, ruda, café, and tomate.

For the Communities

Since these plants emerged as especially important, for different reasons, in the communities, they will be the focus of plant stories written for the communities. The beginnings of these stories for the communities, written in Spanish, will precede the plant stories written for this dissertation audience, in English. Rather than direct translations, the crop stories in this dissertation will look somewhat different than those given to the communities, as their stories are reflections and collections, from their own community members' knowledges, of information they told me they want shared about plants.

Yet, in my last trip to the communities, when I was trying to narrow down the list of plants on which to focus for deliverables for the communities, I was wrestling with the fact that growers too were struggling to call out certain plants as more important or interesting than others. All the plants are important! Just like I wanted to know about *all* the plants as I walked growers' fields with them, the growers too were curious to learn about the more obscure plants they or others had, as well as the common crops for which there was more abundant knowledge to be shared and storied.

Growers and I brainstormed the idea to create a *librito*, a little book to be shared in each community. At first, the *librito* was to be composed of all the plantas medicinales—a big point of interest for many—mentioned in the communities. This has evolved now to become a photo *librito* of all the plants in the communities of which I managed to take adequate photos. Intended to be living documents, each community will receive a physical *librito* to be passed from grower to grower, as well as a digital *librito* which can be as widely shared and edited as the community desires. As the physical *librito* moves from one grower to the next, growers can write in comments—about uses, medicinal properties, growing tips, who has seed, etc.—into blank pages following each plant. Not only a record of and educational tool for local agricultural plant diversity, the *librito* is also meant to continue to facilitate conversations, connections, and ideas between the real experts—grower-to-grower and grower-to-plant.

On Positionality, Privilege, and Attempts to Engage Across Difference

I say this work is an "ongoing attempt" so as to not obscure the difficulties and complications involved in making this a community-based participatory project. This work has been a process of mutual learning. While I have wanted it to be of benefit to the communities and shaped by their visions, I have had to learn a lot from the communities in order to make this possible. In other words, in order for me to have anything to offer the participants, I first had to learn a lot from them. This was a humbling process, one in which I continually questioned my own ability to be of any real use to the communities with whom I worked. Perhaps my research was doomed to become another navel-gazing work, extracting from communities only to serve an academic audience, reproducing colonial trappings under a different guise. I won't argue that I entirely escaped these problematics. At times, they made me entirely too uncomfortable as I looked at the research, my role in it, from afar.

Yet, when I was actually in the field, living and engaging with the communities every day, the capacity of participants to hold space for the complexity within our relationships impressed upon me.

Yes, the community members and I did develop relationships. I was there in the communities. So too am I here in this paper. In the spirit of relationality, there is no fully removing myself. As such, it is also important to understand my positionality as a researcher so the reader may take me with as many grains of salt as they see fit.

For whatever ways my ancestry more complexly influences my personal identity, society offers me the privileges of a U.S.-born white woman. These privileges are amplified when I am in the Mam *campesino* communities of Chichum Majadas, Los Limones, and Unión Reforma, communities where many have been willing to put themselves into great debt and risk their lives to try to reach the privileges the United States promises. As a doctoral student and researcher, many growers were quick to address me as an 'expert,' a notion I had to work constantly to dispel. When I arrived to the communities initially, seeing my lighter skin, lighter eyes, lighter hair, I turned heads. At the same time, many *socios* (who were by then accustomed to navigating relations with Pastoral de la Tierra, Red Kuchub'al and others) were quick to code my appearance to mean I came on behalf of an external organization. They weren't wrong. In these ways, I represented an outsider, a privileged U.S. citizen, an intellectual 'superior' with an agenda, an all-around colonizer.

At the same time, the people in the communities did not regard me only in these ways. After initial skepticism by some and overenthusiasm by others yet, folks began to notice I was showing up—not just to do interviews, but to participate in their lives to whatever degree they would permit me. They noticed I was sticking around—not just dropping in for a day to give a workshop and then going to sleep at a hotel in Tacaná or Sibinal. They noticed I was opening up—having honest, vulnerable, humbling conversations. Over time, I became not only a representation but also a fellow human, even a friend. Through the building of relationship, community members and I were able to dance between our multiplicities of identities. We were able to create a research dynamic constructed from a place of mutual respect, mutual care, and mutual learning.

Of all my attempts to produce something useful for the communities, I was especially struck in my last trip in 2022 at the reactions of community members to my return, many of familiarity, warmth, and joy. *Mari, how long are you staying? When will you come back again?* One of the many lessons in relationality the communities would offer me: despite my intent to provide something 'productive,' much of my value to them lies in my efforts to be present, to engage, participate, relate, to laugh, labor, celebrate, and especially to not forget them as history all too often has.

A Note on Anonymity

Does this paper too forget the beings of the communities who have made it possible? When I was in the formational stages of this research in 2018, I had to complete an IRB for the research to be allowed to really begin. I made a common move of many researchers in that IRB and guaranteed that I would maintain the anonymity of participants throughout. Research has a history of doing plenty of harm in working with (or worse, researching *about* and not *with*) Indigenous communities. By protecting people's names, I also hoped to protect them from any unforeseen negative outcomes that might arise from this research. And when I started conducting interviews, people often seemed soothed, after I asked them for permission to record our conversation, to hear that I would not be using their names in association with anything they said.

But we were all still coming to know each other then. And, as this paper will show over and over, in these communities things do not remain stagnant and unchanged, especially with the emergence of relationship. Research also has a history of erasing Indigenous peoples, discrediting and stealing their knowledges. So I'd like to revisit our old conversations in new light. In my return to the communities in a few months to deliver *libritos*, I also plan to ask all the co-creators of this research whether they would like their names stated, either in association with their words and knowledges or simply in acknowledgement of their role as co-creator, if this work were to ever become published.

Until then, in accordance with my original word, all the names which appear in this paper are pseudonyms.

A Note on Translation

This work, as most, is a work in translation (de la Cadena, 2015). There are the obvious translations, from Spanish to English. But there are also the more subtle translations, from local Mam ways of knowing to Western academic ways of knowing. In the case of the former, I have tried to translate languages in the way that most closely honors the original tone and intent of what was being said. When English words failed in very important conceptual ways, I bring this

into the discussion and consider the implications of such 'broken' translations. Words, after all, have power.

Knowledge too is power. Thus, in the case of the latter, I have tried to write this research in ways that shift some power away from standard Western academic ways of knowing. Instead of supposedly-objective, disciplined, jargon-laden writing, I aim to write in ways that make room for story and recognition of subjectivity, interconnectedness and interdisciplinarity, creativity and transparency. While this form of writing is arguably closer to ways of knowing of the communities with whom I worked, I do not argue that it is perfectly aligned either with their ways of knowing. In an aim to come as close as possible to letting the growers speak for themselves, I include many direct quotes. I acknowledge that, as I am not Mam nor a member of the local community, there will still be ways of knowing that get lost in translation. There will also be knowledges that were never mine to know at all, belonging to the communities alone.

Just as any dialogue, any relationship involves a grappling to understand, this writing is a grappling. It occupies the fuzzy space of 'not quite'—not quite standard academic writing, not quite non-Western writing. Here, I hope, is a space where worthwhile conversations and changes can begin.

Description of Place

San Marcos, one of Guatemala's 22 *departamentos* (departments), is located in the northwest of the country. While around 30% of the total population of San Marcos is officially recognized as Indigenous (with the majority of these being Mam), nearly half of the producers in the San Marcos department are officially recognized as Indigenous (Instituto Nacional de Estadística de Guatemala, 2018). Official numbers may be underestimates, as San Marcos is a region in which Indigenous and Mam culture have not received much valorization. While official statistics might not paint a perfect picture (especially of those Indigenous people who don't wear the *traje*, traditional clothing, or speak their Indigenous language), these numbers nonetheless make clear that a higher percentage of *gente Indígena* (Indigenous peoples) reside in rural areas and maintain agricultural lifeways than the total San Marcos populace. Amongst San Marcos's rural population, 76.4% of people lived in poverty as of 2011, while 18.7% lived in extreme poverty (Instituto Nacional de Estadística de Guatemala, 2013).

In the San Marcos *municipios* (municipalities) of Tacaná and Sibinal the percentage of the rural population in extreme poverty shoots up to 88.8% and 91.2%, respectively (Instituto Nacional de Estadística de Guatemala, 2013). Tacaná and Sibinal are both located in the *altiplano occidental*, the Western highlands, part of the Sierra Madre mountain range. Each a slow, winding, mountainous journey of around 300km from the national capital of Guatemala City, Tacaná and Sibinal are also border regions. The *municipios* border the Chiapas state of Mexico. The distance and difficulty of reaching these areas as well as their proximity to Mexico has given way to a culture of mixing and exchange across borders. It has also prompted a sense

of neglect and necessity which, given the physical proximity to the Mexican border, often leads to migration.

Tacaná and Sibinal are both marked by semitropical, mountain ecosystems, though these ecologies can vary significantly with the shifting altitudes along the steep slopes. Their climates are characterized by two main seasons: the rainy season and the dry season. The rainy season typically begins in late April to early May and ends in mid or late October. The dry season typically begins in October or early November and ends around mid-April. Agriculture is a common practice and lifeway for rural communities in these *municipios* and this too marks the landscape. Historically, agriculture has centered around the *milpa*, a polyculture of maize grown with other crops, most typically (though by no means limited to) beans and squash. While other cropping systems have also become common, tall stalks of maize still cover many slopes in Sibinal and Tacaná in the rainy season.

Within Sibinal and Tacaná, a number of communities have local grower organizations through which they participate in or have participated in projects with Red Kuchub'al, Pastoral de la Tierra, and other organizations. Chichum Majadas, Los Limones, and Unión Reforma are three such communities.



Map 1: Google Earth locations of Chichum Majadas, Los Limones, and Union Reforma in Guatemala's Western highlands

Unión Reforma

Unión Reforma is a community located in the *municipio* of Sibinal. It is relatively close to the municipal center of Sibinal, '*el centro*'. It is composed of approximately 30 households. Unión Reforma was officially formed as a community in 1970, after the larger area of which Unión Reforma was a part (named in Mam, 'Ixibalak'nab') split into smaller communities. The community chose the name Unión Reforma in recognition of how they were already united and working in groups and how they were working to 'reform' the land with soil conservation

practices. By 1985, they had a potable water system in the community. In 1994, Unión Reforma's own school (for primary-level education) was built. In 1998, the *carretera* (main road) that connects to Sibinal and roads to other towns was constructed passing the entrance to Unión Reforma.

Given the proximity to the *centro* and due to increased educational opportunities, one or more members of many Unión Reforma households make daily commutes to jobs in town or in a neighboring area, often as *profesionales* (professionals) such as teachers.

At 2740 meters above sea level, it is the highest altitude of the three communities a part of this research. As a result, it also generally experiences colder average temperatures than the other two communities.

The local grower organization that operates in Unión Reforma is ASDISMA, the Asociación de Desarrollo Integral San Miguel Arcángel. ASDISMA includes other certain other Sibinal communities, with the exact number of participating communities varying from project to project. In part seemingly due to the Sibinal *municipio*'s higher level of public projects which include local communities, ASDISMA appeared to have the highest level of participation in different projects with various organizations among the three communities. The majority of Unión Reforma's ASDISMA *socios*, members, or someone else in their household were participants in this research.

In Unión Reforma, *bosque* (forest), *hortalizas* (vegetables) and *flores* (flowers) are prominent components of the agricultural landscape. Many growers are also *apicultores* (apiculturists) and have beehives near their woods and/or *parcelas*.
Los Limones Pin Pin

Los Limones is a community in the *cantón* of Pin Pin, known locally simply as Los Limones, located in the *municipio* of Tacaná. Hailing a car passing by the main road that runs alongside the town, it is only about a 20-minute ride into the municipal center of Tacaná, '*el centro*.' Los Limones has approximately 45 households. Los Limones officially became its own community after the larger area of Pin Pin divided into smaller communities in order to establish their own schools. The name Los Limones was chosen in honor of the fact that most community members had a lemon tree on their land. Los Limones' school (primary-level education) was built in 2002, not long after the *carretera* which runs past the entrance to the community and connects to Tacaná was constructed around 2000. In 2004, an infrastructure project connected potable water to every home in the community. A different project brought irrigation infrastructure to many growers around 2008.

Many producers are able to leverage their relatively reliable water source and their proximity to the *centro* by selling their crops at local markets and to local businesses as well as by readily purchasing seed and agricultural inputs.

At about 2319 meters above sea level, Los Limones is mid-altitude relative to Unión Reforma and Chichum Majadas. As a result, it generally experiences the mildest average temperatures of the three communities, warmer than Unión Reforma and cooler than Chichum Majadas.

The local grower organization operating in Los Limones is ADIMAG, Asociación Desarrollo Integral de Medianos Agricultores. A group of growers in Los Limones, all men, officially founded ADIMAG in 2010. Since then, women have grown a strong presence in the organization, leading them to found a women's group through ADIMAG.

In Los Limones, *plantas medicinales* (medicinal plants), *hortalizas*, and *milpa* are prominent components of the agricultural landscape. Due to irrigation availability, crop cultivation, especially of vegetables, in the *verano* (dry season) is becoming increasingly common in Los Limones.

Chichum Majadas

Chichum Majadas is a community located in the *municipio* of Tacaná. Farther from the municipal center of Tacaná, *el centro*, Chichum Majadas is the most removed of the three communities. It has around 60 households. Chichum Majadas officially established itself as an independent community by separating from Aldea Las Majadas in 1986. The name 'Chichum' was chosen as 'chum' is the Mam name for *pajón*, a grass that used to grow abundantly in the area and be used to make the roofs of homes. By 1987, they had built their own school (primary-level education) so that their children wouldn't have to walk so far to school. In 2001, the construction of the *carretera* to Tacaná and to Chiapas passed somewhat near, though not directly past, the entrance to Chichum Majadas.

In my initial visits to Chichum Majadas, there was no road that reached the end of the community—one could only reach that far on foot or horseback. A road was constructed prior to my 2021 visit, allowing motorcycles and vehicles to pass to the end of the community (so long as they can handle the rough terrain). Even with greater transportation possibilities, it is often easier for community members to cross the border to the nearest town in Mexico than to go to the

centro in Tacaná in order to sell their crops and to purchase food, staples, and household products. The minimal opportunities to earn money in the remote community and the relative ease of crossing the border also mean that migration is especially common in Chichum Majadas.

At about 2070 meters above sea level, Chichum Majadas is the lowest altitude of the three communities. Thus, it generally experiences the warmest average temperatures. Chichum Majadas' hotter climate enables producers to grow plants suited to more tropical environments than in Unión Reforma and Los Limones.

The local grower organization currently operating in Chichum Majadas is ACDIMT, the Asociación de Comités Desarrollo Integral Mames Tacanecos. ACDIMT is one of the oldest grower organizations and includes growers from other communities around Tacaná. Due to the community's distance making it more difficult to access, Chichum Majadas' ACDIMT growers have less projects with external organizations than Unión Reforma and Los Limones.

Café (coffee), *arboles frutales* (fruit trees), and *milpa* are prominent in the Chichum Majadas agricultural landscape. Lack of sufficient water can be a limiting factor for growers, but many are experimenting with what warmer-climate crops will grow in the community.

Chapter 4

Traditional and Changing Landscapes

Milpa and Maíz



Nombre en Mam: Ixi'n

Variedades:

Negro/moro, pinto, Rojo, Amarillo ('San Marceño' Amarillo) Blanco ('Compuesto' Blanco) Alto/temporado, Mediano, Bajo/tempranero/violente Zapalote, Olotudo, Polotillo

Fuentes de Semillas:

Guardando la semilla, eligiendo la mejor semilla de cada cosecha para guardar para la próxima siembra Intercambios con vecinos o con familia en otras comunidades

Usos:

Consumo familiar—'el sustento de la vida' Para vender Para compartir con todos Para ceremonias y celebraciones Para mantener la cultura de la gente y la comunidad



Meet the Milpa

To understand the worlds of Chichum Majadas, Los Limones, and Unión Reforma one must understand the milpa. In mappings, in interviews, in daily life, the milpa kept coming up and up and up. Even in discussions of and interactions with other plants, the milpa returned to the story. Because the milpa is history and identity. It is criollo and it is a continual becoming. It is central and essential, constant and constantly changing. The milpa is a lesson in relational diversity: one cannot isolate a single plant from its many companions. Milpa, as the community members use the term, can refer to maíz (maize) itself and/or to the land on which and system by which maíz grows with myriad other plants, like frijol, haba, ayote, güicoy, hierbamora, bledo as well as fruit trees, forages, vegetables, medicinal plants, and more. To understand dynamic relationships of plant diversity, we turn first to the stories of the ever-looming figure of the milpa.

History of the Milpa & Milpa as History-Teller

"Before, this place wasn't like it is now. In that time, when I (was) very young and fresh, here the place was very open ground. There weren't trees. Even earlier, when I was little, there were lots of trees. But the people, the grandparents, cut down the trees in order to plant milpa, to be able to plant their beans, their ayote, their calabaza. But the milpa grew without fertilizer in that time. Through time, much has changed.

(My parents) grew up during that time. They are 92 years old. I, as their son...am here, their first child. I am 62 years old. My wife is 63 years old. In their time, the milpa produced without chemical fertilizers, purely natural...purely organically, (using) the natural organic matter of the

land. With time...there weren't trees...Thus, there was no leaf litter or organic matter...With time, the milpa didn't produce. Then the maize (had) little production, very little. And the people, many had to buy maize...

With time, what did the people do? They looked for where to find money. They went to other places. To Chiapas to harvest coffee, to earn money in other places...They brought many people from Guatemala to work in Chiapas to harvest coffee, harvest maize, harvest beans...And here, the lands no longer produced. Those who had animals, horses, cows, collected organic matter, put it on the milpa field and, in this way, the milpa produced. There was maize. There were beans. Those who didn't have animals—their milpa didn't produce since there was no manure as fertilizer...What did people do? They went to other places to earn money in order to buy their maize for sustenance of life, for their children.

With time, there came chemical fertilizer. It was around the year 1975 that chemical fertilizer entered here ... The (chemical) fertilizer entered through Chiapas ... And the people tried out planting their milpa with it. They bought chemical fertilizer. In that time, it cost 7 quetzales for ... the sack of fertilizer. It had 50 kilos that sack, a hundred pounds ... They bought (chemical) fertilizer and tried out planting their milpa. They applied ammonium sulfate. And so came a great bean and a great maize! What quality of ears of corn, of bean! The people then didn't migrate much to other places. Here there was maize, there was bean.

And through time, as it always used to rain in this land, the rain fell stronger. It eroded the soil a lot. More (chemical) fertilizer was applied so the milpa produced. And the land became accustomed to chemicals. (Chemical) fertilizer prices jumped up, very expensive, like to 780 (quetzales). Then a lot of people had to change. They migrated to the U.S., Chiapas...Us—I didn't leave to the U.S. nor to Cancún. To Chiapas, I went to harvest coffee...

Then, in the year 1987, Pastoral de la Tierra came. The ingeniero Don Juan Monterroso of San Marcos came. He saw that the milpa didn't produce much. Why? Because we had to get in the practice of raising sheep, cows, horses...The cows help...to sustain our lives, satisfy our needs. The ingeniero said, keep raising animals so that the animals create manure. But one has to work a lot...I plant my apple tree, my coffee tree. I keep planting...

We are pastoral de la tierra because we care for the land... (We care for) what the land gives or what offerings the land gives in each place... That is us, as pastoral de la tierra, us as humans, campesinos that live here..."

Emanuel, Chichum Majadas⁷

Pura Milpa y Pastoreo

Time in the communities is not often remembered in dates, rather in small eras, in the way things were before they became different. There is a shared language in which references to '*antes*' ('before') are communally-understood through context rather than always through a clearly numbered year.

One 'antes,' one communally-understood era that arose again and again in interviews and daily conversations was that of when the landscape was 'pura milpa,' entirely milpa, pure milpa. Across communities and across participants, references to a time when the land was 'pura milpa' were commonplace⁸. Evelyn of Los Limones described, 'Los abuelos used to plant milpas

⁷ See original Spanish quote in Appendix, Chapter 1 (1.)

⁸ See Appendix, Chapter 1 (2.) for additional quotes and original Spanish quotes 2.

before. They only harvested milpa. Only milpa. Only milpa was harvested...We cultivated almost pura milpa. There weren't other crops."

In 'pura milpa' times, growers weren't necessarily planting maize, beans, and squashes entirely exclusively. In Unión Reforma and Los Limones, some growers were also growing papa (potatoes), trigo (wheat), and avena (oats). Unplanted, *monte⁹* plants grew up in the milpa in all communities. Beyond these few other crops, the landscape in the 'pura milpa' times was largely characterized by swathes of pasture and by *montaña* (forest). The forest, however, was limited, as it was often cut down in favor of planting milpa or trampled by grazing animals. The more '*descampado*,' open landscape was utilized for and exacerbated by open grazing of livestock. Growers recounted these animals as both a blessing and a curse—their manure was essential for fertilizing the milpa, which received minimal other inputs, but their impact on the land, which they roamed without fences or many boundaries, was harsh¹⁰.

Tiempos del Hambre

"In that (earlier) time, the lands were a little poorer. One planted a lot (of maize) and harvested little. Now I have seen that one plants little, but it does produce. One can see that the maize likes a little more fertility."

Jacinto, Unión Reforma

"Right now, (the maize harvest) is pretty so-so, not so good nor so bad...Before, (during the time of) the abuelos...there wasn't chemical fertilizer. Purely organic, but less of it...Those who had

⁹ 'Monte' will be further explained in Chapter 2, but generally describes plants which grow without growers having actively planted them.

¹⁰ See Appendix, Chapter 1 (3.) for quote.

animals planted with manure. Those who didn't (have animals), didn't. They had to buy fertilizer but there wasn't money."

Beni, Unión Reforma

During the 'pura milpa' times, the abundance of milpa on the landscape didn't always translate to abundant harvests. While some participants recount times when the land was 'fresh' and the milpa grew easily, no one recalls such ease lasting. Indeed, the more the land was planted in milpa year after year with limited rotation, the less fruitful the milpa harvests. Partially, these narratives seemed to be influenced retrospectively by external organizations who later taught communities the popular (and eventually contested) view on sustainable agriculture and conservation—that shifting cultivation (also known as swidden or slash-and-burn agriculture) is bad for farming and the environment (Padoch & Pinedo-Vasquez, 2010). Contrary to this view, shifting milpa agriculture, historically and presently, has sustained Maya communities and lands (Schwartz & Corzo M., 2015). The issue at hand in the communities during 'tiempos del hambre' seemed more one of land pressure—fueled by growing populations and Indigenous land displacements—often limiting growers' abilities to practice long rotation periods (of even 15 to 40 years) and thus depleting soil nutrients on already erosion-prone steep slopes.

Participants largely attributed these low yields of the time to a question of *abono*, fertilizer or manure¹¹. *Abono natural* or *abono orgánico* ('natural fertilizer' or 'organic fertilizer'), which came in the form of livestock manure and urine as well as leaf litter and other plant matter collected from the *montaña*, was the only kind available then. Not everyone had

¹¹ See Appendix, Chapter 1 (4.) for additional quotes.

animals, or at least many of them, and *montaña*, forest was not abundant at the time. Thus, *abono* was limited.

Those who had expansive *terrenos* tried to make up for the insufficient nutrients in the soil by operating at scale. They planted large areas of land in milpa in the hopes that, despite low yields, the maize harvest would total enough to feed their families for the year. Those who utilized animal manure and who had lots of land could sometimes manage sufficient production from the milpa. But, for many, the 'pura milpa' times slipped into '*los tiempos del hambre*,' the 'times of hunger.'

Elder generations in all three communities do not forget los tiempos del hambre. They do not romanticize the past. This is a time they are grateful to have left behind.

In the kitchen, as Sara's *mama*, Manuela, hauls a bucket of freshly-ground masa over to the wood stove to begin forming tortillas for breakfast, I ponder some of the *mazorcas* hanging from the wood beams below the *pajón* (grass) roof. Catching me watching, Sara begins to look over the grains of mazorcas herself. She recalls how, my first brief time here in Los Limones, I was grinding and weighing out maize kernels, samples my future-advisor analyzed for research on mycotoxin levels in local growers' maize. Sara says she has since learned from Claudia about different types of *maíz podrido* (literally, 'rotten maize')—how with certain *maíz podrido* it harms humans as soon as they eat it and even feeding it to the animals harms humans when they eat those animals' meat.

Manuela lifts her eyes from the tortillas she flips on the stovetop to look at me. "People still feed their animals maíz podrido because of the custom of not wasting food."

She dives into telling me about living through *los tiempos del hambre* in her younger years, a time when no form of food could afford to go wasted. Maize didn't produce well in Los

Limones because growers didn't add much, if any, organic matter to the milpa. As a result, people had to go plant milpa in other neighboring areas. The heads of the households walked the distance to arrive at these further fields to harvest and made the same journey home with the harvest weighing heavily in a sack upon their backs. Often, the meal for the journey home was a bunch of guineos (bananas) sticking out of the sack on their back, grabbed from above their head and eaten while walking. By the time the harvesters arrived home, their families had often been borrowing maize from a neighbor for long enough since they'd run out of their own maize that they had to practically give all the maize they'd carried to the neighbors and then head back to harvest more. There wasn't maize to buy. No maize was left uneaten. They toasted maiz podrido and cooked it into *atol de puzunque/puzunc*. Sara's mom remembers eating the *dobladores de maíz* (corn husks) by soaking them, cooking them down, grinding them, and making tortillas. Her family sometimes ate the bare cobs and stalks of corn, prepared in a similar process of soaking, cooking down, and grinding. And some years, for periods, there was no maize left at all. For some meals, Manuela's father used to one *chile* (chili pepper) roasted in *mantequilla de* cerdo (pork lard), nada más, nothing else.

"Tiempos horribles," Manuela shakes her head at the memory. "Horrible times."

Others recounted similar times when, for them, their parents or grandparents, their diets were shaped by necessity, and hunger was a common state for their stomachs. Walking through an Unión Reforma parcela together, Sebastián and Edwin recall a time when people ate '*puro maíz, trigo, trisco, ayote*'—only corn, wheat, the wheat-like grain *trisco*, and squash. In the less lean times of the year, their abuelos made huge pots of atol and tamales. The women carried these full pots to the milpa where others were doing field work. The field workers fueled their day's labor—intense labor as this was also the time when growers worked, as many emphasized,

"con puro azadón," only with hoes—with 10, 15 tortillas and a big jug of atol, a meal composed entirely of maize or wheat.

Poorer families who lacked land to grow much maize were often the first to run out. Milagros recounts how her father spent their few funds on alcohol so her mother had no money to buy maize, even when the neighbors had it to sell. Their family went without tortillas and *tamalitos* (masa wrapped in corn husks and steamed), staples of the local diet, for weeks to months at time. During these periods, they ate *ayote* alone, with no accompaniment, *a las tres veces*, at each of the day's three meal times.

"Difícil! Era muy difícil," resounds Marcos of Los Limones as he shows me, while out walking his land, the tiny abode, now falling apart, in which his family lived as he was growing up and reflects with no idealization on life during *los tiempos del hambre*. "Difficult! It was very difficult."

La Guerra Civil

What often went unsaid, at least directly, about *los tiempos del hambre* was their intersection with the country's Guerra Civil, or as better known locally, el Conflicto Armado ('the Armed Conflict'), which officially began in 1960. El Conflicto Armado nearly never came up directly in conversations or interviews unless I made a point of bringing it up—which I was initially reticent to do for fear that it might be a sensitive topic too taboo or traumatic to openly discuss. Still, I noticed more subtle references in community governance meetings, in extended prayers offered at the Santo Rosario, references evoking previous times of conflict, of "*el tiempo negro*," the dark time.

When I began to carefully broach the topic of the Conflicto Armado and its effects on agriculture and the milpa, I was surprised that my questions were received as inoffensive—no lowering of the voice, darting of the eyes, obvious signs of the stress. Rather, it seemed that the lack of outward discussion of the Conflicto Armado arose less due to current sensitivity to the topic but rather due to a seeming lack of shared collective memory/narrative around it across generations and across and within communities. When I asked younger participants in their 30s and below about the Conflicto Armado, they had little to say about it as they had not lived through it or were children as it was coming to an end. The history of the Conflicto Armado was not officially included in national school curriculum and government investment in education, especially in small rural communities, was low anyhow. While the 1994 Comisión para el Esclarecimiento Historic (Commission for Historical Clarification) intended to combat the "memory of silence" that the national Guatemalan powers were attempting to maintain, official reports rarely make it to communities like Chichum Majadas, Los Limones, and Unión Reforma who often feel at-the-margins. Thus, in these communities, informal transfer of information was necessary but the environment of fear and silence created by the Conflicto Armado (through killings and 'disappearings' of local peoples) prevented local memory-sharing by those most intimately acquainted with the horrors of the war.

This lack of shared memory-construction is also clear amongst the elder generations who had lived through or during the war. They possessed no single shared understanding, even within the same community, of the Conflicto Armado's impacts on the local community. Some participants, such as Evelyn in Los Limones, recall that their community managed to escape much of the violence and terror of the Conflicto Armado¹²:

¹² See Appendix, Chapter 1 (5.) for original Spanish quotes and additional quotes.

"(During the Conflicto Armado), it was somewhat different. How it gave one fear when (people) said, 'They're killing there and they're killing over there'! It always gave one fear. But thanks to God, nothing happened to us...Here in Pin Pin, no. Pin Pin wasn't accused. In the areas of Tocxoc...There, yes, the military was killing (people)...To us, nothing happened."

Others recognized that the Conflicto Armado coincided with a time of poor milpa harvests, but didn't necessarily draw any connections between the two events. Others yet recalled the Conflicto Armado as a hard time. These participants tended to be involved at the time in campesino organizing with groups who were looking to bolster agricultural practices and sustainability in the communities. They recall the risk partaking in such movements put them in, a risk that eventually paralyzed campesino/grower organizing in communities, as David of Unión Reforma details:

"Around the year 1970...here in the municipality, an organization called Movimiento Campesino appeared that brought an Italian or a foreigner from some other country. She was a woman who brought experience working with groups and so organizing began to abound here. After, the cooperatives were founded. Her name was Michelle...She's like you who is here now...That's how she worked, she did the trainings and everything. And she had her promoters from the community. The promoters began to promote soil conservation, whatever the organization promoted. And so the idea of the cooperative was by popular demand. Thus, in the years of the 70s, there was desire to form, like, a cooperative at the level of the municipality." "And the Movimiento Campesino continued during the Conflicto Armado too?"

"Yes...It was more difficult! They kidnapped, persecuted, as we say, the guides, the ones who started (organizing). For example, Michelle—I don't know if she went back to her country, but we lost her. What happened, who knows? She was persecuted for coming here. The risks of the promoters—they were also persecuted people. They were all persecuted."

"You all then?"

"In this case, it was Don X... They persecuted him. They looked for him in his house. They looked for Don Y in his house. Because we were the first (organizers). Thus, yes, we had many risks... Here we are."

"During this time, did the people lose the Movimiento a bit?" "Yes, in this way it was lost. It was blocked. We couldn't work then."

"In what year could you begin to work and organize again?"

"It was after the Peace Accords, '96. Then more or less, but then it was still very little. The people had a lot of fear. Now recently strength is returning, no? Now the people are forgetting everything that happened. And as the era of the youth, well—not everyone knew or experienced the Conflicto Armado. Thus, they don't have fear of anything."

The inability to publicly organize without risking being perceived as a rebellious campesino by the repressive military forces debilitated agricultural-oriented groups that allowed farmers to share knowledge and gain resources, internal or external. This translated to an inhibited and crooked collective memory of the Conflicto Armado. It also translated to milpa fields whose production often continued to stagnate.

When a new option entered the scene, it proved hard to resist.

The Arrival of Los Químicos

"Before, (in the milpa, my parents) sometimes put down organic (fertilizer). If not, they just planted (the maize in the field) as-is. When they were older, the chemicals came." Lidia, Los Limones¹³

In the 1970s, during the global wave of the Green Revolution, chemicals fertilizers and inputs, now often simply known locally as *químicos*, arrived to the communities for the first time. At a time when milpa production was low, hunger was high, war was ever-looming, options were limited, and chemical fertilizer cost only around 7 quetzales for a 50 kilo bag, growers ventured to buy it and try it in their milpas. The results, impactful, continue into the present. As Marcos from Los Limones straighforwardly explains, "When the chemicals came, the hunger ended. Now I have this little potbelly. It's true. That's how it went, around the year '70."

As Emanuel details in his local history of the milpa and agriculture, the immediate outcome of chemical fertilizer applications were big, beautiful, and abundant maize and beans. Many people were able to grow enough to feed themselves and their families through the year, maybe even enough to sell and gain some hard-to-come-by cash. They didn't have to go seeking more land to plant or jobs to work in places beyond the community. What's more, chemical fertilizers, and the chemical pesticides and herbicides that quickly followed, converted the typically back-breaking work of tending the milpa with little more than one's body and an

¹³ See Appendix, Chapter 1 (6) for additional quotes and original Spanish quotes for this section.

azadón (hoe) into a less strenuous activity. Initially at least, chemical fertilizers seemed like a dream realized.

As the years passed, use of chemical fertilizers, pesticides, and herbicides became the norm amongst growers, incorporating so thoroughly into milpa production that many growers continue to feed their milpas a diet of '*puro químico*,' 'pure chemicals.'

This heavy shift toward reliance on chemicals to grow the milpa was not met without doubt or resistance. As the prices of chemical inputs increased, uncertainty bloomed. Some growers recognized costs beyond the money leaving their pockets—costs to the health of their land and their people:

"In Guatemala, the biggest/most important crop here would be this maize. Here, all the people plant maize for daily sustenance and in order to not buy MASECA¹⁴. What we plant is what we consume. Sometimes there are people who before grew (maize) more with purely organic (inputs) but went losing that because over the course of the years the technology came, the chemicals came and this came to change everything (once) organic. Because before, there was more purely organic cultivation/crops. And that was nicer for the people...The chemicals...are a bit expensive but people already began to produce more (with them). For example, the maize, if one only adds organic fertilizers, now it doesn't produce much, because the chemicals came to change it. People today, what they do is, in order to not work much, begin to fumigate the land with insecticide. Now one doesn't work much. But we are already consuming more chemicals. We are trying now to cultivate with organic (inputs)...with animal manure or a mix with fertilizer that we make...with Bokashi..."

¹⁴ MASECA is the brand name of a widely-commercially-available instant masa flour. In the communities, MASECA is generally only used in a pinch or when a family runs out of maize but is considered to produce an inferior masa as compared to home-ground masa.

Noé, Chichum Majadas

"Since I have come to realize (their effects), I haven't at any moment consumed chemicals because the chemicals bring lots of illness that comes to ruin our plantings. It harms our crops, above all the Mother Earth...Chemicals produce, yes, they produce more but it affects our health as much as the health of the vegetables and of the milpa planting."

Elsa, Unión Reforma

Pastoral de La Tierra

As doubts over chemicals continued to grow amongst some growers locally, the Conflicto Armado, after its bloodiest years in the early 80s, began to give way. In the struggle to bring restoration to the *Indígena* and campesino communities who were the war's worst victims, groups began to organize again in movements for campesino empowerment. One lofty organization to partake in this movement was the Guatemalan Catholic church.

Pastoral de la Tierra was born in Guatemala in the 1990s following a movement out of Brazil based in liberation theology, inspired by "El Clamor para la Tierra" and *reforma agraria* (agrarian reform) (USAC, 1988). It emerged as an outcropping of the role of the Catholic church and its priests as agents of resistance during the Conflicto Armado, as advocates for social change for the people.

As part of Pastoral de la Tierra's mission, the diocese of San Marcos dispatched agricultural experts, generally known in the communities as '*ingenieros*' (agronomists), out to rural areas to spread the gospel of sustainable agriculture and community agency. This gospel

was not well-received in all communities. In Chichum Majadas, Los Limones, and Unión Reforma though, when the first *ingenieros* arrived to offer *talleres* and *capacitaciones* (workshops and trainings) on the importance of trees/forest to hold soil in place, on preventing overgrazing by keeping livestock in *galeras* (shelters/enclosures), on fabricating one's one fertilizer/inputs rather than using chemicals, some growers came to listen. Not without skepticism or suspicion, but with interest and a willingness to listen. With time, an alliance between some growers and Pastoral de la Tierra began to develop. Ideas began to energize and inspire them. Practices began to shift¹⁵.

Other growers never showed up to the *talleres*. Some showed up to *talleres* at times, partook in some Pastoral de la Tierra projects, integrated some of the practices they promoted, but never fully 'bought in.' However, those producers with whom the Pastoral de la Tierra teachings resonated became increasingly involved. Pastoral de la Tierra encouraged growers to organize and become leaders of agricultural change.

In Tacaná, the local *párroco* (parish priest) initiated Pastoral de la Tierra in the region in the 1990s. Óscar remembers the ingeniero coming to the church to give capacitaciones when he was just a *chamaco*, just a kid. The talks always interested him, so he went with his brothers to listen. Not long thereafter, Pastoral de la Tierra provided the impetus for producers involved with them across Tacaná to organize themselves into ACDIMT (Asociación de Comités Desarrollo Integral Mames Tacanecos). Even before he had his own parcela on which to put into practice what he was learning in the '*lecturas*,' Óscar was excited enough to become ACDIMT's treasurer in his early 20s.

¹⁵ See Appendix, Chapter 1 (7.) for quotes for this section.

After the párroco who brought Pastoral de la Tierra to Tacaná finished his 8-year tenure in charge of the Tacaná Catholic parish, the next párroco continued the initiative. ACDIMT was at its height with around 100 *socios* throughout Tacaná. Then yet another shift in párroco took place and with the new church leadership came corruption. ACDIMT and Pastoral de la Tierra had begun a campesino bank/community credit project. A corrupt leader took all the money that socios had invested and fled to Mexico. As a lot of growers lost faith, this was the beginning of the diminishment of Pastoral de la Tierra's once-large presence in the area, according to Óscar.

Red Kuchub'al, Community Grower Organizations, and Beyond

Even beyond Tacaná, a more recent conservative turn by San Marcos' Catholic church has lowered the profile of Pastoral de la Tierra, decreasing their work and impact, throughout the region. The current *obispos* (bishops) have moved away from *reforma agraria* because they're in the pocket of those powerful interests who rule Guatemalan society and who consider *reforma agraria* radical and undesirable. Yet, as Pastoral de la Tierra was falling by the wayside, one of its *ingenieros*, José Luis, had a vision to see the efforts built with the communities continue. He founded the non-profit Red Kuchub'al.

Red Kuchub'al (Kuchub'al is Maya-K'iche' for 'solidarity and mutual aid'), based out of Quetzaltenango, is an organization of organizations, a network of local/community grower organizations. They work with 12 organizations across the southwest of Guatemala, in San Marcos, Quetzaltenango, Totonicapán, and Retalhuleu to promote agroecology, food sovereignty, and local solidarity-based economies among the smallholder growers who are its *socios*. While Red Kuchub'al's work with the communities has continually evolved, their presence continues in Chichum Majadas, Los Limones, and Unión Reforma. The relationship between community growers and Red Kuchub'al has created a dynamic that has reshaped the landscape of the milpa as well as of other plants. Francisco¹⁶ of Los Limones credits Red Kuchub'al and its agroecological trainings for giving them the resources to conserve soil, to prepare home fertilizers, to make plant-based medicine for livestock, and to reduce chemical usage. "We are working almost more than anything on conserving the environment, not hurting it yet even improving it more..."

As a network of organizations, for growers in a community to partner with Red Kuchub'al, they must be officially organized. This motivated growers from all communities to solidify formerly-loose organizing into official grower organizations. In the case of Chichum Majadas, growers kept their ties to ACDIMT. In Los Limones Pin Pin, ADIMAG (Asociación Desarollo Integral de Medianos Agricultores) came together. Unión Reforma growers along with other Sibinal communities formed ASDISMA (Asociacion Sibinalense para el Desarollo Integral "San Miguel Arcángel").

Within each grower organization, one or several growers are elected to serve for terms as *'promotores'* ('promoters') for Red Kuchub'al. Promotores are responsible for acting as intermediaries between Red Kuchub'al and the grower organizations, leading partnered projects, checking on other *socios'* (members of the grower organization) progress in developing their *'parcela integral'* (agroecological parcela), and teaching other socios agroecology principles and practices. In taking on this responsibility within the grower organization, *socios* and especially *promotores* have built confidence in their own knowledge and abilities.

¹⁶ See Appendix, Chapter 1 (8.) for additional quotes and original Spanish quotes for this section.

Francisco describes this experience, "I also worked for Red Kuchub'al for around 5 years as a promotor, giving the talks, also teaching lots of communities. It was around Xela, it was also around Huitán and here, Pin Pin, (that I worked) teaching our people. How to make organic fertilizers, bokashi and other fertilizers easier to make...Now we have these practices and we aren't going to forget them. And this we are leaving for our children."

In these empowered roles, the growers and their local organizations have begun to take on their own projects, with other organizations beyond Red Kuchub'al.

. . .

Amidst all this agricultural change, the milpa remains the center of community members' tellings of the local history. It remains the baseline against which other crops and cropping systems are compared. Yet the milpa is more than a baseline—it's a constant companion, an ancestor like the abuelos. History is told through the milpa because the milpa and the growers have a long-running and storied relationship. In this way, the milpa is quintessentially criollo. In this way too, the milpa is identity.

Diversity, Identity, and Diversities of Identities in the Milpa

"¿Quiénes somos sin el maíz?"

"Who are we without the maize?"

Ricardo, Chichum Majadas

Mam, Maya, Indígena, Mestizo?

An inquiry into the history of the milpa quickly becomes an inquiry into identity. Maize, common across much of the Guatemalan landscape, has different characters in different contexts. It can be found growing in sweeping monocultures of 'improved' or genetically-modified varieties planted by, typically, ladinos or foreign- owned agricultural enterprises. Especially prominent on the flatter expanses of the coast, growers in the communities where I work often refer to this type of maize by the shorthand '*maíz de la costa*,' 'corn from the coast.' *Maíz de la costa*, while typically high-yield and relatively cheap, is rarely criollo.

The *criollo* sort of milpa, while it can be and is grown in coastal regions too, is heavily associated with the Guatemalan highlands, the *altiplano*, and with the high number of Mayan descendants who live there. On the surface, this story fits for the communities of Chichum Majadas, Los Limones, and Unión Reforma. Yet, while the planting of a *criollo* sort of milpa is nearly universal, defining identity through typical ethnic/racial labels quickly becomes slippery. While most of the community members recognize they are of Mam Maya descent, many also don't readily identify as Mam. Many participants informed me that their grandparents or parents were Mam, but that they themselves were not.

Evelyn, of Los Limones, confirmed¹⁷ that the abuelos were Mam, that they spoke Mam. When I asked if people of the community, the children and grandchildren of these abuelos, were also Mam (or Maya or Indígena or kind-of mestizo), she replied that they were "almost more mestizo now. Now there aren't Maya like before, who dress in the traditional skirt, who dress in the güipil. Now, people don't do that anymore. Now pure dresses, pants..."

Mayra explained the situation of Mam-speakers in Los Limones: "Yes, there are still some. Some—not a lot anymore. The most elderly. Because (people) of my age, we almost don't know anything (of Mam)." Mayra's grandparents have already died and now her parents can understand some Mam but not really speak it. Good-humoredly laughing at her own uncertainty, she struggled to describe her own identity, neither Mam nor mestiza, in categorical terms, "I don't speak Mam—I don't know what I am! Ay!"

Joining in our conversation, another grower Sara jumped in, "Mestiza, because Mam has mostly already been lost." After I asked whether community members identified as Indígena (Indigenous), there was a long pause. It was a complex question. After consideration, Sara decided, "Due to the language, not anymore. But yes, we are Mams, because we are from the area where at some point Mam was spoken. But now it has been lost. But, yes, we come from this Mam culture."

Across communities and participants, the connection between the Mam language and the Mam identity was reiterated. To be Mam was to speak Mam. Often too, it was (for women, at least) to wear the *traje tradicional*, the traditional clothing of the *huipil/güipil* and the *corte*. Thus, in previous generations—when Mam was the common language and *castellano* (Spanish) was still secondary, still being learned—nearly everyone was Mam. Now, those generations have

¹⁷ See Appendix, Chapter 1 (9.) for more quotes and for Spanish versions of quotes.

become the current *ancianos*, the elders in the community. Some of their children understand the language, speak a bit of it, while their grandchildren know less yet of Mam language. Between these generations, the passing down of the language became stifled.

When identity is not only an inheritance but also a practice, it becomes fluid, malleable. As the Mam language eluded the children and grandchildren, who did they become?

Some of the younger generation struggle to understand why they never learned Mam. They recount stories of being shooed from the house when their grandparents had over guests with whom they would speak Mam, of parents and grandparents saying they were mocked for speaking Mam, of the local schools not teaching in Mam. Over and over again, people recognized that not being taught Mam as children set them up to speak more castellano. Many mirrored the sentiments of Elsa (of Unión Reforma) that it would have been nice if her grandparents had tried to teach her Mam, that "it would have been nice if they had let us the language."

Comments alluding to a time when the *abuelos* were made fun of for speaking Mam harken to a time in Guatemala, which still casts a long shadow into the present, of deep racism against *la gente indígena* by the *ladino* elites (Arriaza & Arias, 1998; Velásquez Nimatuj, 2008). This prejudice permeated onto the ground, causing shame in many Indigenous communities, a shame that caused some in Chichum Majadas, Los Limones, and Unión Reforma to attempt to stop speaking Mam around non-Mam speakers and around their children. Many of these children, instead, went through at least some basic levels of education at small rural schools with teachers who came in to teach from outside the community, teachers who largely didn't speak Mam (or other Maya/Indigenous languages) and certainly didn't teach *in* them. Schools taught castellano. This national project of Indigenous erasure was not without some success. When community members of Chichum Majadas, Los Limones and Unión Reforma engaged in discussions around labels of ethnic identity, they were often at a loss. Those who didn't speak Mam recognized they didn't fit the label of Mam. But then where do they fit?

In interview after interview what became clear was that individuals didn't find the need to fit themselves into fixed labels at all. Indígena, mestizo, of Mam culture, Maya, a little of this, a fair amount of that—participants variously rejected and identified with these, sometimes partially, sometimes simultaneously, sometimes only in specific contexts. Where identity is fluid, where it is not just inherited but practiced, context is key. Some participants who seemed jarred by my questions that skirted around ethnic identity would later in the interview or in a separate conversation, refer to themselves as a particular identity within the context of a particular situation. For some participants, it was more necessary to draw boundaries around who they were not than it was to draw boundaries around who they were allowed to be—many made clear that, despite not fixing themselves into a different category, they were, by no means, ladino.

As the rain poured down in droves onto the sheet metal roof of the adobe-walled kitchen, Edwin and I pondered all manner of topics as we waited out the storm to be able to return to the field. "So if you say that you're neither Mam nor ladino, what would you say that you are?"

Edwin paused, furrowing his brow in consideration. "*Diría que somos de la raza Indígena*." "I would say that we are of the *raza Indígena* (Indigenous race)."

I noticed Edwin's subject switch—my question had been about him, but his response referred to the 'we.' Perhaps one of the missed understandings in my previous conversations resulted from my focus on asking individuals to pinpoint their own identity. Individual identity didn't seem a topic of too much concern or contemplation for most participants. I began to notice, rather, that the community was much more often the focus of attention. The sense of collective identity was strong. People rarely faltered to name it.

Of Chichum Majadas, Noé stated "it's a Mam community" and that for that "it's beautiful." In a discussion explaining that ACDIMT stands for Asociación de Desarrollo Integral de Mames, Ricardo affirmed that ACDIM and the community are 'Mames,' Mam people. In the survey of 73 Sibinal growers (and 4 Tacaná growers), around 85% of participants said they did not speak Mam. But when asked if they pertained to an ethnic *group* (rather being asked their individual ethnicity), about 56% people participants responded 'Mam,' around 21% responded 'Maya', and around 19% responded 'Indígena.' In other words, all but three participants responded that they were part of the 'Mam,' 'Maya,' or 'Indígena' group.

Identity Reclamation & the Milpa

For as often as I heard that Mam was very little practiced, I also heard it infused into conversations, some words tucked into phrases about the milpa, whole brief conversations over the de-kerneling of *mazorcas*. I also began to gain a reputation in the communities as the woman interested in Mam. Mam started making its way to me, as folks I was around called over passing neighbors who they knew to speak Mam—"*Dile algo en idioma a la seño*¹⁸." "Say something in the language to the lady."

It became apparent that I was not alone in my desire to learn even a little bit of Mam.

¹⁸ I was often referred to by the neutral term of 'seño' since folks didn't know whether I was a 'señorita' or a 'señora.'

A ring of community members squeezed into the bedroom of one neighbor's home rise from their knees to take seats on an assortment of gathered chairs, benches, the side of the bed, children on knees. We have finished the prayers of the Santo Rosario—a late afternoon staple in the October-long celebration of the Virgin Mary in Los Limones. Before anyone can depart, the señora of the household quickly exits the room and reenters with steaming cups of café and leafwrapped tamales. Her children help to distribute them to all those gathered. A light rumble overtakes the room as folks break off into conversation. A number of people look in my direction and a few of them, unsure whether I speak Spanish, inquire to Sara, who sits next to me, about who I am. I speak up.

"Me llamo Marisa. Estoy aquí trabajando en un proyecto con los socios y el grupo de mujeres." "My name is Marisa. I am here working on a project with the socios (of the local grower organization) and the women's group." More people turn their attention, a bit surprised to hear the gringa able to talk to them. Someone asks me if I can speak English as well as Spanish. When I respond affirmatively, a few folks start to joke about how they'd like to learn English, that maybe they could learn English from me. Sara laughs and says we could do an exchange—I could teach them English and they could teach me Mam.

"She wants to learn Mam." Sara tips her chin at me. A chorus of "Oh, sí?" and raised eyebrows.

"But who still speaks Mam?" someone chirps. A discussion ensues about who speaks Mam. Neighbors ask each other if they speak any. Some cite reasons that they only speak a little, only understand, or don't speak any—largely that their parents didn't teach them.

"She speaks Mam." Evelyn, a member of the women's group with whom I've bonded over our affinity for laughter, points out an elder woman in the opposite corner of the room. She nods, offers a sentence of Mam that few understand. Then, she smiles in my direction, translating into Spanish that she'll teach me Mam if I take her to the U.S. Laughter breaks out.

People start to list other members of the community not present who speak Mam, not only to me but as a curiosity shared amongst all gathered. Evelyn shares the story of a man who spoke "*el idioma*," as many refer to Mam. He sang very pretty songs in Mam so 'they' ('they' being some foreigners with money, whoever exactly they were) flew him to France to perform all around Europe, paying for his whole trip. The Frenchmen and the Spaniards loved it! More surprise amongst the group.

In response, someone laments how teachers discouraged them from speaking Mam in school. Someone else points out that they should have been encouraged to speak Mam in school, should have even been teaching it. Mayra, the afternoon's prayer leader, declares that they should be able to receive classes, that they offer Mam classes in Tacaná so they should be funded to be able to participate in these classes. "It's important! It's our language and we should have the right to learn it."

In a wave of indignation and inspiration, head nods of agreement flow across the room. Someone turns the attention back to the elder woman across the room. "Let's start now! Sing something for us!"

The woman explains that there is a Mam song that everyone used to know. Eager to hear, the audience implores her to sing. She stands and, with an air of confidence, sings the song through. After a pause, the room applauds.

While I frequently asked people directly whether they spoke Mam and then started discussions about why they didn't (or didn't much), I wasn't directly asking those who didn't speak it whether they would like to. Nonetheless, many conversations on why Mam wasn't

learned turned into proclamations of wishes to be able to speak Mam. Perhaps people sensed my interest and mirrored it. Yet, the underlying sentiments for re-learning Mam seemed rooted in a recognition of its value for community identity and knowledge. Sitting on a hillside in Unión Reforma on a break from hoeing up a new bed to plant onions, Gloria and Rudy told me how the *abuelos* thought that it didn't benefit them to speak Mam, "but now, we believe, all languages, all dialects have their value."

To speak Mam is to be Mam. Thus, to relearn Mam could be to become Mam again. Or perhaps it would more represent a continual becoming, identity that transgresses easily-defined bounds, that spirals rather than moves along a singular axis of progression. When identity is also a practice, the possibility for reclamation and transformation exist simultaneously and can happen at the same time. While many brought up a desire to learn Mam, no one specifically brought up a desire to be able to call themselves Mam again. Rather, community members in Chichum Majadas, Los Limones, and Unión Reforma were less concerned with what to call themselves and more involved with practicing their identities in other ways—through relationship, with their hands in the milpa.

Milpa as Identity

"Somos gente de maíz."

"We are people of the maize." Manuela, Los Limones When what remains of the Mam language is uneven in memory, what is remembered speaks to something important. Among those who could speak some Mam—and even among some of those who claimed at first not to know any—words for crops, foods, plants were commonly recalled.

After Emanuel (Chichum Majadas) had called over his wife to teach me to say 'vamos' ('let's go') in Mam, Emanuel's elderly father strolled over to tell us it was time to go up the hill for lunch at his daughter's home. "Are y'all teaching (Mam)?" He contributed to the lesson, repeating the phrase 'let's go eat' in Mam. He continued, "Maíz is ixi'n. Frijol is chenaq'."

Marcos (Los Limones), upon asking him whether he learned Mam, quickly began teaching me as well. As he demonstrated how to say 'woman' and 'man,' 'young lady' and 'old lady' in Mam, he emphasized the importance of speaking from the throat to properly pronounce the words. When he told me maize, "ixi'n," bean, "lo'ti'j," I tried repeating after him with the same throaty, guttural gusto. Despite my best attempts, my pronunciation was extremely lacking. Marcos broke out laughing at the sounds coming out of my mouth. I returned his laughter when he joked, "Nice to be with you, but I'm gonna' go," and then, in English (as Marcos had learned a bit during a few years working in the U.S.), "No more please."

The milpa, its plants serve as a key memory vessel for Mam. This is no accident. Mam is stored in the milpa, because the milpa is itself an identity. When participants discussed why they planted milpa, the reasons surpassed the practicality of producing food to eat. The milpa, maize was the '*sustento de la vida*,' the sustenance of life. It was sacred, it was celebrated. Its life was so intricately woven into the life of the community that it was often hard to separate the two. In this way, to ask why growers keep planting milpa was partially unanswerable, like asking

someone why they breathe. It was essential, second nature. As one participant responded when I asked him this question, "Quiénes somos sin la milpa?" "Who are we without the milpa?"

In these communities where Mam-ness and Indigeneity are contextual identities, the clarity of identity of 'people of the milpa' permeates through the communities' cultural lives. In this identity there is potential for continual becoming, for practicing identity through relations of cooking and eating, placing seeds in the earth and harvesting *mazorcas*. The clarity of the identity of the milpa as criollo also permeates the communities. Here too, within the milpa, there is potential for continual becoming, for all plants amidst the maize to come into relationship and become criollo.

Becoming Criollo

In Chichum Majadas, Los Limones, and Unión Reforma relationship runs deep in the milpa. The importance of relationship between growers and the milpa is what makes the milpa quintessentially 'criollo.' In all communities, the milpas being planted and grown are milpas criollas. Across field mappings, only one grower had a non-criollo variety of maize planted—a small test plot of sweet corn. When is a plant criollo? In the case of maize, its long history of relationship with the communities makes assessing this more straightforward for growers. To find the answer(s) begins by looking to the seeds. Maíz varieties which are open-pollinated whose seeds had been saved and passed down through the generations are 'criollo.' Thanks to the extent to which maize seeds have continued to be saved by growers, the term *maíz criollo* holds within it a great diversity of varieties, distinguished by colors, sizes, growth patterns. Depth of relationship gives name to all this variety. After all, growers' deep attunement to and

involvement in their criollo maize life cycles—actively selecting seed for certain qualities and carefully planting to prevent cross pollination which would diminish varietal differences—is key for facilitating and maintaining the diversity of criollo maize that makes it resilient to diseases, pests, and extreme weather patterns.

Relationships abound within the milpa as well, for the milpa signifies both maiz itself and also all the plants growing alongside the maíz. Who these other plants of the milpa are varies across place. For most growers in the communities where I worked, maize, beans, and squash are the staples of the milpa. The beans—most often 'isich' or 'isiche' variety—growing in the milpa were nearly always called criollo too. The different plants from the cucurbit family—usually avote in Unión Reforma, avote and occasionally güicoy in Los Limones, mostly calabaza and guicov in Chichum Majadas—were consistently called criollo as well. The centrality of these three crops to the milpa tied to their criollo nature. Other plants cropped up in mappings of the milpa as well—haba, guisquil/chayote, hierbamora, apazote, colinabo, bledo, pastos, even cilantro, miltomate, fruit and coffee trees. It's notable that most of the other plants which were less commonly a part of growers' milpas also fit less straightforwardly into the category of 'criollo.' The longevity and constancy of relationship is key to what makes the main triad of the milpa so consistently recognized by growers as criollo, but other plants which are newer to growers' milpa fields can also become criollo if they became well-integrated into the milpa and/or well-known by the growers. Relational agrodiversity is embodied in the milpa. This is not only because relationships have long abounded within the milpa and between the milpa and growers but also because new formation, re-formation, and renegotiation of relationships is ever possible. Through relationship, identity—of plants and humans—is a continual becoming.

While within-community or within-family sourcing of seed might make identifying a plant as criollo more straightforward, the meaning of 'criollo' does not end with this starting point of relationship between grower and plant. Within the 'criollo,' solid and trusting relationships between growers and plants also make room for change. Mirroring the fluidity of human identity within the communities, 'criollo' plants and agriculture are not beholden to stagnancy, to immoveable bounds.
Changeable Traditions and Traditions of Change

The longevity of relationship between growers and the milpa makes it a ripe place to contain and maintain traditions. Indeed, when I asked growers about agricultural practices passed down through the generations, about knowledges and customs, the milpa was over and over the center of responses.

At the same time, the other dynamic of such an ongoing relationship is inevitable change. In Western narratives, when tradition and change are put in a room together, the overriding result is near inevitably loss. Loss does paint part of the narrative of the modern milpa in Chichum Majadas, Los Limones, and Unión Reforma. Yet, so does tradition as something that is allowed to change, encouraged to grow and take new form.

Knowledges Alive in the Milpa

The milpa moves through time with a rhythm. The practices of the milpa are stamped throughout the year and cycled across years. *La siembra, la limpia, la corta de hojas, doblando, la cosecha de elotes, la cosecha de mazorcas*. Planting, cleaning ('weeding,' in a crude translation), cutting the leaves, bending the stalks, harvesting elotes, harvesting mazorcas. Within this rhythm, there is a dance, a choreography—certain ways by which each practice of the cycle is performed.

1. La Siembra

Planting begins several months into the year, as the dry season, *el verano*, starts to give way to the first rains of the rainy season. Most growers await a specific date, the same date as always, to plant the milpa. This set date, however, varies across communities, between growers in the same community, and across multiple parcelas of the same grower(s). In Los Limones and Unión Reforma, the higher altitude communities, planting dates ranged from as early as March to as late as late May. In Chichum Majadas, the lowest altitude and warmest community, planting dates ranged from May to sometimes as late as July. The heat in Chichum Majadas can cause the soil to quickly dry out, making it important for growers to wait for enough rains. Yet, the heat also quickens the growing cycle and leads to a later first frost date, so growers don't have as much pressure to rush to plant earlier.

Within the same community and even across different milpas of the same grower(s), elevation can vary a fair amount due to the communities' location on steep mountain slopes. Other in-community variation of planting dates can largely be attributed to variation in maize variety and variation in soil types. Certain varieties of maize, especially those of shorter stalk height (*bajo, tempranero, violento*), require less time to reach the point of harvest and can thus be planted later. Across the communities, growers referred to two main categories of soil type *tierra suelta/polvorosa* (loose/sandy soil) and *tierra dura* (hard soil). *Tierra suelta* is a softer soil that can more easily be worked earlier in the season. Parcelas with this soil type are often planted into milpa as early as March when rains are about to begin or only just beginning. *Tierra dura* is a harder soil that needs a number of rains to soften it before it can be worked. Parcelas with this soil type are usually only planted into milpa after the rains have consistently begun, often as late as May.

The moon is also an actor in the timing of the planting of the milpa¹⁹. Growers watch the sky, waiting for the moon to wax to full before putting the seeds into the earth. Timing planting with the cycle of the moon is key for the milpa to grow up strong enough for the maize stalks to not prematurely bend, break, or fall over.

When the time to plant nears, growers prepare the land²⁰. In the wake of the 'pura milpa' times, growers were beginning to recognize soil degradation and erosion as an issue. As support from Pastoral de la Tierra and later Red Kuchub'al and other organizations began to trickle in, soil conservation became a priority for many growers, especially *socios* of the local grower organizations. Now, many milpas are terraced, *con terrazas*, with *barreras vivas* (living borders) of forage grasses lining the terrace edges to help prevent erosion and retain soil moisture.

Even with the movement toward soil conservation in the milpa fields, plowing (manually, not with tractors) remains a relatively common way to prepare the soil for milpa planting. At the time of plowing, most growers now apply manure and fertilizers (some natural/organic, others chemical) to the field to prevent soils from becoming too nutrient-depleted. As the families prepare their fields, they also prepare their seeds so they will be ready to sprout upon entering the ground²¹.

The practices of the milpa are not only the results of intellectual knowledge, passed down and experimental. They also result from the long and storied connection between the communities and maíz criollo. They are the result of a relational agriculture, an agriculture in

¹⁹ See Appendix, Chapter 1 (10.) for quotes.

²⁰ See Appendix, Chapter 1 (11) for quotes.

²¹ See Appendix, Chapter 1 (12.) for quotes.

which grower, land, seed, sprout are all connected, all have roles to play. Thus, certain practices of the milpa are customs that maintain the good standing of these relationships, offering respect from the growers to these other actors, initiating a dialogue between them.

Most growers tend to practice these customs at later points in the growing cycle of the milpa, often beginning at the time of the *corta de hoja*. However, Francisco (Los Limones) recognized even a small ceremony his family practices at planting:

"Speaking of planting, we always de-kernel the seed, we leave it overnight with a votive, a candle, and we request from God that the seed multiplies. And to this day almost we do this. Not so many people (continue), but there are still some."

2. La Limpia y La Corta de Hoja

After planting, growers' next main interaction with the milpa is a *limpia*. *Limpia* most easily translates into English as 'weeding,' but it most directly translates as 'cleaning.'

Once the milpa has begun to grow, growers 'clean' other plants (though not necessarily all other plants) from the field. This is usually an all-hands-on-deck family affair. Some families perform just one limpia through the milpa's entire growing cycle, while other perform a couple or a few, including sometimes before planting or when the maize is still small²².

A few months after planting the milpa as the early leaves have developed on the stalks of maize, most growers perform the *corta de hoja*, cutting leaves from the milpa²³. They utilize the maize leaves they cut to make the first tamales wrapped in fresh maize leaves of the season. So

²² See Appendix, Chapter 1 (13.) for quotes.

²³ See Appendix, Chapter 1 (14.) for quotes.

begins the first outputs of the milpa for the year. While the practicality of using these first leaves as a vessel to create food is astutely intelligent, 'output' nonetheless doesn't capture how these leaves are viewed as a gift, as a point of gratitude for Earth, to God. The harvesting of milpa leaves, as much as it is practical, is also ceremonial and celebratory, a chance for the convening of plant and human family:

"(The abuelos) had customs even to cut the leaves. They, when they cut the leaves, they recount, that first they would begin to cut in the four corners and lastly they cut in the very center. And that day they killed hens for criolla hen soup. Afterward, they passed hot leaves over the men's hands. They said that it got rid of cramps so that they could endure working cuerdas and cuerdas of fields and so that they wouldn't tire, wouldn't tire. So they used to say. And the first little mug of soup (went) in the milpa field, in the soil. They used to say, 'Mother Earth always eats first, afterward us.' They used to have beautiful customs, but now people don't practice them anymore. Some do. When cutting the leaf, we always do this, slaughter some hens, invite our relations. When someone goes out to cut the leaves, they also pass (leaves) over the hands of the men, of everyone so that they don't cramp. It's a custom...We do continue practicing." Luz, Los Limones

3. La Cosecha

While leaves are the first harvest of sorts from the milpa, in the months following growers, after patiently waiting through uncertain weather, are able to harvest the more literal fruits of their labors. Maize is an abundant giver, offering two distinct harvests—first the harvest of elotes and later the harvest of mazorcas.

Elotes are the younger, tender ears of corn. They can be (and with great gusto are) eaten fresh. The most tender ears are prized for eating right off the cob, boiled up in a pot or grilled over open coals. Tasty enough to be consumed plain or with a sprinkling of salt and squeeze of *limón*, many children beg their parents for a few coins to run to the *tiendita* (corner shop) and buy little bags of mayonnaise and *chile* with which to douse their ear of hot elote.

Elotes to be prepared in this way are the first to be harvested. Elote for atol is next. Atol de elote can be served as warm thick beverage, often sweetened in the preference of younger generations, or as a hot savory porridge topped with beans and chile to one's liking as usually favored by elders. On the later end of the elote harvest, as the grains start to mature they become firm enough for the making of tamales de elote and eventually tortillas de elote, even pan de elote or quesadilla.

Due to the same variations that impact planting timing (and the resultant varied dates of planting), exact timing of elote harvest varies between and within communities, and on different parcelas of the same family. It can begin as early as September and some even continue to harvest into the beginning of November.

Having had the good fortune of being in the communities twice during elote season, I witnessed the excitement that the time inspired—a special time, for elotes only come around once per year for limited few months. This excitement swept me from one home to another depending on which family was celebrating their elote harvest on any given day with a seemingly endless feast of fresh elotes, atol de elote, tamales de elote, and often tender ayote/calabaza/güicoy (and of course, 'normal' tortillas from masa) as accompaniment. Whole crowds of relatives poured into or passed through small kitchens. In the words of Ofelia

(Chichum Majadas), "*Cuando alcance el elote, un atol de elote para toda la familia.*" "When there is enough elote, atol de elote for the whole family."

The harvest of elotes aligns, not coincidentally, with certain rituals²⁴. In Chichum Majadas and Los Limones, the Día de San Lucas on October 16th is an important celebration, a religious celebration but also a celebration of the harvest. The sharing of elote is a central component of the day. Agustín (Los Limones) describes the day's importance:

"The tradition that we maintain, as cultural and religious, is that when the time of the elotes arrives, the Day of San Lucas is celebrated. The church celebrates the Day of San Lucas. We believe in that culture, that tradition. Apart from tradition, it's part (of it) that we give thanks to God because there are elotes."

In the first days of November, elote is also an important feature in the Día de Todos Santos (All Saints' Day) and Día de los Difuntos (Day of the Dead)²⁵. Luz explains:

"Nowadays, the majority make lots of tamalitos de elote, atol de elote, tortilla de elote for Día de los Difuntos. Now they're accustomed to taking the tamalitos to the cemetery to leave some BIG tamalitos there, or a little atol left there over the dead."

The yearly cycle of the milpa culminates when it is time to *tapiscar, levantar*, or *cosechar* the *milpa*. This is the time to harvest the mazorcas, fully matured ears of corn with hardened kernels that can be stored to become the source of masa for months thereafter. Many growers precede the harvest of mazorcas with *doblando la milpa*, bending the stalks of maize in half. A practice passed down through generations, growers say it helps to dry the maize more quickly, preventing issues of disease occurring before harvest.

²⁴ See Appendix, Chapter 1 (15.) for quotes.

²⁵ See Appendix, Chapter 1 (16.) for quotes and Spanish version of quotes.

Timing of harvest varies according to planting date, environmental/climate conditions, and variety of maize. Some growers harvest mazorcas as early as October, others as late as January. They know it's time once the maize is fully dry. Nothing is wasted. Leaves of the milpa and plants growing below the milpa are used as livestock forage. Children chew the sweet juices out of maize stalks.

While some growers do not recall any customs that they practiced at the time of harvesting the mazorcas, others yet describe acts of coming together to share in the labor of harvest or of recognizing the harvest with the slaughter of a sheep or hens and a communal meal²⁶.

Once all the grain is harvested, growers store it, the precious base of their diet for as many months as they can make it last. However, they also make sure not to eat all of their mazorcas. Indeed, they pay attention to which mazorcas have positive attributes and select seeds to set aside, saved for planting next year's crop²⁷. These prized mazorcas, these choice seed hang like proud ornaments alongside doorways, from the rafters of homes.

Where Is the Milpa Going? To Lose or Not to Lose

The yearly rhythm of the milpa season is rich with ritual, rituals most often taught by grandparents and parents to their children. Yet, within some of the narratives, one hears how not everyone is carrying on with these traditions²⁸. Joel (of Los Limones) said some growers

²⁶ See Appendix, Chapter 1 (17.) for quotes.

²⁷ See Appendix, Chapter 1 (18.) for quotes.

²⁸ See Appendix, Chapter 1 (19.) for quotes.

continue milpa customs, while others do not. "A part of the culture of our community is being lost. But yes, the culture of (this place) is beautiful."

The sense of loss of traditions accompanying the milpa practices, as expressed by growers, does not seem to derive from a disinterest by younger generations in carrying on traditions. Rather, some growers simply state that the traditions are less common because planting of the milpa itself is less common. Across communities, a general sentiment arose that there is a local trend toward planting less milpa or giving up planting it at all. The reasons behind this seeming shift away from the milpa are multi-layered²⁹:

"It's less (milpa than before). Because before we used to plant close to 150 pounds. There were corn fields, there were granaries. The granaries weren't big enough (for all the maize). My mother-in-law had some blankets, there she piled the maize and shut the door. No one entered there, since that same maize was sold in order to buy fertilizer, to buy chile, salt, a bag of rice to eat. Beans, one harvested 4000 pounds. She had another parcela of land over there, up there. There more maize was planted. For that reason, when she took maize to sell, she sold 4000 pounds. She went to sell 1200 pounds of beans and the rest to eat."

Ofelia, Chichum Majadas

"Some (have) children (who) have grown up and then they go and stay in another department or municipality to live. Now only the two parents remain and they can no longer work (the milpa)... Like over there, look, is pure woods and monte plants. Before they planted all of it in milpa, they cultivated all of it...The owner of this land went to live in San Marcos. And afterward, he left the

²⁹ See Appendix for quotes 20.

land abandoned. He doesn't live here anymore, can't work (the land) anymore. Already the monte have grown. Now only the animals live there."

Luz, Los Limones

"I have little land for producing maize. I have a certain quantity of land—unfortunately, it is for forest. For forest it goes. In this area, the majority of people leave their land for forest. Thus, there is now a lot of damage, many animals, birds, squirrels, whatever animal does damage (to the milpa). Thus, one can't (grow milpa) because one ends up losing instead of earning...Only in little parts (of land) some are producing maize."

David, Unión Reforma

"(People in the community) say (the milpa) doesn't turn out. The maize harvest is late, they say. For example, those who plant now are starting to plant flowers. They used to plant maize, but now they say other crops produce more quickly, like flowers, potatoes. They say that, with the maize, it's more work. And now the (wild) animals are many...In my case, I don't have a son to cultivate (the milpa), so I keep planting maize...I already know how to plant maize and now to plant another crop, well, I don't..."

Elsa, Unión Reforma

"Now (the milpa) has decreased due to the (lack of) parcela. Before, (there was more milpa), because many parents had lots of land and now they don't. Because the brothers, each one with their own parcela—there (with the division of land) it decreased. The parcela shrank." Beni, Los Limones "Here, (many have stopped planting milpa). Because others don't have the time. They work in other areas. Sometimes they work in offices. As professionals, as teachers. It almost doesn't leave them time. Thus, they can't produce (the milpa), right? They dedicate themselves more to their jobs."

Jacinto, Unión Reforma

"Now the production of milpa is decreasing...The wind comes and knocks it down. Thus, we have a big loss...What is causing us problems are the pests/plant diseases..." Ricardo, Chichum Majadas

The narratives imbued with loss are punctuated with complex reasons for the decreased milpa. Some cite how the milpa requires a larger swathe of land for significant production and how the land has become divided into smaller and smaller parcelas as it has been passed down from a single pair of parents to their oft-many children. Some, especially in Unión Reforma, point out that many community members work in town as professionals and thus have limited time for working the milpa too. Others yet have moved entirely out of the communities for the time being and the parcelas on which their milpas once grew have now become hosts to 'wild' plant life. Even among those who still dedicate themselves predominantly to agriculture, some have found they prefer to dedicate more of their time to other crops, especially those they perceive to require less work, to have shorter growth cycles, or to be more productive/profitable. Some of those who still plant a fair share of milpa feel that it has become less productive or

harder to grow, due to big winds that come and knock over the stalks of maize and an increasing amount of pests and disease in recent years.

Yet, these reasonings and this very real sense of loss are indeed punctuations in a larger story of shifting relationships with the milpa and the larger landscape of agrodiversity.

Change in the Milpa

As I walked from home to home in Unión Reforma, visiting growers, something odd began to emerge³⁰.

I continually heard, from many different people in Unión Reforma, that only 2 or 3 or 4 people in the community still grew milpa. Many of these same people, including ones who didn't count themselves in this local milpa tally, would then proceed to show me their planting of milpa. Indeed, the field mappings—based upon the plants the growers themselves presented to me on their lands—show a total of 11 growers (out of the 14 with whom I did mappings in Unión Reforma) growing maize.

A discrepancy. A paradox. An emergence of multiple truths, simultaneous realities.

The milpa is disappearing. And the milpa is not disappearing, cannot and will not. Across communities, growers are able to hold both these clarities simultaneously, even within a single conversation, within a single thought. For example, Felix (of Chichum Majadas) was quick to explain to me that his family keeps planting because from the milpa they eat. Yet, a moment

³⁰ See Appendix, Chapter 1 (21.) for quotes.

later, Felix was listing off reasons why they might stop planting milpa, or at least not plant as much as they once did³¹.

Among all communities, maize is the most grown crop according to the participatory field mappings. Forty out of forty-five growers counted it among the plants in their fields. So if the maize is still in the field, to where is it disappearing? For many growers, this is partially a matter of relativity. In previous times, they grew so much maize that what they grow now can easily pale in comparison. And if the moment arrives in which growers decide to grow milpa no longer? This is an idea which they both toy with and refute.

The milpa is hiding in plain sight. Standing along the steep curves of any of the communities (though especially of the more remote Chichum Majadas) during the milpa season, one can look out to the surrounding slopes and glimpse stalks of corn reaching toward the sky in great spreads. The traditions of the milpa, too, despite the appearance of loss, can be found around, tied up alongside doorways, steaming up in big pots³².

Often though, the milpa is not hiding at all. Sometimes, on some growers' fields, even while it might cover less cuerdas, the milpa is doing the opposite of disappearing. "We only used to plant milpa, but the milpa didn't really produce." Iris (Los Limones) explains³³ that upon dedicating themselves to improving their fertility practices by adding lots of leaf litter, manure, and natural fertilizer, her family's milpa now, "produces lots"—more so than when they planted an abundance of milpa in past times.

The milpa's story is not a singular one of loss. Rather, it is a story of persistence made possible by continual change. Rather than measuring diversity by clear increases and decreases,

³¹ See Appendix, Chapter 1 (22.) for quote.

³² See Appendix, Chapter 2 (23.) for quote.

³³ See Appendix, Chapter 3 (24.) for full quote.

the relational agrodiversities of Chichum Majadas, Los Limones, and Unión Reforma continually re-create diversity through simultaneous persistence and change.

The history the milpa tells is one of shifts and cycles. When did it produce best? When were the milpa soils most fertile? The answer shifts depending on who you ask and where. This isn't to say that one answer is right and another wrong. This is to say that the answer moves. It cycles. There were no químicos. Then there were some. Then there were lots. Now, some growers have given them up entirely, others swear by them, and many fluctuate when they use them or don't depending upon the context. The present shift in the cycle away from such heavy chemical input use links to the soil fertility and conservation practices such as those to which Iris above attributes her increased milpa production.

"Siembra de la milpa es lo que sí sabemos." "The cultivation of the milpa is what we do know." (Joel, Los Limones) The people of Chichum Majadas, Los Limones, and Unión Reforma know the milpa. In this way of knowing, even certainty is fluid. Even as many growers expressed that, in the annual cycles of the milpa, they plant on a set date that remains the same from year after year, there is also recognition that dates too change, are changing. Some growers recognize that the rainy season has become more inconsistent. In the survey of 77 growers (mostly in Sibinal), around 83% of growers had noticed changes since they were younger in the start/end dates of the rainy season. Around 4% noticed it was starting or ending earlier, 39% noticed it was starting or ending later, and 44% noticed it had become more variable from year to year. When the first rains arrive later, some growers delay their milpa planting³⁴.

The winds of change are quite literal in the communities. Strong winds, '*aire*' or '*viento*,' have increasingly become an issue for many growers, as they arrive in the windy season of

³⁴ See Appendix, Chapter 1 (25.) for quotes.

October and November when maize is tall and nearly ready to harvest³⁵. The strong winds knock down swathes of stalks, leaving much of the harvest to rot on the ground.

Some growers have adapted by planting their frijoles separately from the milpa, so that the weight of the bean vines growing on the corn stalks doesn't make the maize more likely to topple. Other traditional milpa crops have also stepped outside of the milpa³⁶. Many growers who used to plant habas (fava beans) within the milpa now plant them in a separate plot, so that the haba isn't impacted by the shade of the maize, that they can plant haba on distinct dates, or that they can otherwise differently cultivate haba. Ayote, güicoy, and calabaza are also less abundantly growing among the milpa. In Chichum Majadas, many growers note that a bad year of güicoy and calabaza growth led them to lose their seed. In Unión Reforma, many say that human consumption of ayote is going out of favor (a number of growers mostly toss their ayotes to their pigs or even leave them to rot in the field), leading to a drop-off in production.

Even the seeds of the milpa, the seemingly simplest way to identify the criollo, haven't gone unchanged. According to growers, they are planting the same seed they and their family have always planted—and also different seed³⁷. Among nearly all growers, the seed is the same in that they have never stopped planting maíz criollo. Yet, some growers have switched around which varieties of maíz criollo they plant, often exchanging with or buying from neighbors in search of varieties that have a different color maize, smaller cobs with more grains, shorter stalks, more delicious elotes. Agustín of Los Limones explains:

³⁵ See Appendix, Chapter 1 (26.) for quote.

³⁶ See Appendix, Chapter 1 (27.) for quotes.

³⁷ See Appendix, Chapter 1 (28.) for quotes.

"The majority of us what we do is exchange...For example, she comes to my house and says to me, 'Look, I like your seed. Sell me some.' Or 'Come give me a pair of mazorquitas!'...We don't sell (seed), we just gift it or exchange it... That's how seeds are managed here."

Elsa, of Unión Reforma, also points out that, even planting the same seed, maíz and its seed "through time, change." They are always changing. She explains, for example, that if neighbors have different colors of maize and their maize is flowering at the same time, the crosspollination of their milpas results in a mixing, a different maize than either of their original seeds. Other times, she says, some seed just 'degenerates' so they seek a different variety.

The milpa is also changing by giving way to other crops³⁸, as shall become clearer in the chapters to come. Many growers see ways this is positive for the land, their families and the milpa itself. As growers have begun to grow 'a little bit of everything' rather than 'pura milpa,' their families have a greater variety of plants to eat and sell. Growers too are able to plant crops which best suit the land. And the milpa itself, with more possibility for crop rotation and fallowing, is better able to rest and revitalize.

As new plants arrive on the scene, the milpa is not only making space—it's also sharing space. A number of growers are experimenting with planting baby fruit and coffee trees, medicinal plants, and other plants *within* the milpa. Through its long relationship with growers, the milpa represents a safe space—a space to experiment, play, care.

The 'criollo-ness' of the milpa does not derive simply from the idea that it is a 'traditional' cropping system centered on the poster-child 'traditional' crop of maize. Rather, its criollo-ness derives from the way the milpa is able to change amidst tradition, its fluidity but

³⁸ See Appendix, Chapter 1 (29.) for quotes.

constancy of relationship with growers. Key to this is that even as the milpa changes, its importance to the growers and communities (while also changing) continues.

This importance is expressed over and over again³⁹. When I asked growers which crops were the most important ones for them, maíz and the milpa frequently featured in their responses. Yet, growers do not only express themselves through words of affection. They also demonstrate their care through acts.

Growers place intention into maintaining maize seeds to both plant and exchange—or, as many stated, to simply continue having them, to not lose them. Maize is also a daily part of community members' lives, their 'source of sustenance,' prepared as tortillas, tamalitos and tamales, myriad forms of atol. Rare is the meal which does not include maize. Most mothers nixtamalize and grind corn daily so that the fresh masa seemingly never runs out. Many growers explain their choice to plant certain maize varieties based upon their culinary characteristics—*maíz blanco* produces white tortillas that many find aesthetically-pleasing while tortillas made with *maíz negro* or *pinto* come out extra soft. The same desire to eat good maize is one of the reasons many continue growing their own. Ask nearly anyone in the communities and they'll inform you that *maíz criollo* simply tastes better than the *maíz de la costa* one can buy at the store. For others, they can't stop planting maize because they can't give up the annual delight of eating elotes.

Criollo maize is food. And more than food. Felix (Chichum Majadas) explained, "*No vamos a dejar nuestra santa milpa porque en el maíz vivimos*," "We are not going to abandon our holy milpa because in the maize we live." The milpa and maize are sacred. Maize does not go wasted—when I saw a pot of maíz podrido in one growers' kitchen, he said they were saving

³⁹ See Appendix, Chapter 1 (30.) for quotes.

it to give to their livestock. Maize is to be offered and shared—with family, with neighbors and community, with the earth, with God, even with the birds and the squirrels. Luz (Unión Reforma) laughs, "When there are elotes, we begin to eat the elotes, the squirrels too. For everyone, a little. We all get to enjoy a little." Maize is to be celebrated—in prayer and offerings on the altar, in rituals from planting to harvest, in ceremonies centered around shared feasts.

Criollo maize is beloved now simply for being criollo. But the long-ago growth of this love is also integral to how maize once became criollo. This love too is what spurs growers to defend criollo maize from maize varieties which don't fit into a relations agrodiveristy.

Los Híbridos, Los Transgénicos and Seeds of Resistance

"The seeds that we harvest here are seeds that our abuelos have left us...And that seed we have not lost, we do not think of losing it, because they are the seeds that produce here. If we change the seed, there are seeds that don't produce, as it is not their land. We take care of the seed..." Agustín, Los Limones

Criollo maize is an identity in Chichum Majadas, Los Limones, and Unión Reforma. It is an identity not bounded by the rigidity of traditions which go unchanged. Rather, within the criollo, the traditional is malleable, responsive, able to shift. Yet, the fluid boundaries of the criollo does not mean it has no boundaries at all. In parallel to how many community members don't have a singular term (be that Mam, Indígena, Maya, mestizo, etc.) to classify their identity but do have clarity on who they are *not* (ladinos), maíz criollo also finds a sharp contrast in who it is *not—maíz transgénico* or *híbrido*, transgenic or hybrid maize. Note that growers, especially in regard to maize, often used the terms 'transgénico' and 'híbrido' interchangeably, unconcerned with the technicality of distinguishing GMOs versus hybrids as is common in U.S. debates around the topic.

Francisco (of Los Limones) describes⁴⁰ the community's rejection of maíz transgénico: "…Now, maize is healthier to eat. It's not transgénico and it's not produced with much chemical (inputs). That is our advantage now, as farmers."

"You all don't want to plant transgénicos?"

"No! No...If we plant the transgénico, what it causes is that we lose our criolla seeds. And that is what we don't want because (with) the transgénico one has to buy seed every year. And we don't buy seed. On the contrary, we give seed to those who need it. That is our advantage. If we plant transgénico, we stand to lose our seed. Although now some folks are planting transgénico, because, they say, it's faster. Clearly it's faster, but we can't save seeds...And the seed of transgénico is very expensive. Whereas we have our seed. Thus, we don't spend anything. We just harvest it, save it, and then at the next planting we already have our own seeds...It is very important to have the criolla seeds. Because we have created a strike (against transgénico maize) in the past. Thanks to God, we pretty much stopped (the introduction of transgénico maize). And now...yes, there is some (transgénico) seed (in the community), but the people don't have interest in it. What the people want is to have their own seeds and not lose them. Because the seed—which comes from before and which we are still growing—is a strong seed. It is not so delicate, and it doesn't easily get disease/pests. It's resistant. But the transgénico is a hibrida seed. It's more delicate and we don't get much livestock fodder from it because it's a seed that

⁴⁰ See Appendix, Chapter 1 (31.) for Spanish version of quote.

produces short maize stalks. On the other hand, our maize is tall. We get livestock fodder from it and so we can save the fodder..."

The journey out to the communities from Guatemala City is long. Each time I have made that trip, I split it into a few days, which includes a stop-over in the rural area outside the city of San Marcos, the capital of the department of San Marcos. Walking along the stone and dirt roads there, many of the milpa fields, interspersed between fields of *papas* (potatoes) and *hortalizas* (vegetables), struck me with their neat appearances—long rows of short stalks of corn, all of near uniform height and form. These milpas contrasted those I knew from Chichum Majadas, Los Limones, and Unión Reforma, where the maize stalks who reach tall toward the sky each have their individuality of differing heights and looks. Most of the uniform milpas outside San Marcos were marked along the roadside with a side—an advertisement from such-and-such company for the variety of hybrid maize seed growing in the farmer's milpa.

I saw no such signs in Chichum Majadas, Los Limones, or Unión Reforma. As I asked growers whether they ever thought about growing maíz transgénico, a refrain of answers similar to Francisco's resounded⁴¹. The answer was a strong 'no.' Albeit, some growers professed to have experimented with planting it at some point. But dipping their toes in had only hardened their conviction that maíz transgénico was not for them. As Jacinto described, "*Hemos hecho algunos experimentos, pero esa semilla hay que volver a comprar otra vez. Entonces nosotros queremos lo propio, lo natural.*" "We have done some experiments, but one has to return to buy that seed again. Thus, we want our own (seed), the natural (seed)."

⁴¹ See Appendix, Chapter 1 (32.) for quotes.

For all growers with whom I discussed maíz transgénico, it comes back to this issue of seed—of not losing their criollo seed, of their own seed being dependable, adapted to place, strong. Of it being theirs. Of it having been with them and provided for them for so long.

The maíz transgénico, for all its touted promise, came from somewhere that growers had learned not to trust. It threatened to make them dependent and to trick them out of their maíz criollo—which is to say, a part of their identity. Growers recognized these high stakes. And they resisted. Growers organized themselves to protest the marketing of maíz transgénico in their community and to protest the "Ley Monsanto," which aimed to open up criollo seeds to be patented by private companies (Congreso de la República de Guatemala, 2014).

The communities' resistances to maíz transgénico connects to a larger history of politics and power. Just as maíz transgénico threatens to subjugate maíz criollo, growers recognized how Guatemala's ladino elite has pushed their communities to the margins. Óscar explained to me that people like those in his community historically came from the 'civilización Maya,' 'Maya civilization.' Yet ladinos had always held the power and taken advantage of them, 'la raza indígena.' Since the Peace Accords, it had been '25 years of corruption and rich ladino families buying elections.' "*Nunca hemos tenido un presidente de nosotros, de la raza indígena*." "We have never had a president of ours, of the Indigenous race."

When politics arose, a sense of disillusionment seemed to spread through community members. Some explained how, at the national level, the continual division of parties representing the raza indígena meant that they never represented a united enough front to gain political power. Many described how, even in local politics, votes were always bought, even if just through the passing out of bottles of coca-cola. Whatever promises politicians made to their communities on the campaign trail, few believed they would follow through with them, since they rarely had in the past. The communities, far from the center of governmental power in Guatemala city, felt hard to reach, intentionally forgotten, left out of the government programs they heard were supposed to be benefitting rural campesino communities like them.

Rather than cede to a sense of powerlessness, the local communities found their own means of resistance. Through the milpa, through criollo seeds, through a relational agriculture that maintains identity, subverts rigidity, prioritizes relationality, and defies suppression.



Mam names: Kyeq sqal; Na'õ; Sqal

Variedades:

Cuarentena, Colima, Loman, Tecpan, Roja o Equis, Rosada, Tollocan, San Luis, Canela

Fuentes de Semillas:

Semillas criollas guardadas Intercambios con otros productores Semillas compradas del veterinario Semillas de proyectos con organizaciones

Usos:

Consumo familiar Para vender Intercambios, especialmente con productores de tierra más baja



Meet Papa

Papa provides another framework for understanding the criollo. The relationship between growers and papa is a place where the criollo meets the 'mejorado' (an 'improved' crop), where communities meet external organizations. Rather than one entirely overtaking the other, they navigate an intricate dance of simultaneous and contrasting existences. They dance to the rhythm of relational agrodiversity, a rhythm which engenders tensions, explorations, and many actors to join.

History in the Communities

"Maíz y papa es lo que sembrábamos." "Maíz and papa is what we used to plant." Lidia, Los Limones

Planting papa (potato) has been somewhat of a custom for growers in all three communities. In Unión Reforma, with its higher altitude and cooler climate, many growers referred to the time of their abuelos as a time of a triad of crops—maíz, papa, and trigo (wheat). These three crops filled their fields and their bellies. Potato was also a more common crop in Los Limones in times past, before hortalizas and planting of other crops became available. In Chichum Majadas, few growers planted potato within the community but many had (and some still have) *terrenos* (fields) located at higher altitudes in neighboring communities where they would travel to plant crops better suited to cooler climes, chief among them potato.

Thus, growers in these communities regard papa as regarded as a 'traditional' crop. This may not be obvious through its low appearance in the participatory mappings, only appearing

once outside of Unión Reforma. Some of this may have to do with timing. Unlike the milpa, which tends to follow a set rhythm over the course of many months by which growers abide year after year, papa's crop timings were more diverse from planting to harvest. Within Unión Reforma, one grower had planted on September 1st expecting to harvest in December, another family were about to start planting at the end of October or beginning of November, while another yet was about to harvest their papa at the same end of October/beginning of November time. Thus, one has to be present at the right time to catch someone growing potato, as most growers incorporate potato into sequential croppings and might quickly re-plant a harvested potato field with vegetables.

Yet, the low mapping appearances did also seem to correspond with growers' reflections that planting of papa was changing. In all communities, potato production has shifted as the diversity of crops one could plant has grown. In Los Limones, many growers say they plant less papa now in favor of planting, especially, more vegetables. In Unión Reforma, potato is still a common crop choice but now makes up less of the growing space which is now dedicated to other crops. In Chichum Majadas, there are less growers who have the time to tend far-away plots at higher altitudes, which means less growing of potatoes in those parcelas. However, some growers, such Gaspar's family, are now trying to grow papa within the community: " "We have tried to plant papa. It does produce but it's a question of us putting in the work…"

Planting of papa is not only changing, however, due to opportunity to plant other crops. Methods of cultivating potato itself have also undergone shifts. Hilario (Unión Reforma) explained that the introduction of chemical inputs into papa production has had prolonged effects, making it hard to grow papa without químico, "One did not used to apply chemical inputs to papa in those times (of my grandparents and parents). Now (the papa) is used to the químico because without the químico, it no longer grows...The land is accustomed (to the chemicals)."

The increased chemical input requirements of potato aligns with the arrival of papa mejorada to the communities⁴²:

"Before, the agriculture was purely organic. But afterward, chemical products started appearing...Some improved seed—or supposedly 'improved,' right?—appeared. And all the criolla seeds started disappearing. They appeared, for example, in the papa, especially in the papa. The mejoradas, when they came, at the beginning a good product! Lots of yields with little disease. Not anymore. Those mejorada seeds are too fragile in the face of disease. You have to be applying fungicide. For example, in the papa, lots of fungicide! Pure chemical to combat the diseases. Thus, it has changed a lot. And there are no longer the ancient criolla seeds! For example, there used to be a seed that was called criolla, a little red potato. It grew...almost without any fertilizer/manure...From these same (papas), they could grow again. But now there aren't any more of these. There used to be others. There is one called Colima, another called Canela, the Cuarentena, lots of kinds of papas, right? But good potatoes. But now they're all lost. Now only mejoradas. These same (papas) mejoradas are hard to produce because one has to apply lots of fertilizer. And more, for the diseases that attack them heavily...And now we want to revive the organic production, but it's very difficult, the yields very low."

David, Unión Reforma

In contrast to maíz transgénico, papa mejorada gained traction in the communities. Most potatoes varieties which are planted and consumed in Guatemala have pre-colonization origins

⁴² See Appendix, Chapter 1 (33.) for original Spanish and additional quotes

outside of Guatemala. These potato varieties have largely come into communities via Guatemala's ICTA (Instituto de Ciencia y Tecnología Agrícolas) and agricultural extension agents. Some of these potato varieties have been a part of the communities since as long ago as the 1950s—long enough for the communities to develop distinct relationships and lines of seedsaving with these potato—and these are the papa which have become papa criolla, despite not being what a standard botanist or ecologist would consider 'native.'

This history of papa arriving to communities with agricultural extension and external organizations, interestingly though, is also what predisposed more-recent papa mejorada to be able to gain traction among growers. And as more growers started buying and planting papa mejorada, papa criolla seed began to disappear. In the meantime, the benefits of papa mejorada have diminished over the long-term and the costs of buying the chemical inputs needed for their upkeep have become unsustainable for many. Many growers now grow varieties of papa mejorada, not so much because they really *want* to, but because it is the seed they still have available to them. When I asked one Unión Reforma grower whether the papa they had planted was mejorada or criolla, they responded, "Mejorada because there isn't (criolla) seed anymore. Thus, it has to be mejorada."

Another Unión Reforma grower explained that, while many papa varieties were grown in the past, such as Cuarentena and San Luis, he currently planted the varieties he did (only 2, Tollocan and Roja) "because that is what remains here." He described Roja (also called Equis, he said) as 'criollo' and Tollocan (an ICTA-originating variety) as '*criollo sí pero no tanto*,' 'criollo but not so much.' When a family in Los Limones was explaining that they'd be planting papa Loma(n), also a frequent variety in Unión Reforma and an ICTA-originating variety, and papa 'rosada,' they wavered on naming them 'criollo,' landing on calling them criollo with an ambiguous shrug. Despite the stories of the rise of papa mejorada and the loss of criollo seed, no growers called the varieties they were growing 'mejorada'—some varieties they did call criollo and others they assessed as not-entirely not-criollo. This isn't to say that growers aren't growing 'improved' varieties of potatoes or that improved varieties cannot be criollo. Rather, the term 'mejorado' has become wrapped up with 'transgénico' in a discourse of resistance.

Seeds

Unsurprisingly, given the narrative of loss of papa criolla seed, some potato growers purchased their seed, such as that of Loma(n) which is widely available. An Unión Reforma family explained of their 'criollo' Colima and Cuarentena papa, "We don't save the seed, we buy it further up the mountain."

Yet seed saving hasn't entirely gone out of practice with potato. Growers in Unión Reforma saved their own seed to grow out Roja/Equis, Tecpan, and Tolloca(n) varieties of papa. Jacinto, although not having papa planted at the time of my visit, said he's always maintained his same papa seed. Bernardo expressed, "We have the seed from here, in order to not going buying elsewhere...I won't lose the potato seed."

Life with Roots

Growers with potato planted it in a range of locations, but they generally gave it its own 'parcelita' (plot) in which to grow. While papa was often rotated with other crops (especially *hortalizas*) in the same plot, it was not planted with any companion crops. In the participatory

mappings, potato could be found relatively near to grower homes, in terrazas (terraces), and alongside the milpa. Jaime, the Chichum Majadas grower with papa, had planted it in a '*lugar más lejos, en tierra fría*,' in a 'further away place, in cold land.' Besides growing well in *tierra fría*—high elevation, cool climate locations—some growers also pointed out papa's preference for *tierra polvorosa*, sandy soils, where there is less risk of too much moisture causing the potatoes to rot or to become diseased (blight) or damaged (rhizoctonia causes cracks in the tuber).

Despite the historical turn toward heavy reliance on chemical inputs in potato cultivation, some growers are growing papa without them, or with an attempt to use less of them. However, a number of growers expressed that this is difficult due to a suite of disease and pests that harm papa. For example, one grower explained that the insect 'trips' (thrips) attacks the potato plant. Another grower explained 'la arjeña' damages papa, especially Cuarentena, unless one fumigates. Thus, use of *químicos* is a fairly common practice among papa growers.

Harvest and Beyond

Papas, just like maize, are similarly a fill-the-belly, storable local food. They are thus another staple of the communities' diets. Most potato growers prioritize using the harvest to feed their families. Most growers' harvests only extend as far as that.

However, Jacinto (Unión Reforma) recognizes that more growers used to grow enough papa to feed their families and to sell at market. Now, while papa is still a sought-after product, most growers only sell when they have a bumper crop. "If the papa gives/produces a lot, one can sell some 5 to 10, up to 15, quintales of papa to those who come asking for papa." Beyond sale, the papa is also a crop of *intercambio* (bartering). Bernardo (Unión Reforma) describes taking some papas with on visits to other farmers and leaving with some of the other farmers' papas, so that they both have more variety as a result. Jaime (Chichum Majadas) leverages the fact that he grows potatoes in a higher altitude location further from the community in order to barter. Since few growers around him in the lower-altitude Chichum Majadas have papa, he exchanges some of his papas for some of their maíz. Thus, he explains, neither grower has to have '*billetes*' (money/cash) in order to buy the food they need. Such '*intercambios*' create synergies between communities of different altitudes and continue to foster connections that were common before most local *campesino* communities had much, if any, money to purchase goods. (See Calderón et al, 2018 for more description on bartering.)

Navigating Organizations

Cooperative Resistance and Resistant Cooperation

"... They have come to me to propose transgénico maize. But they weren't accepted. (Why?) Due to the same experiences with the papa. True, (the transgénica/mejorada seeds) are good, in the beginning good, but after that, not anymore. With the transgénica seeds, every year you have to be buying the seeds. Buying and buying. And it could be that afterward, it goes back to the same as with the papa—little production. Thus, we still (want) some criollo seeds." David, Unión Reforma⁴³

When David explains that he plants "*poquito*" (very little) milpa but "siempre semillas criollas, no mejoradas ni transgénicas" "always criolla seeds, neither mejorada nor transgénica," before I can finish asking whether he had ever considered mejorada/transgénico seed, he is already declaring, "No! No, no, no." After a breath, he explains that his strong resistance to maíz transgénico is due to the negative experience with papa mejorada. Papa mejorada left a bad taste in many the mouths of many growers in Unión Reforma and Los Limones. Enough of a bad taste to lead to strong grower movements to prevent the popularization of maíz transgénico in the communities.

Yet, for all its complications, growers still plant papa mejorada.

In fact, in Los Limones, it was only just recently that the community grower organization ADIMAG participated in a project experimenting with new papa mejorada varieties. The project

⁴³ See Appendix, Chapter 1 (34.) for original Spanish quote and additional quotes.

was brought by a Guatemalan nonprofit called FundaSistemas and it aimed to test out six new potato varieties brought from the United States in Los Limones. The ADIMAG growers noted that it cost a lot to import the seed from the U.S. The *técnicos* (technicians) who came to help them in the project explained to them that they couldn't split the potatoes to create new seed—which the local growers figured out would mean they'd have to keep buying the expensive seed from the U.S. if they wanted to plant the potato varieties after these initial trials.

Adding to this expense, the new papa varieties required a lot of fumigation. The growers again recognized that the *químicos* needed came at a high price—literally and figuratively. The grower whose land was used for the trial would regret it afterward, saying the heavy application of chemical inputs left their soil sterile, infertile.

Still, the ADIMAG growers were curious. They wanted to give the potato trial a fair shot. Knowing potatoes to be sensitive to water (too much and they rot, too little and they dry up), they brainstormed the idea to plant the papas in an *invernadero* (hoophouse) so that they could control the irrigation and that no one could blame the rains if the potato crop failed.

Largely, fail it did. Of the six U.S. papa varieties planted in the trial, only two produced. The two that did produce were uninspiring to the Los Limones growers. They stuck with their pre-existing papas and abandoned the project.

On the surface, it is easy to ascribe agricultural changes that have occurred in Chichum Majadas, Los Limones, and Unión Reforma to the influence of first Pastoral de la Tierra, then to Red Kuchub'al, then to other external organizations doing projects with the communities. After all, this is whom most growers' narratives credit at the outset. Josué (Los Limones), for example, said the ADIMAG growers' agricultural work has improved in the past few years now that, learning little by little, they have more knowledge gained through *capacitaciones* (trainings) from organizations.

When repeatedly hearing accounts like Josué's, it can be easy to play up the influence of external organizations in the communities. Yet, when witnessing the communities engage with the organizations with whom they work it becomes clear that they don't unquestioningly accept whatever the organization offers. In fact, many of the organizations' projects have been influenced by the knowledge and demands of the local communities. The exchange between community and organization is multi-directional. As a former director of Red Kuchub'al explains, "Many practices that we teach them are not new for them. They are Indigenous practices—the milpa, the lunar cycles, the use of organic fertilizer, side-dressing (*el calzado de*) the milpa, the terraces...We just give them the initiative/enthusiasm."

The growers a part of this research, growers willing to engage with external organizations, were open to learning from different sources and adapting ways of doing—to an extent that they often offered credit to others, including beyond the community, for their teachings. Still, the more commonly cited source of knowledge about milpa and papa among growers is not organizations, but rather the teachings of the parents, grandparents, and ancestors. Agriculture knowledge in landscapes of relational diversity is an ongoing experiment, a practice of not simply 'knowing' but of paying attention to plants and their behaviors. Knowledge passed down can evolve as shifting relationships and new actors alter plants and the land.

Growers continue to hold this ancestral knowledge in high regard without putting it on a pedestal too high to reach. Ancestral knowledge, just like criollo plants, is permitted to change. It transforms as relationships between growers, plants, land, and other forces also transform. It is through this tension—of steadfastly tending the place-based wisdom of ancestors and of

continually opening to knowledge-making opportunities from all directions—that the local grower organizations engage with external organizations.

The community members' (very justified) sense of neglect, as campesinos and gente Indígena, by the Guatemalan government has inclined them towards utilizing resources where they find them. Since officially organizing into local grower organizations in order to collaborate with Red Kuchub'al, growers in ACDIMT, ADIMAG, and ASDISMA have been able to sign on to projects with external organizations in order to garner resources that would otherwise be inaccessible to them.

The presence of these projects with external organizations leaves marks throughout the communities, especially Unión Reforma and Los Limones. Signs with names of NGOs and foreign governmental organizations adorn new *invernaderos* and homes rebuilt with cement blocks after Hurricane Stan ripped through the communities with floods and landslides in 2005. In Los Limones, plots of diversified vegetables and *invernaderos* of tomates mejorados ('improved tomatoes') color the landscape. The women's groups' small tea-cookie-and-jam processing plant and *vivero de plantas medicinales* (medicinal plant nursery) pop up amongst the fields and homes. In Unión Reforma, *colmenas de abejas* (bee hives) tuck into the edges of parcelas, and forests protected by incentive programs rise into the sky. *Socios* periodically trickle down the road for a meeting on the latest project, like that of the creation of *viveros forestales mixtos* (agroforestry nurseries).

In Chichum Majadas, the communities' distance from the nearest '*centro*' (central town) of Tacaná has resulted in growers there being less connected and in less external organizations making or sustaining the effort to conduct projects there. Many projects which occur in Chichum Majadas, such as extending the dirt road to finally reach nearly the furthest end of the

community, proliferate through the pooling of funds of community members. Despite the lower presence of external organizations, the marks are there too, in spreads of Sarchimor coffee trees across hillsides and baby fruit trees dotting fields. In all three communities, different versions of *parcelas integrales* (agroecological plots) display themselves on *socios*' lands.

Growers speak often of the role of Pastoral de la Tierra and Red Kuchub'al in their communities. In Unión Reforma and Los Limones, growers have worked, usually indirectly, with so many different organizations that they often don't worry too much about keeping straight which organization they worked with on which project—FundaSistemas, USAID, Caritas, FUNDAP, Fundación Intervida (now Educo), Visión Mundial, FUNDAECO, MAGA, INAB, ADIPO, the European Union, the Spanish Embassy, and more were mentioned⁴⁴. For many growers, these organizations represent opportunities. But keeping their names straight doesn't matter because even at the point of operationalizing projects on the ground they remain fairly faceless and unrooted. They come and go as funds appear and disappear, rather than focusing on creating ongoing and deepening relationships with the communities.

Often, Red Kuchub'al—a more consistent presence in the communities and a frequent initial intermediary between the local grower organizations and other organizations—has helped connect the local grower organizations in the communities to project opportunities with other organizations, and with the odd researcher such as myself. Other times, the local grower organizations have found projects for their communities in other ways. In either case, the external organizations typically manifest on-the-ground as a pool of earmarked funds, some

⁴⁴ <u>FundaSistemas</u>, <u>USAID</u> (United States Agency for International Development), <u>Caritas</u>, <u>FUNDAP</u> (Fundación para el Desarrollo Integral de Programas Socioeconómicos), <u>Educo</u> (Fundación Educación y Cooperación), <u>Visión</u> <u>Mundial</u>, <u>FUNDAECO</u> (Fundación para el Ecodesarrollo y la Conservación), <u>MAGA</u> (Ministerio de Agricultura, Ganadería y Alimentación), <u>INAB</u> (Instituto Nacional de Bosques), <u>ADIPO</u> (Asociación de Desarrollo Integral para el Occidente)
agricultural inputs, structures, seeds/saplings, and technologies, maybe an *ingeniero* or *técnico* popping in once in a while to give trainings or guidance.

While these external organizations largely remain abstract, the local grower organizations have come to learn how to work with them, have become acquainted with their terms and how to navigate them. On many days in Los Limones and Unión Reforma when I rambled around with a *promotor* (promoter) from the local grower organization visiting growers, the *promotor* would make a point of reminding other *socios* we encountered to make sure to attend an upcoming meeting or workshop held by a leader or *ingeniero* from an external organization. They know attendance matters, that signatures on the sheet matter, that procedures matter—not so much to the communities themselves but to the organizations who provide them resources and could revoke those same resources if their requirements aren't met.

The day before representatives from one organization were coming to pay a visit to *socios* in Los Limones, growers' conversations over meals, out walking, at the Santo Rosario swirled around who would attend. Folks were buzzing over how to make sure everyone who was on 'the list,' or at least a family member representing them, showed up and (relatively) on time. The reason for such a buzz was the stakes—signing in on the list for this organizations' workshops keeps one eligible to receive a *canasta básica* (staple foods) and other future resources from the organization.

The *socios* invited me to join the organization's workshop. (By now accustomed to my gung-ho attitude and constant companionship, they invited me to nearly every ongoing and halfjokingly tried to convince me to just move to the community on the regular.) My host and I rolled in only a tad late. Other *socios* continued rolling in after the workshop began. We played a get-to-know-you game before settling in for a presentation on the session's theme, kitchen hygiene. Said presentation included a puppet show and an amateur-production slapstick video both met with good-humored rumbles of giggles—before turning to break-out group work. Assigned the notetaker role by my group, I scrawled in marker all the errors in kitchen hygiene that my group members noticed in the video across a big sheet of paper. Finally, the sign-in sheet went around and everyone made sure to sign (or thumbprint) next to their or their family member's name.

I found the whole affair fairly patronizing and was a bit annoyed at the organization, who just dropped into Los Limones from time to time, assuming that community members didn't know didn't think to keep dogs and chickens from pooping in their food. I asked the members of the family with whom I was staying who were in attendance what they thought of the workshop. They shrugged. "It was nice." The workshop hadn't phased them.

Socios are used to the often top-down dynamics of projects in collaboration with external organizations. They are used to these organizations arriving with their own agendas and acting as 'experts.' I was continually pushing back against *socios* addressing me as an 'expert,' contending that the growers themselves are the experts on their own land, plants, and agriculture. The reasons for the deference were not only that growers were humble. For one, national historical narratives and, arguably, academia too have continually scripted these growers, as campesinos and gente Indígena, as lesser—a narrative of which they are aware and which sometimes seeps into their own understandings of themselves, their communities. But for another, perhaps greater, reason, these growers are practiced in navigating the whims of organizations in order to appease them and maintain good standing with them.

In this navigation, the growers hold a subtle but strong power. Showing up in ways that let the organization still feel like it is in control, the growers proceed to turn the projects into what they want, into day-to-day on-the-ground manifestations in the communities. For as often as growers credit their medicinal plants, their beehives, their coffee trees on the good graces of an organization, when we draw the story out further it becomes clear that the impetus for such developments came from their side. Further, any 'expert' training an organization gives soon becomes transformed by growers doing their own experiments—not following the pre-prescribed instructions to a tee—and then by informal learning through regular grower-to-grower sharing of experiences and ideas.

The empowered way in which *socios* engage with projects became clear amidst the COVID-19 pandemic, when the presence of projects (especially those involving community visits and workshops) with external organizations in the communities was forced to drop amidst lockdowns and closed borders. Growers noticed the sudden shift as many organizations didn't show up anymore as they had to wait out the pandemic to be able to fully operate again. And some of their projects did drop away. But many of them went on. The local grower organizations continued their initiatives even without much, if any, external support. What's more, they felt a freedom and a pride to develop their projects in their own way, on their own terms and knowledges.

Some organizations, like Red Kuchub'al (or the occasional eager researcher), arrive to the communities, expecting and aiming for processes of exchange and co-creation. Others arrive with pre-formulated plans to 'give' to the communities. The *socios* are open to the possibility of learning and engaging with projects across this spectrum. But they are always agents in the process of engagement, always transforming projects through their own priorities and own ways of knowing. And, as seen with the project to bring new papa mejorada to Los Limones, growers

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are not afraid to push back. They are not afraid to stand up for their communities, their land, their plants.

Thus, external organizations do not simply 'influence' agriculture and agrodiversity in the communities. Neither is there some 'pure' agriculture in the communities untouched by interactions, relations, and navigations with external forces. Rather, the sorts of agricultural landscapes that emerge from these navigations between the local and the beyond-local are emblematic of a relational sort of agrodiversity, in which romantic notions of 'purity' must make way for the wonderfully messy reality of relationality.

Chapter 5

Namings and Agencies



Nombres en Mam: k'a i'mach; mo'och

Variedades:

'la que solo sale' (nativa/criolla) Y 'la de piloncito,' 'de mercado,' 'sembrada'

Fuentes de Semillas:

Nativo (todavía la mayoría) -Solo sale a si mismo -Solo coge la semilla y la tira Sembrado

> -Semillas guardadas -Semillas compradas -De piloncitos del mercado

Usos:

Consumo familiar-se come como verdura y es muy nutritiva

Para vender, en el mercado o los vecinos



Meet Hierbamora

Hierbamora is typically *monte*. That which grows on its own. Its monte-ness, more so than its criollo-ness, has been central to its identity for growers. Yet, the evolution of relationships between growers and hierbamora shows new avenues for engaging with *monte*. No longer only 'growing on its own,' hierbamora is now being planted too. Growers mix labels of *monte* and *nativo, criollo* and *sembrado* into namings that free each hierbamora to change while still being valued and at home in the agrodiversities of Chichum Majadas, Los Limones, and Unión Reforma.

History in the Community

It is a food of past generations that has continued into the present in Chichum Majadas, Los Limones, and Unión Reforma. During the *tiempos del hambre*, 'hunger times,' when food was sometimes scarce, people didn't yet plant many *hortalizas* (vegetables), so cooking up the leafy greens of hierbamora was a key part of people's diets. Some used to eat it two to three times a day without tiring of it. Sara still describes hierbamora as "the most delicious vegetable and very nutritious." When I asked one grower whether people used to plant hortalizas with their own seeds, he responded, "There were only *hierbas*, nothing more. There was the *colis*, the *quixtan*, the *hierbamora*, the *apazote*."

Most commonly, hierbamora used to grow and continues to grow up below the maize in the milpa. It also grows up 'spontaneously'/ 'wild' in other locations, in the *monte* or *bosque* (forest), such as in the *bosque comunal* (communal forest) of Unión Reforma, as well as alongside other planted crops in their plots or *invernaderos* (hoophouses). Before, hierbamora

was considered to grow on its own quite abundantly. Some growers now say it is growing less. I asked David of Unión Reforma which crops there used to be more of that are now being lost and hierbamora was first off his lips when listing of disappearing plants. "The hierbamora, the bledo. Many of the *hierbas*—there is the quixtan, there used to be one called silj. All are disappeared."

Some growers say a plaga has begun to affect the hierbamora that does grow, detectible by little holes that cover the hierbamora leaves. Sara in Los Limones says this plaga began only two or three years ago, that it hadn't really been seen before then. Bernardo (Unión Reforma) identified that "*muchos insectos malos*," "many bad insects" are to blame. "Some tiny ones called 'thrips.' They go to the beans...to chew the leaves...And to the vegetables, hierbamora, all that, you see."

Other growers yet, if looking in certain locations and thinking back to specific times, cited ways in which they perceived hierbamora to be growing more abundantly. As we walked through the milpa during a participatory field mapping, Josué (Los Limones) implied hierbamora, known for growing in the milpa, has done better since more milpa has covered land that was once open and grassy. "It produces/gives the same or double than in the past because before it was *pajonado* here. Before there wasn't milpa here."

Application of *químicos* could play a part in determining where folks perceive shifts in hierbamora. As hierbamora commonly pops up in the milpa, they could be susceptible to herbicide applications that began to occur after growers started using *químicos*. At the same time, as many growers have more recently shifted away from *químicos*, they hope that more hierbamora might start appearing in their milpas, that hierbamora seeds might yet remain in the soil ready to sprout. Others are uncertain whether hierbamora might show up on its own anymore.

At the same time, a recent shift has been taking place in which growers, rather than just letting hierbamora grow on its own as monte, are planting it. Jacinto (Unión Reforma) was excited to note this occurrence. "And up to today, we have seen that, yes, our fields are producing now...For example, now we plant—in vegetables, we have the hierbamora, onion, broccoli, cauliflower, carrot."

Seeds

The majority of hierbamora still continues to be hierbamora nativa, hierbamora that "*solo sale a si mismo*," "only comes out on its own." These 'wild'-growing plants are typically left by growers to go to seed and thus reseed themselves. Yet too, as Gloria (Unión Reforma) and I stand over a hierbamora during a field mapping, she explains to me, "Solo coge la semilla y la tira," "Just grab the seed and toss it."

Where do the seeds of the hierbamora sembrada, the planted hierbamora come from then? Some growers seeds are "de la propia casa," from their own household. They collect seeds from the hierbamora nativa growing on their parcelas and save them to then plant hierbamora sembrada. Óscar has begun a semillero, a seedbed/nursery to start hierbamora seedlings. Yet, hierbamora seed has also become available for purchase at the local markets. Sara said that kits of seeds can now be found in Tacaná. Jacinto bought his/her hierbamora seeds in "piloncitos del mercado," transplants from the market in Unión Reforma.

Care, Growth, and Life with Roots

During hierbamora nativa's growing life, interactions with growers tend to be indirect. They largely leave it to grow on its own, where it may—often in the milpa, alongside *hortalizas* in *invernaderos* or on grounds unexpected. Inputs, *orgánico* or *químico*, if any, that hierbamora nativa receives come from their association with other plants, neighbors like maize or vegetables who receive intentional feeding of inputs. A main point of interaction between hierbamora nativa and growers is the subtle act of recognition. Growers know where hierbamora nativa has shown up before, where it's likely to show up again. When it sprouts and leafs out, they see hierbamora, recognize it by name and as a potential source of nourishment. When they do the *limpia*, they don't 'weed' it out but let it keep growing on.

Hierbamora sembrada generally intermixes less with other plants. While growing alongside them, it won't likely be found sporadically popping up in between other crops. Rather, growers usually plant it in its own little plot in semi-neat rows, rows that themselves might be punctuated by other *monte*. In one planting, a plot of hierbamora stood next to the milpa familiar neighbors but more segregated from each other than milpa and hierbamora nativa.

Many of the growers who plant hierbamora sembrada have begun to experiment with sewing it in their *invernaderos* (hoophouses). Some have had middling results doing so, but others swear by it, claiming the plants grow big and robust in the additional heat. Of those growers with hierbamora sembrada taking off in their *invernaderos*, some have started testing out applying *químicos*.

An increased flexibility around planting timing, due to relatively recent additions of irrigation or invernaderos, has provided additional room for experimentation. Dominga (Unión Reforma), who now has irrigation, decided to start planting hierbamora in the last months of the 2021 rainy season because "the dry season is now coming when there is no (hierbamora)." With the movement toward planting hierbamora, its temporal and spatial availabilities are shifting.

Harvest and Beyond

"How did you decide to plant hierbamora? Because there is already hierbamora in the milpa..." "Yes, there is (hierbamora) in the milpa but (we planted hierbamora too) in order to be able to provide, for example, economic income for the families. In any case, sometimes it gives 2, up to 3, 4 harvests. Thus, it gives a fair amount, right?"

Jacinto, Unión Reforma

Hierbamora, nativa and sembrada, can be harvested whenever it grows to a sufficient size. Harvested with care, hierbamora will regrow after the first cutting allowing a grower to enjoy multiple harvests from a single plant. Growers who harvest hierbamora only for their own families' consumption will often time their harvests with their appetite for hierbamora, or with their availability (or lack thereof) of other food options.

Hierbamora, while a staple of older generations' diets, continues to be a common food, though perhaps a somewhat less prominent portion of people's diets due to, according to many community members who have seen the change, increasing availability of '*comida chatarra*,' (junk food). Nonetheless, hierbamora is still regularly consumed. As Luz (Unión Reforma) states, "what we most consume here are vegetables, hierbas…the hierbamora, the quixtan."

In fact, hierbamora continues to be enough of a staple in these communities that vendors at the local mercados now sell it, a relatively recent occurrence. While there is enough of a market to have prompted growers to bring their hierbamora to market, many growers express a preference for eating hierbamora from their own lands and especially hierbamora nativa. Sara (Los Limones) explains that hierbamora sembrada grown in the invernadero "doesn't have the same flavor" and is "*menos rica*" "less tasty." In a separate conversation, Mayra (Los Limones) makes a nearly identical assertion. Ismael simply states that the hierbamora sembrada, especially from *piloncitos*, "is not the natural (hierbamora) from here."

While the proclamation of the preference for eating hierbamora nativa was nearly universal, growers still find it worthwhile to plant hierbamora sembrada for their own household's consumption. At least then they can be assured of having a consistent enough supply of their own hierbamora to not have to go buying from the market. Beni (Los Limones) says that before planting hierbamora that their '*manojo*' (bunch) of hierbamora was "bought in town." ______ points out that when the hierbamora is on her own land, it spares her having to make the trip to the market and she can eat hierbamora more abundantly and spontaneously: "*Siempre hemos sembrado porque no me gusta ir a la plaza. Podemos comer a cualquier hora*" "We have always planted (hierbamora) because I don't like to go to the marketplace. We can eat (hierbamora) at any time."

Iris (Los Limones) explains that homegrown hierbamora is preferable because one knows how it was grown: "Because I think that for me it is the health factor. If we go to the *centro*, we buy vegetables—Why are they so limp and droopy? Where do they come from? On the other hand, from here we cut hierbamora very fresh."

Even as no one admitted to wanting to buy hierbamora at markets, some growers did want to sell their hierbamora there. Growers with success in cultivating hierbamora sembrada have started playing with increasing the quantities they grow in order to have enough to take their harvest to market. The relatively recent shift toward finding more hierbamora at the mercados reflects an increased value for the plant. Growers point out that hierbamora, despite being *monte*, can sell for a high price. When I asked Jacinto (Unión Reforma) if people are willing to pay for hierbamora, he explained that the price of "4 quetzales per bunch, up to 5" people were currently paying for hierbamora in October was a lot. The price only increases amidst the dry season when, according to Sara (Los Limones), "a bunch can sell for 8 quetzales."

Amaranto & Bledo



Amaranto

Bledo

Nombres en Mam: Amaranto = Xlaqtox'o' Bledo = Lews

Variedades:

Bledo

-Más bajo y verde, con semillas pequeñas

-Generalmente monte

Amaranto

-Más alto y morado, con semillas más grandes que las del bledo -Generalmente sembrado

Fuentes de Semillas:

Bledo

-Solo sale

-Hay unos que recolectan semillas del bledo nativa y la siembran

Amaranto

-Intercambios con vecinos o otras comunidades

-De organizaciones como Red Kuchub'al

-Semillas compradas

Usos:

Bledo - Consumo familiar, se consume como verdura

Amaranto—Consumo familiar (la semilla para atol o la hoja como verdura) o Para vender (como palomitas, galletas, dulces)





Meet Amaranto and Bledo

Bledo and amaranto are family, both of the Amaranthus genus. They are also both 'native' (in the botanical meaning) to the region. Yet, their relationships with growers are quite differing. Growers are highly familiar with bledo, a *planta nativa* that grows as *monte*—with all the simultaneous stigma and pride that comes with that. Amaranto has a sense of re-newness in the communities and an accompanying excitement among growers at the possibility of planting it. Despite their differing roles in the communities' agrodiverisities, both bledo and amaranto show their agencies to return, to grow, to keep growing.

History in the Community

Bledo and amaranto are family. Their ancestries are intertwined but a divergence in their histories led them to different fates and present realities in Chichum Majadas, Los Limones, and Unión Reforma. Yet, where these histories diverged is not clear in local narratives.

A former director of Red Kuchub'al, in discussing amaranto in the communities, describes it as being an essential food, both nutritionally and culturally, of the Maya peoples before colonization. He easily references this portrayal of history, documented in articles and books, like pulling it out of his back pocket (National Research Council, 1984). While U.S. marketing often flattens this history into touting amaranth as an 'Aztec superfood' without acknowledging its role for the Maya, I encountered and heard about a number of NGOs in Guatemala who considered amaranto's pre-colonization significance in the country as an important medium around which to form projects with Indigenous communities. Yet, when discussing amaranto with growers in the local communities, they addressed it with a sense of newness—with curiosity, eagerness, and uncertainty. If they alluded to amaranto's deep-rooted history in the region, they tended to reference what they had been told by people from NGOs and other organizations. There was a distance between them and this history. While they intellectually comprehended that amaranto was from the region, it nonetheless felt new to their communities. And maybe it was entirely new—no one could recall stories from their abuelo's about growing amaranto. In these communities, where history hinges upon the stories passed down through generations, when plants and relationships fall out of the abuelo's memories so too do they fall out of the local history.

This potential erasure of any amaranto history in the communities is a ripple outward from a less popularized history. Upon realizing the cultural/spiritual importance of amaranto to the Maya peoples after colonizing Guatemala, the Spanish colonizers outlawed growers from planting the crop (National Research Council, 1984). While this attempt to wipe out amaranto did not manage to fully eradicate it from the landscape, it did turn amaranto into an 'underground' crop, covert enough to seemingly disappear it from cultural life and from the stories told across generations.

And what of bledo? Where amaranto was smothered, bledo could thrive. Bledo, the *monte* relative of amaranto, grows up on its own. Thus, even when outlawed, its seeds could keep spreading. Unlike amaranto that feels new in Chichum Majadas, Los Limones, and Unión Reforma, growers are well-acquainted with bledo. It is a plant that has 'always' been around. An especially common food during the youths of elder generations, it's a food that continues to show up in community members' kitchens, cooked down in pots and paired with tortillas.

Yet, bledo and amaranto both appear infrequently in the participatory mappings, each appearing 4 times total across all communities. Bledo's ability to hide in plain sight has been key for its persistence. While growers themselves do see bledo, its *monte* nature means they might not point it out. When I first started encountering bledo, I was the who stopped in my tracks and pointed to it, asking if it were amaranto. Iris, the grower whose land I was walking, shook her head, "No, it's bledo!" She went on to explain how to distinguish it and that it was food.

While some of the lack of appearance of bledo in the field mappings seems to stem from ways of seeing, some growers also express that, even with their way of seeing, they have been finding less bledo growing. David (Unión Reforma) points it out as one of the *'hierbas'* that, once abundant, has been disappearing.

While bledo goes under-the-radar and (dis)appears without explanation, amaranto received lots of attention despite limited appearances on growers' land according to field mappings. Full of interest and questions, growers keep bringing up amaranto. From whence did this interest arise?

There exist projects with Indigenous campesino communities throughout Guatemala that are centering on revitalizing amaranth as a way to promote sustainable livelihoods, improve nutrition, and support culturally-relevant crops. Red Kuchub'al collaborated with a grower organization in Porvenir Majadas, a community neighboring Chichum Majadas to begin local projects to grow, process and sell amaranto. Members of ADIMAG's *grupo de mujeres* (Women's Group) in Los Limones expressed interest in starting an *iniciativa* (initiative) of growing amaranto too. Since most of ADIMAG's growers were set up with *riego* (irrigation), around 2015 or so, Red Kuchub'al began to provide seed and *asistencia técnica* (technical assistance) to the *grupo de mujeres* for their endeavor to begin growing amaranto. When I visited Los Limones in 2019, I spent a sunny and sweaty afternoon baking in Evelyn's *invernadero*, harvesting fluffy flowering heads of amaranto with women of the grupo de mujeres (and some of their children). Since Evelyn had an *invernadero* available, she lent it to the grupo de mujeres to serve as the main space for their trials of amaranto production. Upon completing the harvest, we sat on the cement patio outside Evelyn's home sifting the tiny seeds out from the flowers through kitchen sieves onto a large tarp where we would leave them to dry in the sun until sufficiently dry to store and use as grain.

As the work began to draw to a close and women and children grew tired, Evelyn's adult daughter brought out mugs of café and another woman of the *grupo de mujeres* who had disappeared a bit ago rematerialized with stacks of *galletas* (cookies). Women leaned back with sighs and children darted about. Café and galletas made their way to all those gathered. As Gladis went to pass me a galleta, she asked me which I wanted, "*De manía o de amaranto*?" "Peanut or amaranth?" With a spur of excitement, I reached for the *galleta de amaranto*, which was studded throughout with popped amaranto.

"Did you all make these? With your own amaranto? I rembember these from my last time here!" I recalled eating these cookies on my first whirlwind trip to the area as part of Claudia Calderón's mycotoxins-in-maize project. The memory stuck with me, I told them, because I had found the amaranth cookies so delicious. The women smiled proudly. One explained that nearly all the amaranto they grew went into these *galletas*, which they sold to a growing following of local customers.

Months later, the COVID-19 pandemic hit. Two years passed. Still, when I returned to Los Limones in 2021, I arrived with a craving for some of the famous *galletas de amaranto*. My bubble was burst upon walking into Evelyn's *invernadero* during our participatory field

mapping. A smattering of amaranto stems randomly reached out between rows of other crops. Evelyn explained that amaranto continued to sprout from the seed of plantings of years past but that she and the *grupo de mujeres* had ceased growing amaranto. Her husband, she said, hadn't wanted her to plant it again. Sara would later explain to me that the member of the *grupo de mujeres* who owned the oven in which they had baked their *galletas* had also left the *grupo*. Without a space to plant the amaranto nor an oven in which to bake the *galletas*, few amaranto plants were to be found beside the volunteers like those in Evelyn's *invernadero*. Evelyn still had bags of harvested but unpopped amaranto. Unsure what to do with it, it continued to sit. Meanwhile, neighbors still passed by her house looking to buy amaranto "*como verdura*" "as a vegetable," to buy the leaves to cook up and eat.

The next year, in 2022, I sit in a meeting of the *grupo de mujeres*. To my surprise, the topic of *galleta* sales comes up. Once the official business of the meeting gave way to casual conversation, I inquire about whether the women are making *galletas* again. Sara lights up and points to the *grupo de mujeres*' little *fábrica* (production plant) behind us. "We now have our own oven." With funds that Red Kuchub'al had procured for small community projects from a Spanish organization, the *grupo de mujeres* had been able to buy their own oven and start baking *galletas* again.

But only the *galletas de mania*, the peanut cookies so far. Yet, folks have been asking for the *galletas de amaranto* again and the women of the *grupo de mujeres* are reinvigorated about growing amaranto again, this time more independently from Red Kuchub'al. Red Kuchub'al owns the popper in their facility in Quetzaltenango with which the *grupo de mujeres* had previously popped their amaranto grains. Now, the *grupo de mujeres* wants to do this step themselves. They aren't waiting to figure out all the details of how, though, before starting to plant amaranto again.

In a grower-to-grower *intercambio* (exchange) in Chiquimula—a department in eastern Guatemala—a few months prior, the member of the *grupo de mujeres* who had participated were inspired by the Chiquimula growers' amaranto production. The Chiquimula growers thus gifted the Los Limones women some of their amaranto seed. The Los Limones women then distributed the limited quantity of gifted amaranto seed to several other members of the *grupo de mujeres*, who had planted it and started growing it out by the time I arrived. The *grupo de mujeres* is seeing how the amaranto takes to growing on different members' *parcelas*. Rather than relying on those with *invernaderos*, they're experimenting with planting it '*en el aire libre*,' out in open air. They're looking to procure more seed so that—once they observe where and how amaranto best grows—they can expand their amaranto production.

Seeds

By 2022, the women of Los Limones weren't the only ones looking for amaranto seed. During my time in Unión Reforma in 2022, amaranto popped up unexpectedly in a number of conversations—a few growers had experimented with planting it, others yet hadn't but hoped to if they could find seed. Meanwhile, the same year in Chichum Majadas, amaranto started showing up in conversation when a couple growers and I were trying to distinguish whether the plants growing up near Ofelia's home were amaranto, bledo, or the look-alike *cola de gallo*. But it didn't leave the conversation thereafter. In fact, amaranto rolled into a growing conversation amongst a number of growers. They discussed how the neighboring community, Porvenir Majadas, was already producing lots of amaranto for Red Kuchub'al and that Red Kuchub'al bought it for a good price. They agreed amongst each other that '*hay mucha demanda*,' there is much demand for amaranto. In one of these discussions, one of the growers looked to me, seemingly in hopes that I would jot his words down in my notebook (a hope I quickly fulfilled). "We producers here also have interest in selling amaranto."

So if amaranto seeds are so sought-after, where do they come from? Red Kuchub'al is an important source of the sort of amaranto 'that produces' which was hard to find in the area before they brought seeds to Porvenir Majadas. Before the *intercambio* with Chiquimula, Lidia was one of the other women in Los Limones growing a smaller amount of amaranto in her *invernadero*. She said the seed came from the *initiativa* of the *grupo de mujeres*, that it was initially purchased but "*ya es criollo*," "it's criollo by now."

In Chichum Majadas, Emanuel was growing amaranto in 2021 by having been able to acquire some of the seed that Porvenir Majadas growers had. He explained during our mapping, "The seed is from Red Kuchub'al, brought from Totonicapán." He planted it "*para no perder la semilla*," "to not lose the seed." By the time I was back in 2022, Emanuel was on the search too—he had lost the amaranto seed.

The case of bledo seed, while quiet, is also intriguing. Despite its reputation as *monte*, Joel in Los Limones explained during the participatory field mapping that he had both bledo '*que solo sale*, ' that grows on its own and bledo *sembrado*, planted. Mónica and Gaspar in Chichum Majadas had only bledo sembrado, no bledo que solo sale.

Life with Roots

Bledo, while found infrequently, appears all over—growing amongst the *hortalizas*, beside the home, in the milpa. Joel describes how bledo grew after he harvested the *rábano* (radish), as though that was the space and time for which the bledo had been waiting. Even those few who plant bledo described little tending of it. It is usually just left to grow—though this 'leaving alone' too should not be missed as an act of attention.

Growers with amaranto are still learning how to tend it. For the women in Los Limones, this has been an ongoing process of experimentation in the wake of the technical advice Red Kuchub'al provided nearly 8 years ago when they began planting amaranto. For the growers in Chichum Majadas, this is a process of watching and listening to their neighbors in Porvenir Majadas and of passing this along within the community through a healthy habit of agricultural gossip. Thus, some Chichum Majadas growers were able to explain to me (and other growers) how amaranto 'quiere un poco de trabajo,' requires some effort, like staking the plants up so they don't fall over as they grow tall.

Still too, though, the amaranto that grows without tending is emerging—the 'volunteer' amaranto that grows without being planted. The amaranto that is starting to act notably similar to its monte cousin, bledo.

Harvest and Beyond

The ways in which bledo and amaranto are used and consumed are key to how growers understand them differently. Bledo, whose leaves are cooked and eaten like a vegetable, is daily food, *comida de los campesinos* (food of the campesinos). Eating bledo is '*comiendo monte*, ' eating *monte*.

Growers plant amaranto, generally, to harvest the seed, a pseudo-grain. The seed can be popped into *palomitas de amaranto*, popped amaranth and then added into *galletas* (as the *grupo de mujeres* does), *dulces* (candies), even cereals and granolas. These foods, though, are not the sustenance of daily life and are infrequently consumed in the communities. People make them, rather, as specialty products, value-added products with which they might turn a profit from amaranto (even if they don't grow the amaranto themselves). Speaking of amaranto, though, Emanuel clarifies, "We also eat it, because if we sell it all, afterward we have to buy it." He explains that the most common local use of amaranto was to prepare atol, a hot thick beverage in this case made with ground amaranto seeds.

But it turns out the harvest of seeds as grain, or at least the potential to harvest seed for grain, is not unique to amaranto. As I further try to clarify local differences between amaranto and bledo, Emanuel tells me, "One can harvest bledo seeds too and they have the same flavor as amaranto." So, with all the demand for amaranto seed, why aren't people harvesting bledo seed? He describes how a few years ago one producer took bledo to Red Kuchub'al for them to do a test at their facility to see how they popped into *palomitas*. The result: not as many grains popped as with amaranto. Furthermore, "The popped amaranto also turns out whiter and that's what the people want."

Just as bledo has more potential than its leaves, amaranto has more uses beyond its grains. The growers who have amaranto also mention that one can use the "*hoja para comer como una verdura*," "the leaf to eat like a vegetable"—just as with bledo. In fact, when explaining how people came around to her home to buy amaranto '*como verdura*,' 'as a

vegetable' even after she had stopped planting it, Evelyn claims, "(amaranto) is a good vegetable, not like bledo that just grows on the land, that gives one a stomachache."

This view fits with the overall narrative of why growers said amaranto is so in-demand because of how nutritious it is. Sara, when discussing the popularity of the *grupo de mujeres' galletas de amaranto*, explained that when the women took their *galletas* out to make sales ready to educate customers on amaranto's properties—some people they encountered were already aware of its health benefits and were quick to snap up cookies. In describing the nutritional properties of amaranto, '*tiene muchas vitaminas*,' 'it has lots of vitamins' was a common phrase among growers, who didn't get caught up in the specifics when saying that amaranto was all-around good for health. Although growing amaranto is more recent in the communities, familiarity with its nutritional value runs further back. This is because, in an area in which malnourishment has been an ongoing struggle, atol de amaranto—available in just-addto-a-pot-of-boiling-water bags—has been used for some time as a way to help children grow.

Bledo does not receive the same health hype as amaranto. Nonetheless, one grower conceded that it is "*también muy nutritivo*," "also very nutritious" and most with whom I discussed bledo shared similar understandings. Despite its lower hype, bledo also shows up in the markets. The growers who planted bledo say they sometimes sold the leaves *en el mercado*, at the market. Customers weren't hard to find. Lidia also sometimes takes the leaves of her amaranto to market to '*vender en hierba*,' sell as a green.

The demand for the Los Limones women's cookies and the desire of Chichum Majadas growers to sell grain to Red Kuchub'al seem to indicate that great excitement—and the great potential to earn a fair profit—grows with the seeds of amaranto.

On Namings and Agencies

The matter of plant namings were what initially keyed me into an understanding that the meaning of agrobiodiversity in the communities is distinct to standard ecological or conservation meanings, that in the communities the meaning of agrodiversity is built from and (re)defined by relationality. How did namings do the work of this revealing? By being sticky, perplexing moving targets. By shattering my pre-existing definitions. By asking me to enter into relationship, with plants and growers, before I could begin to understand their nuances.

Namings of monte, nativo, criollo, mejorado, transgénico, and others graced the lips of growers frequently but often with not quite the same meaning each time (and very likely with more meanings than I encapsulate here). The fluidity of these terms, as wielded by growers in Chichum Majadas, Los Limones, and Unión Reforma, is key to their capacity to turn conventional notions of agrodiversity and plant-human relationships on their heads. It is key to how a plant doesn't have to be automatically assigned one of these names but has agency to be ever-becoming into new meanings of relating.

<u>Monte</u>

The word 'monte' pops up continually in Chichum Majadas, Los Limones, and Unión Reforma when walking land, discussing plants—hierbamora and many others. Within the communities, it is a common term, confidently wielded and seemingly well-understood locally. As I heard it used over and over, though, I found myself increasingly struggle to key in on one clear definition. Monte, as it turns out, has multiple meanings. It can represent both a space and a general category of plant. As a space, when growers make reference to things '*en el monte*,' 'in the monte,' they are usually referring to land which there is not a concerted attempt to tame. This is to say, land in which growers cede to the will of the land itself, in which the land and the growers have an understanding of peace rather than a struggle of opposition.

Interestingly, as growers and I stood on the high end of a slope looking out across the land before us, mapping with our eyes, I would often point to a patch of woods and ask, "*Es el bosque de ustedes?*" "Is that y'all's forest?" The response would usually flip my script—'*St, es nuestro monte*' 'Yes, it's our monte' or '*No, es el monte de (nombre de un vecino)*" "No, it's the monte of (name of some neighbor)." It is not that no one uses the word 'bosque' (forest/woods)—it arises when people speak of when the land began to reforest, of *bosque comunal* (communal forest), of land that is better left for forest, of forest incentive programs. Rather, monte is a more implicit way of seeing and naming woods. Growers' woods often derive from a context of land that growers stopped planting. In some cases, they did plant some of the trees themselves but they still give the credit for the greater composition of the woods to 'monte' plants—trees and beyond—making it a monte space.

Who, then, are monte plants? How can they be both hierbamora and bledo as well as the plants growing in a forest?

One of the contexts in which growers reference monte is in the process of '*limpiando el monte*' in the milpa, in fields of *hortalizas* and other crops. It's temptingly easy to translate '*limpiando*' as 'weeding' and thus to equivalently translate 'monte' as 'weed.' '*Limpiando*,' though, more directly translates as 'cleaning.' The lighter concept of tidying up a space seems to

more closely align with local understandings of monte, rather than the heavy-handed judgements and need for control wrapped up in the concept of 'weeds' (Ray & Ray, 2023)

'Monte' seems to equate to a 'wild' plant, but notably the word 'silvestre,' the more direct translation of 'wild,' is not used by growers to describe plants. Rather, in describing hierbamora, bledo, and myriad other plants, growers often say something along the lines of "*Es monte—solo sale*," approximately meaning "It's monte—it just comes out on its own."

Conceptions of the 'wild' and 'wildness' in Western culture are often predicated on a nature-culture binary in which there is the civilized—and, in the case of plants, cultivated—world and its opposite, the wilderness (Barbour & Schlesinger, 2012; Power, 2005; Ramos et al, 2019). Thus, to think of monte not as 'wild' but as 'lo que solo sale,' 'that which comes out on its own' is a distinction which operates from beyond this binary way of knowing. Monte can be 'lo que solo sale' outside the home, in the field, in the forest, and in the many in-between spaces.

As not-quite weed and not-quite wild, the designation of monte also defies binaries of good-or-bad. The connotation of 'monte' is complex and heavily embedded within context. Sometimes growers downplay a plant's status with the phrase "*es solo monte*," "it's just monte." At the same time, growers' actions, through care and attention, seem to indicate a value for monte. On land with monte growing—the majority of land—farmers are able to identify hierbamora, bledo, colinabo, nabo, llantén, pajón, verdolaga, sauco, granadilla del monte and many more. They know their names, their characteristics, what they are good for. And amongst the monte, they don't categorically 'limpiar' all monte in the way one might weed back all weeds. Rather, monte, like hierbamora and bledo, with whom the growers have built a relationship, are typically left when growers could cut them back or uproot them. What's more,

as food options continue to expand in the communities, people continue to eat monte, to buy and sell it. Hierbamora is a hot commodity at local *mercados*.

As I sit down next to the wood-fired stove one morning, Manuela opens a warm pot and spoons its contents into bowls for all the family. Sara flips tortillas. As everyone begins to dig in to breakfast, Manuela watches my expression. "*Mmm, ¡qué rico! ¿Qué estamos comiendo?*" "Mmm, how delicious! What are we eating?"

Manuela breaks into a good-humored laugh. She shares a knowing smile with the others in the room. "*A ella le gusta comer monte también!*" "She likes to eat monte too!"

She explains that she had gone down to the carrot patch at dawn to pick hierbamora for our breakfast. Hierbamora always grows there amongst the carrots. "Does hierbamora grow with the carrots in the United States also?" Manuela is surprised to hear that I don't know—and more surprised yet to hear that if hierbamora does grow amongst the carrots, farmers in the U.S. probably won't identify it as food and will just weed it away.

My reputation as a monte-eater consistently made community members laugh. It also, I started to notice, earned me some esteem—likely because in my appreciation for monte community members recognize something we unexpectedly share.

Monte and community members have intertwined identities. Many community members have a sense, not unfounded, that eating monte has been looked down upon by larger society, especially urban and ladino. They seem to internalize this sense, reinforcing their recognition of the low status of *campesinos* and *gente Indígena* in Guatemala's social hierarchy. Yet, even while eating monte might carry with it some degree of shame, community members have also turned it into a point of pride, a bastion of their *campesino* identity.

One grower tells me with relish that her community is 'gente que come monte,' 'people who eat monte.' Amid a Los Limones Santo Rosario, one participant proclaims to the others gathered that their community's ability to resist illness, even amidst the pandemic spread of COVID-19, stemmed from the strong *campesino* custom of eating monte: "People make fun of us but, eating monte, we keep strong." Despite historically being made fun of, communities are beginning to find validation and valorization of eating monte beyond the community, as more nutrition-focused projects and programs recognize the value of plants the communities already knew have value. Sara (Los Limones) says, "A woman came and told us that the monte and hierbas we eat are so nutritious that we could eat them all day to survive."

This shared identity emerges from the maintaining of relationship between monte and grower, which itself derives from shared agency. In a cultivated-wild binary, there is a fight for control. For land to be cultivated (i.e. civilized), the growers must maintain control over the plants—choose which plants grow and eliminate others. For land to be wild, humans have no place in the picture and beyond-human species reign freely. Of course, these Western ideals rupture in the face of reality.

Contrastingly, the concept of monte is pliable enough to adjust itself to a reality in which agency is a continual navigation by many simultaneous agents. In understanding monte plants as 'lo que solo sale,' 'that which just comes out on its own,' growers recognize the agency of plants. They recognize the legitimacy and value of plants which seed, take root, grow, and reproduce outside of the growers' control. Yet, growers also recognize that just because these plants came to be out of their own agency doesn't mean they are totally independent beings. Growers and monte exist in familiar relationship, which affords the growers agency too. It is a grower who 'just grabs and tosses the seed' of hierbamora to help it sew itself anew. It is a

grower who recognizes the bledo growing after the radish and lets it be. It is a grower who goes at dawn to harvest hierbamora from among the carrots, to cook it into family breakfast.

<u>Nativo</u>

'Nativo' is a naming growers frequently use to describe a variety of plants. In a very literal translation, one could understand it to mean 'native.' However, there is a clear rift between the meanings of 'plantas nativas' in Chichum Majadas, Los Limones, Unión Reforma, and of 'native plants' in the realm of Western biodiversity conservation.

The concept of native plants comes with heavy associations in the fields of traditional agrobiodiversity and conservation. Determining whether a plant is native in these fields generally requires looking back to the plant species' 'original' origin. The idea of an 'original origin' might sound like a trap door leading to pit with no bottom. But when Nikolai Vavilov's 'centers of origin' concept became popularized in the 1950s, generations of Western botanists thereafter would utilize his theories, solidifying a near-universal understanding of plant origins which has gone on to determine which plants are 'native' in a particular place and which are not (Harris, 1990). The popularization of the concept of 'native' plants is not entirely uncontroversial though (Simberloff, 2012; Valéry et al, 2013). Who gets to deem whether a plant is 'native'? And what are the implications and ramifications of that designation?

While thinking in long timescales is worthwhile, the valorization of native plants in biodiversity conservation often comes at the cost of all other plants who *don't* make the cut as 'native,' most especially those subsequently deemed the villainous name of 'invasive.' The romanticization of native plants in standard conservation theory and projects often gives way to the demonization of these 'other' plants who are tainting the 'natural' local ecosystem, who 'don't belong here,' who 'need to be eradicated,' who ought 'stay where they came from.' If these phrases ring eerily similar to anti-immigrant rhetoric than pervades human society, it's because fear of the 'other' human and fear of the 'other' plant are two sides of the same coin. For as much good as traditional biodiversity conservationists aim to do with their attempts to rescue 'native' ecosystems, they often risk proliferating a plant form of xenophobia.

The way the communities' growers use the term 'nativo' to describe plants is a far cry from these implications of the 'native.' 'Nativo' overlaps continually with 'monte.' Many of the plants described as monte growers subsequently describe as 'nativo,' and vice versa. Because in describing a plant as 'nativo,' growers often quickly followed up with the familiar explanatory phrase '*solo sale*,' 'it just comes up on its own.' *Plantas nativas* (nativa plants⁴⁵), much like monte, are those who sprout on their own. They grow without farmers directly planting them.

Thus, plantas nativas and native plants are both determined by their origins. However, their timescales of determination are different. With plantas nativas, rather than rigidly looking back thousands of years to a time when humans supposedly had minimal impact on plant species and their ecosystems, the focus is on locally-relevant timescales and community memory. This opens the possibility for plants that have been in the community for only some generations, even sometimes one generation, to be counted as 'nativo.'

And by plants, I don't necessarily mean a plant species. Growers usually distinguish the origins of individual plants, even when these plants are within the same species. Look at the case of hierbamora. When hierbamora grows up on its own (albeit perhaps with some modest tossing

⁴⁵ I maintain the term 'nativa/nativo' rather than translating to 'native' because of the different meanings and implications these words carry.

of seed by growers), growers call it hierbamora nativa. Yet, when growers plant hierbamora (or find it at the market with unknown origins but suspect it of being planted), they make sure to clarify that these are a different sort of hierbamora, no longer hierbamora nativa.

Such individualized focus on specific plants requires on-the-ground attention and knowledge. When I want to find the origin of a certain plant—as I did for the plants in the crop(ish) stories—I search the internet for scholarly botanist articles. I defer to the 'experts.' However, I can't Google my way to figuring out if a plant is nativo in Chichum Majadas, Los Limones, and Unión Reforma. The power of this 'nativo' determination is not handed over to some singular authority. It depends on particular plants and, thus, not all growers need to be in agreement. Each grower is the 'expert' on their own land.

And what of the sort of plant that traditional conservation typically makes out as native plants' foil? What of the perfect antagonist of the 'invasive' plant? No grower mentioned any term for a plant that seemed equivalent in sentiment to 'invasive,' a term now so popularized in the U.S. as to be used among the general populace. Indeed, I didn't encounter sentiments that there were species of plants that simply 'didn't belong' in the communities. At times, there are specific plants in specific places that growers don't look upon as particularly desirable, beneficial, or useful, but growers do not vilify them. These less-desired plants, not having been planted by the growers, are most commonly categorized as monte—a category with significant overlap with plantas nativas.

The characteristic of plantas nativas and monte plants as plants 'que solo salen,' 'who just come up on their own' puts them in interesting company. Within them, Western concepts of 'weeds,' 'native plants,' and 'invasive species' collapse into each other, making space for more attentive, intimate interactions where growers can see the individuality within each plant. In seeing plants as distinct beings, growers acknowledge the agency of plants. This recognizing of plants by how they 'solo salen' should be distinguished from the conservationist tendency to classify 'native' plants according to their supposed historical separation from human influence. In the context of Chichum Majadas, Los Limones, and Unión Reforma, the description of plants as 'coming up on their own' is not a claim that these plants' lives are entirely separate from or uninfluenced by human lives. Indeed, growers call hierbamora 'nativa' a plant 'que solo sale' even as they grab and toss its seeds to encourage reseeding. They call bledo a monte even as a few say they plant the seed themselves. Even monte and plantas nativas are in relationship with growers—but these relationships are not controlled by the humans. In these relationships, plants have power too.

<u>Criollo</u>

Just as the monte naming overlaps with the nativo naming, the nativo naming overlaps with that big and proud naming of 'criollo.' Growers describe many plants as both 'nativo' and 'criollo.'

Plant identities, in parallel to human identities, in the communities have fluid boundaries. Inhabiting one identity does not exclude a plant from simultaneously inhabiting another, or from moving between identities across time and place. These multiplicitous identities can seem contradictory, paradoxical to an outsider to the communities, especially to a traditionally-trained scientist who has been taught in skills of reduction and classification. But the growers in Chichum Majadas, Los Limones, and Unión Reforma do not struggle to hold these complexities.
As Evelyn points to an *anís de chuch* and states '*es nativo*' ('it's nativo') then '*es criollo*' ('it's criollo'), she speaks with the confidence of someone who does not ascribe to singular truth.

The overlap of 'nativo' and 'criollo' actually becomes unsurprising when observing the importance of origin to 'nativo' and the importance of relationship to 'criollo.' An *anís de chuch* who sprouted on its own and has an extended relationship in a community or with a grower might be both nativo and criollo. Or other plants who persistently slip and slide between being planted, reseeding themselves, and reseeding with grower assistance yet whose seed originates in the community are also frequently deemed both nativo and criollo. Hierbamora who growers have started planting with seeds from their hierbamora nativa (not seeds or starts from a market whose origins are uncertain but clearly external to the community) is variously called nativa and criolla.

In the case of *maíz*, criollo varieties are easily identified thanks to *semillas criollas* (criollo seeds) saved from season to season, often generation to generation. Plants for whom growers save seed are nearly always counted as criollo. This makes it easy to reduce the concept of criollo down to an equivalence with 'heirloom.' Many plants who growers deem criollo— especially varieties of maize, beans, and squashes—could be considered heirlooms, in the sense that they are cultivars which have been preserved through open pollination and saving seed for many years and generations.

However, the way growers in Chichum Majadas, Los Limones, and Unión Reforma apply the term does not limit it to only plants who would be considered 'heirloom.' This is particularly apparent when realizing the possibility in these communities for plants to *become* criollo. Recall how Lidia described how, while her amaranto was initially from purchased seed, *"ya es criollo,"* "it's criollo by now." Lidia, Iris, and Evelyn have all witnessed how the amaranto which they first planted with seed procured by Red Kuchub'al from outside of the community continued to grow after they first planted it. Iris only brought one *mata* (plant) of amaranto to her parcela but now lots is growing up. As amaranto has made a home for itself in their fields, sprouting up again and again through a combination of passive and active reseeding on the part of growers, growers have started to recognize it as criollo.

This making-of-home is key to plants becoming criollo. Because the naming of criollo, above other meanings, is about relationships built and maintained. Growers and certain plants may begin as strangers. Yet, if and as this dynamic deepens into acquaintance, understanding, alliance, mutuality, these plants may—and often do—become criollo. Perhaps one of the reasons, then, growers speak of their criollo plants with especial clarity and pride is that their dynamic of familiarity is akin to family. Criollo plants have become a part of the community. Growers recognize their belonging not necessarily because they are 'native,' 'heirloom,' or have always been a part of the community but because they engage in relationship.

With relationship comes responsibility. To maintain healthy relationship requires respect, care, support. Thus, the 'criollo' is an ongoing practice of interdependence.

In English, 'criollo' translates literally to 'creole.' The English word 'creole,' usually meaning a 'pidgin' language made from the combining of two languages or someone of mixed European and African heritage, might seem to bear little relevance to plants. Yet, these meanings do suggest a meeting and mixing of worlds, just as plant and human worlds meet and mix in agrodiversities of the criollo.

Yet, 'criollo' again seems a strange word for plants of pride and interdependence in the communities when reflecting on its significance in Guatemalan history, where 'criollo' has been

used to describe someone born in Guatemala but of Spanish descent. In this meaning, the criollo and the ladino are bedfellows in the inferiorization of Guatemala's Indigenous peoples. Yet, tracing the meaning of the word back further, 'criollo' derives from '*criar*,' 'to raise' or 'to bring up.' Criollo plants and growers bring each other up. Not hung up on origin alone, they form adopted and intermixed families. They tend to each other and help each other grow.

Híbrido, Transgénico, Mejorado, and That Which Goes Unnamed

As Marcos, Sara, and I walk along the edge of Marcos' milpa, I ask him whether he has always saved seed to replant the milpa. "Yes! Yes, because they aren't those seeds…" He stretches out the word 'seeds,' racking his brain for a way to describe them. "How do you say?" He gives up trying to figure out the words he wants to describe what the seeds aren't and instead describes what they were, "They are nativas, criollas from here. They aren't from the *veterinario*."

Sara offers the words Marcos had sought, "Híbridas or transgénicas." Literally, Sara is saying that the seeds aren't híbridas or transgénicas. Less literally but more to Sara's point, híbrido and transgénico (and sometimes mejorado) have become shorthand in the communities for identifying a plant that is not criollo or nativo—in this case, from an agricultural service company.

In the case of maize, growers have an easier time conjuring up the word 'transgénico,' almost always as an opposition to maíz criollo and usually as a point of resistance. With potato, growers distinguishing between papa criolla and papa mejorada is an important part of understanding their relationship to papa. Yet, in the case of papa, the boundary starts slipping between criollo and mejorado, as when one grower described his Tollocan papa as "criollo but not so much."

Beyond maize and potato, the terms 'transgénico' and 'mejorado' appear more sporadically in growers' descriptions of other plants. When they do emerge from a growers' mouth, they are usually followed by a pause of consideration, a searching for what to call that which is not criollo or nativo. Growers' experiences in recent decades with maíz híbrido or (what they heard called) transgénico and papa mejorada have equipped them with the language of 'the 'transgénico,' the 'mejorado,' the 'híbrido.' And it's a language which has served them in their resistance to non-criollo maíz and in their consideration of restoring criollo seeds in the face of papa mejorada.

As these terms have entered growers' lexicons, though, growers have also transformed their local meanings. With many crops beyond maize and potato, growers most frequently use 'híbrido,' 'mejorado,' and sometimes 'transgénico' to describe plants they have bought from agricultural service companies, seeds brought by external organizations, seeds brought from the coast, plants that are clearly different from the nativo and criollo varieties. Often the growers don't literally mean to say these plants are improved, hybrid, or transgenic crops. Rather, they are establishing a certain degree of unfamiliarity with these plants—plants not originating from or yet-part-of the community, plants whose seeds they cannot save to replant, plants who they are still getting to know, or plants about whom they are yet uncertain.

In other words, these are plants who don't (yet) have other names by which growers know to call them. Sometimes, rather than using any of these terms, when a plant isn't criollo or nativo and the grower doesn't have other words to distinguish its variety, they simply shrug, leaving the plant unnamed. Often, the labeling of a plant as transgénico or híbrido is used to establish a relationship boundary. Not necessarily 'bad' plants, growers might have decided that engaging with them does not result in a positive dynamic. For example, they understand that if they were to plant maíz transgénico, they would become dependent on buying seed and likely lose their criollo seed. However, many plant-grower relational dynamics are not so clearcut, resulting in these plants who go yet unnamed. Boundaries are still being negotiated.

In a landscape of ongoing change, boundaries can continue to be renegotiated. Even with the híbrido, the mejorado, the transgénico, boundaries are fluid. Occasionally, growers describe a plant as, for example, 'medio híbrido' or 'medio mejorado' ('semi hydrid' or 'semi improved'). One grower described one of their maize varieties this way, because it grew shorter and more quickly (similar to maíz transgénico). Another grower described one of their apple trees this way since it was a variety brought from elsewhere that produced more abundant and uniform fruits, but that had now been with them long enough to only be somewhat mejorado.

Acquaintances between growers and different plants wax and wane. Outsiders can become welcomed, become home. As these relationships shift, namings do too.

Ruda



Nombres en Mam: Lo'n; Nu'la

Variedades:

Criolla Del mercado

Fuentes de Semillas:

Comprado en pilón como una plantita en Tacaná Sacando/guardando semillas de la ruda que ya hay A veces se da sin sembrar Perenne – puede seguir creciendo/viviendo por años

Usos:

Medicina –sirve para el susto, el ojo, la tos, pena, dolor de corazón Para vender – como plantita o como té



Meet Ruda (and *Plantas Medicinales*)

Ruda is a *planta medicinal*, medicinal plant. So essential in the communities, nearly any grower in Chichum Majadas, Los Limones, or Unión Reforma, could recognize it and describe its medicinal properties—and probably also show a *mata* growing near their home. Yet, if one looks up ruda by the scientific name *Ruta graveolens*, they'll find its 'native' origin is Southern Europe. This does not prevent ruda from being oft-deemed criollo or from being interwoven into local ancestral medicinal knowledge and into relationships of healing with community members. Women especially make sure ruda, and other medicinal plants, continue to form part of local agrodiversities.

History in the Community

Knowledge and use of medicinal plants have been a part of the communities '*desde muy antes*,' 'since long ago.' Many growers recount times when harnessing the power of plants was the most common way of curing ills. They can still recall the specific ways their mothers, mother-in-laws, grandmas would send someone out for a branch of this or some leaves of that when one had a stomach pain, a headache, a fever. When a family member had a particularly hard to figure out or hard to treat ailment, the family would call in a local *curandero*, traditional healer. "Our grandparents didn't used to go to the doctor," explained Elsa (Unión Reforma). "They cured children with the plants. They didn't have cancer. They didn't eat canned and processed foods."

In recent times, as *centros de salud* (health centers) and hospitals have become more available, more community members go to medical facilities with their ailments. They recognize the benefit of having healthcare options, but they also approach doctors—the diagnoses and the pills they offer—with a healthy degree of wariness.

"There are enfermedades that the *curanderos* (traditional healers) cure and ones that the doctors cure. When the doctor can't cure a certain illness, we go to the *curandero*." There are illnesses the doctors don't understand. Manuela's abuelos taught her of many *enfermedades* (illnesses). Two of them occur commonly and are common knowledge in the community but go unrecognized by doctors: *el ojo* or *el mal de ojo* and *el susto*.

"When we go to the doctor with one of these 3 enfermedades, they'll get it wrong, call it an infection or something and prescribe acetaminophen or other wrong medicines." These are the realm of the curanderos, or of plant-based cures passed down through lines of kinship and practiced in homes. "It's easier for us to make our *curas* (cures) here in order to not go to the doctor."

When community members speak of how to cure *el ojo* and *el susto*, ruda comes up over and over again as a key component of the cure. In Chichum Majadas, upon arriving back to the home where I was staying one day, I encountered the four-year-old daughter—who usually ran up to greet me before piling me with animated questions and lively requests to play—in a hammock looking listless. Her mother explained to me that she had *el susto*. When I asked how to cure it, she told me there were some people who know how cure it, but then shrugged and wondered aloud if *el susto* is even real. The answer didn't seem to matter—a moment later she was sending one of her elder daughters off to pick some ruda. In Los Limones, one father cured his young daughter's *susto* by taking her every morning at 5am for 9 days straight to a ruda plant, placing her underneath, and shaking the dew from the ruda plant onto her. Sara remembers

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that when her brother was a child and had *el ojo*, the curandero bathed him in a bath of ruda, aguardiente, and peppercorns.

When I asked Felipa (Chichum Majadas), who had just pointed out to me the many different *plantas medicinales* growing outside her home, if her family has always planted medicinal plants, she replied, "No, there used to not be anything. The ruda, nothing more." Ruda has long been a key *planta medicinal*, around in the communities before projects focused upon cultivating medicinal plants.

Many growers credit recent projects with Red Kuchub'al and other organizations with an increasing amount of *plantas medicinales* on their parcelas. In discussion between Noé, Gaspar, and Emanuel, Noé was explaining how when they became involved with ACDIMT they gained *plantas medicinales* from Red Kuchub'al due to their participation. Gaspar jumped in to say that there weren't medicinal plants before then. Emanuel contested, "There were, but the families didn't realize...but now they are realizing that there are plants that are medicinal." Noé agreed pointing out that they have ruda, hinojo, albahaca, "We knew these since long ago but then we went bringing the others that are new. For example, marialuisa, romero come from other places." He said an important aspect of what Red Kuchub'al contributed was understanding, *talleres* where they learned what each plant was good for.

Felix voices a similar sentiment on the impact of Red Kuchub'al on the relationship between growers and medicinal plants, "We have always (planted *plantas medicinales*)! Thanks to God and thanks to the program (with Red Kuchub'al) also. It has always spurred us to plant (more medicinal plants). But us from this place, we always (have planted medicinal plants)." Women from the *grupo de mujeres* in Los Limones also recognize the role of workshops and trainings in which they participated through Red Kuchub'al as part of the series of events that led them to start growing more medicinal plants in order to start making and selling teas. In Unión Reforma, some growers are excited to have the resources to start *plantas medicinales* in agroforesty *viveros* (nurseries) through the recently-begun '*parcelas forestales mixtas*' project funded by ADIPO.

At the same time that narratives around the increase in both actual medicinal plants and knowledge about medicinal plants emerges among growers, so too do narratives of loss—of medicinal plants and knowledge of medicinal plants—and resistance to loss. Elsa (Unión Refroma) encapsulates the sentiments of many, "More than anything what is being lost (are) the *plantas medicinales*….But some of us still have them there (on our land), the little plants, so that these don't give out once and for all." Whether growers talk about them as disappearing or recently abounding (or both simultaneously), growers' valuation of *ruda* and all *plantas medicinales* became clearer and clearer the longer I spent with them. When the topic of *plantas medicinales* comes up, ears perk. Nearly all growers eagerly hope for learning and sharing of information—be it with regards to medicinal properties, seed sources, or growing methods.

Seeds

When growers are starting new ruda plants, it is not uncommon for them to seek out starts (*'en pilones'*) at the markets or agricultural shop in *el centro* to transplant back at their homes. Unlike *híbridos*, though, once the transplants take, growers can harvest seed from these same ruda plants. Some growers who had planted their ruda within the past few years say they had sourced it through Red Kuchub'al.

The generosity of ruda in reproducing itself means that once growers have established it, they won't necessarily need to buy it again. Some growers save seed for future planting. Some growers go asking their neighbors for ruda plants, gifted or sold, as '*ramitas*' (cuttings). The Los Limones *grupo de mujeres* is starting to grow out and reproduce ruda in their *vivero* (nursery). There is also ruda that grows from seed disbursed by existing plants, without the grower planting it. Noé (Chichum Majadas) says that such ruda that 'grow themselves here' are especially criolla, especially nativa, and "good for the health of the family, of the community."

Being self-seeding is not the only characteristic of ruda that makes it endure—it is also perennial. The relationship between a ruda plant and growers can be maintained year-round and through a number of years.

Life with Roots

Ruda, like many other *plantas medicincales*, is usually grown in small quantities and near the home. Most growers have a few ruda plants in pots or small beds outside their house. Among the elements of the '*parcela integral*' promoted by Red Kuchub'al is a *huerta medicinal* (medicinal garden), a designated plot for the planting and growing of medicinal plants. Thus, a few growers have ruda planted in such *huertas medicinales*. However, many growers also continue to plant or let grow their *plantas medicinales* intermingled with other crops. Lone *matas* of ruda can be found growing amidst a vegetable field, below the branches of fruit or coffee trees.

The small amount and the proximity to the home of ruda, and other plantas medicinales, facilitates an easy relationship of care by growers. This care most likely takes the form of

occasional '*limpiando*,' 'cleaning' to give the plant space to grow and obtain sufficient nutrients from the soil.

Harvest and Beyond

Ruda is sometimes intermixed with other crops due to its use by growers as a repellent for *plagas*. According to Emanuel, a number of insects that 'disrupt' crops don't like the smell of ruda.

Primarily, though, ruda is valued as medicine. And it is not good only for curing *el susto* and *el ojo*. Upon asking about its medicinal properties, one grower claimed ruda is used "*para todo*," "for everything" and another said it "*cura un montón de enfermedades*," "cures a ton of illnesses." These hyperbolic statements reflect the great range of medicinal uses of ruda which growers listed to me, including for a cough, for pain of the heart, for when someone has a '*pena*,' for 'cleaning' one's blood. All this from a plant who arrived to the area post-colonization, and who, in the United States, is accompanied by warnings of toxicity.

Most community members voice more fear of pills and medical treatments than of any medicinal plant. Growers don't warn about potential dangers of ruda because they trust the relationship and accompanying understanding they have built with it. As Mayra explains, "Each plant has its function in the organism/body of each person." This trust in *plantas medicinales* is reflected in their value. Although grown in small quantities, most growers think it important to have *plantas medicinales* growing on their land.

few growers are selling ruda seedlings at the market. The grupo de mujeres in Los Limones is planting ruda in order to one day sell it as one of their teas.

Being a Woman, Being a Plant

Óscar and I stand on the steep edge outside of Angélica's home in Chichum Majadas, looking out over the planting of coffee trees to which she is indicating. This is her café. Or rather, according to her, her husband's café. When we arrived at Angélica's house, she regretted to let me know her husband wasn't home with an expectation that our conversation would end there. She was surprised and a touch reticent when I told her that I would be happy to talk to her, husband or no husband around. The source of her reticence is made plain now as she says that she doesn't know anything about the café, as it is her husband's realm.

Rather than press for information on the coffee plants—which many male growers in Chichum Majadas had already had much to tell me about—I look around at what other plants I see growing on Angélica's land. I ask Angélica if she has any *plantas medicinales*. "No."

Óscar speaks up then, arguing to Angélica that she does indeed have *plantas medicinales*. Gazing toward an avocado tree, Óscar points out that the *aguacate* seed can be prepared into a tea that works well as a contraceptive. Angélica says that she has heard that, though isn't sure herself whether it works. "My daughter-in-law's mother told me that."

Óscar continues on that all that café growing along the slope is medicine too. You can cut a lemon, put some ground coffee bean on it, and then put it on the spot of your head that hurts in order to cure a *dolor de cabeza* (headache). Angélica nods in confirmation. She knew all along.

I recognize that beneath Angélica's sense that she, as the wife, doesn't have anything to share with me, as the researcher, is a world of knowledge. At this point, my questioning becomes less fueled by wanting to know that knowledge myself and more by wanting Angélica to see herself as I see her—as a vessel of wisdom, as a woman, as worthy. I ask Angélica what other *plantas medicinales* she know about. "Not many."

I persist. "That's alright. Which ones do you know about?"

She starts off slow, pausing to consider one plant, before the names of quite a few plants roll off her lips. She explicates, too, examples of their different medicinal uses and mentions that a few of them she even has growing. Heartened, with a new air of ease, she waves me over to come see them.

Hidden Roles

As I had similar interactions to that with Angélica with other women producers, I began to wonder how much the seemingly paradoxical narrative of both increase in and loss of *plantas medicinales* from agricultural diversity is wrapped up in gender roles. Is part of this disjuncture due to the often 'hidden' roles of women in agriculture? Is part of it that *plantas medicinales*, like women, also have occupied a more 'hidden' role in the tapestries of agrodiveristy in the past too?

While patriarchy prevails more often than not in Chichum Majadas, Los Limones, and Unión Reforma, gender roles in agriculture are not as simplistic they might seem at the outset. As much as certain realms might be associated with certain genders (men work with field crops, women work with home gardens of vegetables and medicinal herbs), in practice, such boundaries blur. Women and men alike partake in the hard labor involved in planting, 'limpiando,' and harvesting the *milpa* and other field crops. Women and men alike cultivate vegetables and herbs. Although when I asked men about medicinal plants they would often comment that it would be better to ask their wives, many of them—like Óscar above—would proceed to demonstrate they indeed had knowledge of the medicinal properties of plants.

Key in these comments by men that I had better ask their wives about the medicinal plants too is not just assumptions about who *has* knowledge but rather who is *in charge* of holding that knowledge. Women are expected to be the knowledge keepers of medicinal plants as well as of traditional practices, of criollo varieties of seeds, of the culture in their agriculture. Men practice and know about these parts of agriculture, but women are quietly responsible for the act of remembrance.

Until more recently (and likely largely since at least colonization when the Spaniards imported their strict brand of patriarchy and imposed it upon the Maya peoples), men were the ones in leadership and decision-making roles in the communties. In other words, men were the ones with a voice. If women are the memory and men are the voice, it becomes easy to see how, as history is retold, simultaneous divergent narratives can emerge. What is collectively seen, remembered, and spoken doesn't always add up to single, linear story. Especially when some plants which are seen aren't always being spoken.

In contrast to the charismatic presence of the milpa, for example, some plants have quiet roles too—especially those plants who are monte, nativo, blurrily criollo. Women more frequently are the ones who remember to remember these plants who might be easy to miss in plain sight, easy to take for granted, easy to lose. Until recently, many of the *plantas medicinales*—such as apazote, lengua de venado, mishte, and llantén—were in fact monte, nativo, that which grew on its own. These are the sorts of plants who might typically be forgotten from conventional agrobiodiversity measures—the 'unplanned' diversity.

To see these plants as part of agrodiversity requires a relational view. In other words, they require a relational agrodiversity, which itself requires 'feminine' ways of knowing contextually, through relationships, and with fluid truth. 'Masculine' ways of knowing, which assert reduction, objectivity, and certainty, are those favored by Western knowledges and thus too by conventional agrodiversity. 'Feminine' and 'masculine' ways of knowing are not mutually exclusive and can merge and mingle in persons of any gender. Both women and men in the communities can possess and operate from both feminine and masculine ways of knowing. Men, though, are more socialized by larger society toward masculinity and are also the ones who have more frequently engaged with outside organizations which often implicitly train (or attempt to) their participants to operate from masculine ways of knowing. Thus, relational agrodiversity is important for recognizing both plants who are often left out and women who are often discounted.

Many pots with different seedlings surround Dilma's home in Unión Reforma. She excitedly gives me a tour of them. While not exclusively, tours of diversities of individual seedlings and potted plants like this one have most often been offered to me by women. When she points out her little seedlings of *chicajol* and of *arnica*, she informs me they are *plantas medicinales* that used to just grow 'wild' but that they now conserve. When I ask where they used to grow and she replies, 'the woods,' I quickly respond asking if they grew in the *bosque comunal*, Unión Reforma's communal forest. Dilma's face lights up when she realizes I haven't gone into the *bosque comunal* yet.

Soon enough, Dilma's children and my host family's two daughters are excitedly running out ahead of us on one of the trails entering the *bosque comunal* as a drizzle of the late rainy season begins to sprinkle us. Dilma and I walk slower as the trail thickens into overgrowth and Dilma narrates everything we encounter in our path. She stops continually to recognize one *planta medicinal* after another, sometimes seemingly surprised by a plant she had nearly (but only nearly) forgotten or by a plant she hasn't seen for a while. She harvests some leaves here and there for teas, some seeds here and there to take back to plant outside her home.

When some growers speak of a time when there were practically no *plantas medicinales*, it seems they are likely actually referring to a time when they *planted* very few *plantas medicinales*, not speaking of the *plantas medicinales* who are monte and 'solo salen' in the monte. When other (or even sometimes the same) growers speak of a recent decrease in *plantas medicinales* compared to generations past, the unplanted *plantas medicinales* is who they were usually seeing, often listing names of plantas nativas.

While many *plantas medicinales* blur these distinctions of sembrado versus nativo/monte—like ruda, both able to be planted by growers and able to self-propagate—certain medicinal plants previously uncommon or nonexistent in the communities have recently become more readily available for planting (due to availability of seed, irrigation, or training). Others, like apazote, have a long history of growing up on the land without having to be planted, though now don't grow as abundantly nor have growers found them easy to grow by planting. While there is still more specific variance plant by plant and place by place, the narratives of increase in *plantas medicinales* usually focus on *plantas sembradas* (planted plants) while narratives of loss usually pay attention to *plantas nativas*.

Who Controls the Land

To talk about gender roles in agriculture in Chichum Majadas, Los Limones, and Unión Reforma necessitates a discussion of land tenure. The quick-and-dirty of it: Men are the owners of the land. But it wasn't always so simply this way. A complex history underlies this reality.

Such a history traces back to when Spanish colonizers began a long chronicle of stealing land from the Indigenous peoples. Colonizers and their sucessors removed many Maya peoples from the previous lands as a form of suppression and to serve as labor on haciendas. Justo Rufino Barrios rule, following shortly after independence from Spain, continued the displacement of Indigenous Guatemalans from their land in order to turn the lands over to elites for conversion into monoculture plantations of commodity crops, especially coffee (Einbinder, 2017). After a brief blip of hope for land reform during Jacobo Arbenz presidency, the Conflicto Armado created another wave of Indígena displacement and now around less than 5 percent of Guatemala's population controls around 80 percent of arable land (Aguilar-Støen et al, 2014). This has left little of the land for the *gente Indígena*. Amidst the carving up of their lands, many Indigenous communities have also seen their communal lands divided up into private plots. Land that once belonged together to whole communities now belongs privately to individuals—and those individuals are usually men.

Among the three communities the *bosque comunal* of Unión Reforma is remarkable. In each community, the effects of the promotion of forest begun by Pastoral de la Tierra and collaborating growers and the resultant reforestation are visually evident on the landscape. Spreads of woods, which many growers tell me I wouldn't have seen in decades prior, butt up against people's parcelas and homes. Community members enter these woods seemingly freely, harvesting wood for fire and lumber, forage for livestock, edible and medicinal plants—or just walking through on their way to some other destination. As someone from the land of 'no trespassing' and 'keep off my lawn,' I mistakenly thought these woods must be public or community lands. As more and more growers started pointing out 'their' forests, though, I began to realize that, despite the seeming shared use, these lands are privately owned. Upon inquiring in each community, I learned that Unión Reforma is the only one with communal land, its *bosque comunal*.

Yet, Chichum Majadas and Los Limones used to have communal land too. As Sara and I go to visit another grower who lived on a different slope, we walk down one mountainside and up another, cutting through a large sweep of forest rather than taking the long route of winding road. (People always used to walk this route. Now, with cars more available, most folks preferred to flag down a lift, but Sara graciously humors my love of walking.) As we walk through a big swathe of forest, marked periodically by the mecate plant which people use to mark property lines.

Sara says there didn't used to be mecate here, that all this forest used to belong to the community. Some maybe thirty years ago (Sara is hesitant, as community members often are, to guess at the time in years), the land became entirely divided up among *dueños privados*, private owners. The way Rosy describes the shift is like the knocking down of a line of dominoes—one community member claimed some land for themself and then one after the other followed, afraid if they weren't quick to claim some private land there would soon be none left available.

Now, each family has their own private parcelas. In all three communities, how much land families got as communal land became privatized has greatly impacted their future fortunes. At that time, land sold for cheap. Some people would trade large tracts of land for livestock animals. Edwin explains that his father, rather than buying it, sold lots of land back then. The small amount of land Edwin's father maintained became divided into yet smaller parcelas when Edwin and his siblings came of age and were ready to start their own families, homes, and parcelas. Now, land is expensive. Edwin has little land, not enough even to plant a milpa, and difficult prospects of buying more. When the land is a main means for feeding one's family and earning a livelihood, the lack of it can leave a family in a perpetual state of just-getting-by.

Edwin's family's story is not at all uncommon. Growing populations in recent decades (at least until present upticks in longer-term out-migration) leading to division of limited private lands across generations has led to a fairly pervasive sense of land scarcity in all communities, even Chichum Majadas where geographical isolation and very steep slopes have allowed community members to maintain generally larger parcelas than in Unión Reforma or Los Limones. In the surveys conducted in the Sibinal area (including Unión Reforma), when growers were asked whether they were growing more new crops (in scale or in number) or a greater variety of crops, the most cited reason among those who responded 'no' was insufficient *terreno*, land.

And the owners of these ever-smaller private parcelas, again, are men. The community ownership of communal lands allowed those lands to be the domain of all, unencumbered by divisions of individual ownership. In privatization of land, women lost out. When women don't own land, the basis by which most people subsist, they are put in a very vulnerable position.

What's more, while men own the land, women are in many ways responsible for being keepers of the land. When men are away (which they often are for leadership roles, organization meetings, communal work days, work of various kinds, migration), women are in charge of maintaining the home, the family of humans, plants, and animals. Women work the land. They make sure the harvests happen, the seeds are saved, the grains stored. In the milpa, they recreate the rituals. They tend the seedlings and watch the monte. They make food and medicine, take products to market. When folks like me show up, they host me on their parcelas.

Yet, women in the communities often underplay their own agricultural efforts and knowledge in relation to the men. They still call the parcela the work of their husbands, while the household is woman's work. After all, the parcela does belong to the men and the women, they had long been trained, belong to the household. It is their duty to cook all meals, take care of the children, and do all the cleaning. Many women describe how the disproportionate amount of household labor they are expected to perform makes it hard for them to have enough time. Some women, especially in Unión Reforma, also now have jobs outside the home, making it even harder for them to fulfill all their roles—wife, mother, homemaker, keeper of the land, and professional.

Women don't necessarily agree with the roles they are dealt, with being secondary to men. However, they also understand the difficulty of being a woman without a husband or livein partner. Widows, women of broken partnerships, and even women whose husbands have migrated struggled to keep up with all their roles and stay afloat financially. Even domestic abuse is hard to leave. As one woman expressed to me, if the men are the ones who have the land, where can women go?

This is a question to which women are working toward creating more answers. The woman above told me of the creation of movements of *Red de Mujeres* (Women's Network) and *Tierra para Mujeres* (Land for Women) to help them escape abusive home situations and to gain land access. Even without official ownership, I witnessed women asserting alternative ways of

'owning' the land—ways that involve bringing their abilities, knowledges, and relationships with land and plants forward.

Empower the Women, Empower the Plants

When Red Kuchub'al began working in Chichum Majadas, Los Limones, and Unión Reforma, primarily men were showing up to their workshops. This is because the founders of the grower organizations and their subsequent *socios* (members) were largely men. Most women were only *socios* by association—their husbands were officially a part of the group and gained resources and teachings that women would then become a part of putting into practice at their homes and parcelas. ADIMAG was established by men, but it was from there that the Los Limones *grupo de mujeres* came to form around 2007. Evelyn, one of the elder women in the group, explains:

"We were born almost from the men('s group). Because when the first invernaderos came, we planted tomato. After the tomato (planting was) when the quetzal per pound (price of tomato) dropped and the tomato plants produced for the first year... An ingeniero who was named Wilson said, 'Poor y'all, you lost all these products.' He said, 'It would be best if two women go learn to can tomatoes.' And so Sara and my daughter who was here, those two went (to a Red Kuchub'al training). They went to make that sauce 'ketchup,' chile en escabeche, to learn to can. But worse, the people didn't buy any because they cost 10 (quetzales) per bottle and tomate cost one quetzal per pound. Thus, it didn't suit their interests to buy prepared, bottled tomato. And as the people here are very poor, they couldn't buy it. Thus, the bottled tomato...didn't sell. Afterward came a 'sister' from France. She said, 'Let's unite the women. We have to invite all the women. Let's meet in the school.' Like that, like you. And the women arrived once, two times. Some liked it and others didn't. Us, we mostly liked it because she said, 'Learn, women. Learn to make sweets, to make this peanut treat, this one with ayote seed, of sesame seed. And afterwards there was another 'sister'(in Los Limones) who learned to make tea in a training. Thus, that brought the idea that we too can make tea. We bought a grinder...And that is where we ended up as the grupo de mujeres. But some of these 'sisters' have already left. They don't exist with us. Some of us are those who remain."

Despite the changing of members (some former ones have left, some new ones have joined), the Los Limones grupo de mujeres continues strong.

Chichum Majadas has never had a women's group. The closest it comes is the beginning of the inclusion of women in trainings and workshops from Red Kuchub'al. While initially women began attending as replacements when their husbands were absent, some women have become more emboldened through their participation and a handful have become more active participants. Mónica is one such woman. When I arrived to her home, she made clear that she has *her* parcela to show me, different from the one her father-in-law or husband manages. And when we went out to walk the fields, she made sure to step in when we arrived at her parcela and take over explaining it. A few days later in church I would hear her give an impassioned speech about how women and men are and should be equals.

Unión Reforma also has (or had, depending on who you ask) a women's group formed from wives, sisters, daughters of men who are *socios* of ASDISMA. These women are now *socios* in their own right too, but they haven't been able to maintain the same momentum as the Los Limones grupo de mujeres and many of their projects are on pause. A meeting of the *apicoltores* (beekeepers) with Red Kuchub'al leadership about a potential grant opportunity through the Embassy of Spain illuminates some of the group's struggles to keep going.

At the meeting, a small group of us gathers in chairs (or standing, as is the case for those who filtered in later after all seats are taken) in a tight circle in the one-room cement-wall *apicultura* processing facility. The leader from Red Kuchub'al explains the grant opportunity, which, much to everyone's excitement, would provide them funds to buy new beekeeping equipment. Some *socios* eagerly put me on the task of Googling the price of locally-purchasable industrial-size bee pollen driers (not an easy find).

The leader from Red Kuchub'al is quick to slow the excitement down with the requirements—this grant is specifically targeted for women participants. All eyes turn toward the women in the room, whose shoulders slump. A lot of externally-funded projects are now explicitly geared toward women and youth. While these projects aim for women's empowerment, the women *socios* are becoming exhausted by them. Without the pressure to partake in projects in order to secure grants, they already have their households to take care of, their parcelas and livestock to tend, some have jobs in *el centro*. To find time for multiple other group projects and meetings, for more responsibilities feels unmanageable and taxing.

The *socios* at the meeting go home to ask other wives, sisters, daughters if they would be willing to participate in the project, at least in name, at least in showing up to meetings. Eventually, they secure the grant and its funds.

The Los Limones grupo de mujeres certainly does not escape the issue of feeling multiple simultaneous pressures. Some women left for this reason. When the grupo de mujeres formed around the production of *tomate envasado*, it included 50 women from all of Pin Pin but, by the time that project had ended and the women had the idea to make teas, the group was down to about 10 women in only Los Limones. Many current members tell me of their husband's initial disapproval of their joining the grupo de mujeres, saying the women were wasting their time making teas, that they were neglecting their duties as a wife, even some that they weren't smart enough or good enough to make it work. But the collective encouragement of the women in the group gave them the courage to persist, to find value in their parcelas, their plants, their lives by creating their own option for work and livelihood.

When the idea to make tea first came to the grupo de mujeres, they were imagining making teabags like most people already knew, like Lipton, Sara explained. But then they began to think of the potential of making herbal teas, teas from plantas medicinales with which they were already acquainted. Red Kuchub'al responded to the idea by providing the women in the grupo de mujeres with seed to start *huertas medicinales* (medicinal gardens) and with trainings on tea production. The teas sold well and the women quickly found themselves in need of their own space to produce them. Red Kuchub'al agreed to provide the women a tea-packaging machine if they provided the space.

The women wanted to buy a *terreno* but no one in the community would sell them one. According to Sara, when other community members knew it was the grupo de mujeres who wanted to buy the land, they charged high prices for their land because they didn't want to see the women succeed. Finally, one of the group members convinced her husband to sell the grupo de mujeres a corner of *terreno* where the milpa didn't grow well. Red Kuchub'al came to inspect and approved the spot. The women built their little production plant, contributing much of the labor. Sara points out that some of the men in the community did help with construction but that's as much as they have helped with the growth of the grupo de mujeres. With the establishment of their own space, the grupo de mujeres started with four tea varieties and have since expanded to nine and are working on introducing more. The women have also experimented with other products, such as *mermelada de sauco* (elderberry marmelade) and *enlatados de durazno* (canned peaches). The sauco, a nativo elderberry variety, was gathered from local trees which grow uncultivated in the community but whose fruit typically goes unutilized by community members. The enlatados de durazno utilized the season when duraznos fruited in abundance to then preserve the peaches as a saleable product later in the year when fresh fruit is harder to come by and more expensive. There was also the introduction, of course, of the delicious *galletas de amaranto* and *de mania*, the amaranth and peanut cookies. A side group of the grupo de mujeres has recently started growing and selling oyster mushrooms.

The teas, though, remain the centerpiece of the grupo de mujeres' work. Every woman in the group has to go out and sell the teas. The women try to inspire each other to sell by offering the woman who sells the most each month an extra 10% cut of the earnings. Otherwise, profits are split evenly. A certain amount of money is saved to always cover the costs of production and to invest in the grupo de mujeres. While earnings had dipped during the height of the COVID-19 pandemic, at my last visit in October of 2022 the women had started to regularly turn a profit. In the months prior, they made a profit of 700 quetzales one month, then 800 the next, 900 the next, finally 1,000. And then last month they achieved a profit of 2,000 quetzales⁴⁶.

As the grupo de mujeres has gained confidence, they have branched further away from Red Kuchub'al's support. When Red Kuchub'al became less present during the pandemic and during their own internal leadership turnover, the grupo de mujeres found new project funding

⁴⁶ At the time of writing, 1 quetzal was equivalent to about .13 USD.

with FundaSistemas. The grupo de mujeres aspires to become more independent yet. They are very proud to have their own property, their own plant, but they also dream of one day being able to employ other local people, bringing jobs to the community. They also want to establish their own brand. Their tea has been sold under the Red Kuchub'al name and logo, but now the grupo de mujeres see that they have established enough of a reputation for themselves that they want to be seen distinctly and be in charge of all aspects of their business. They have created their own name, formed from the initials of all the group members, and they're in the process of creating their own logo.

The grupo de mujeres has afforded the women involved a greater independence from men, giving them the opportunity to take ownership and proving to themselves and others their worth. The women recognize that the plants with whom they work are key players in their process of empowerment. They are working to strengthen their relationships with the plants they involve in the projects.

The nine teas the women currently make are higo (fig leaf), jamaica (hibiscus), eucalipto (eucalyptus), albahaca (basil), manzanilla (chamomile), menta (mint), marialuisa (lemon verbena), té de limón (lemongrass), and hierbabuena (spearmint). Some of these plants, like jamaica and té de limón, are suited to warmer climates than Los Limones and the women have always purchased the raw ingredients to make the teas. In the beginning of their tea production, the grupo de mujeres was buying many of their herbs from neighbors, sometimes the market. In one of my earlier trips, one of the women and I went to implore another member of the community with an higo tree to sell us as many of his higo leaves as he was willing. Many of the women involved say they hadn't planted high amounts of *plantas medicinales*. In the words of Gladis, the president of the grupo de mujeres at the time, "Before, we did used to plant (plantas

medicinales) but very little. Just small plants at the house. Whereas now we already have them in the parcelas, more than anything in our fields."

Just as the plantas medicinales has enabled the grupo de mujeres to flourish, the grupo de mujeres is now enabling plantas medicinales to flourish. Plantas medicinales are gaining more space on the womens' lands—and often on the land of their neighbors too who have watched the women's land shift. The grupo de mujeres have started a vivero (nursery) of plantas medicinales where they gather regularly to work together tending seedlings to eventually distribute among the grupo de mujeres and to sell to other community members who are now interested in growing more plantas medicinales too. At last check, the vivero contained romero (rosemary), pericón, ruda, albahaca, toronjil (lemon balm), mishte/mixte, orégano, vics/vaporub, té de limón, hierbabuena, menta (peppermint), and llantén (broadleaf plantain). They hope to add hinojo (fennel), flor de muerto (marigold), marialuisa, higo, incienso, and apazote.

Some of these plantas medicinales are ones that the women are using for teas. But planting more plantas medicinales for teas has also inspired the women to think beyond those plants with which they make teas to giving more space and attention to a variety of plantas medicinales. Gladis explains, "Now that we have the tea facility, we thus need the plants and we have to plant them. It is not an obligation to plant them, yet our own work permits us to plant them. And we also need them for some symptoms, some illnesses we have."

The work of the grupo de mujeres enables them to valorize and prioritize their relationships with plantas medicinales. But what does this emphasis on plantas medicinales sembradas (planted medicinal plants) mean for plantas medicinales who are nativas, are monte. Intriguingly, some of the plants the women have or wish to have in their vivero, such as mishte/mixte, apazote, and llantén have historically been nativo and/or monte plants. Mishte/mixte and apazote are nativo plants which used to grow prolifically and be well-known medicines but which the community has more recently noticed have become harder to find. Llantén, on the other hand, is a monte medicine which continues to grow fairly commonly.

As women (and, following in their wake, much of the community now too) have started planting more plantas medicinales, including varieties previously uncommon or nonexistent in Los Limones, the monte and the nativo have not fallen by the wayside. Rather, the women's appreciation for plantas medicinales has extended too to these plants who could easily have once been taken for granted. As many families converge on the main road on our way to the afternoon Santo Rosario, Sara stopped to point out to me a plant growing up along the dirt roadside llantén nativo, she says. The other women gather to take note, starting an exchange of knowledge on its medicinal qualities, how to grow it, its history. Along the rest of the walk, one woman after another continues to stop and wave the rest of us over to see a planta medicinal she has found just off the path.

Women in Los Limones are cultivating relational agrodiversities. They are simultaneously creating new abundance of plantas medicinales and revaluing the abundance of plantas medicinales who have already existed, still exist even if in the margins. They are making space in agrodiversities for all variety of plantas medicinales, blurring the boundaries between new and old, between the sembrado and the monte/nativo. In this space is room for relationships to grow, for these different kinds of plantas medicinales to become, however fluidly, criollo. The women of the grupo de mujeres and the plantas medicinales are resisting and persisting. Despite a history of being pushed to the margins, they are starting to take up more space. They are starting to shine.

Chapter 6

Movement and Seeds

Café



Variedades:

Criollo, Café árabe, Café borbón, Sarchimor, Café Caturra Amarilla, Café Caturra Rojo, Catimor, Robusta

Fuentes de Semillas:

Haciendo viveros y injertos de café Criollo –Semillas traídas de la finca Sarchimor—de Red Kuchub'al o compradas

Usos:

Para vender, a un comprador que pasa por la comunidad o en Tacaná o Chiapas La posibilidad de formar una cooperative para procesar café para vender Consumo familiar Planta medicinal—para dolor de cabeza



Meet Café

Café does not grow in the higher-altitude climates of Unión Reform and Los Limones. It did not start growing in the warmer Chichum Majadas until recent decades. Now, though, its presence in Chichum Majadas is hard to miss, marking both the landscape and people's daily lives. The story of the rise of café in Chichum Majadas illuminates the journey of how certain plants, or varieties of plants, become criollo even when they come from somewhere else—of how migration and home can become wrapped together in identity.

History in the Community

The story of the relationship between community members and café began before anyone was growing café in Chichum Majadas. In previous generations among all three communities, seasonal migrations to '*la finca*' were commonplace. 'La finca' (literally, 'the farm' or 'the plantation') is the shorthand by which community members refer to the coffee plantations on the San Marcos coast or, more often, in the Chiapas region of Mexico where they used to migrate for months at a time, beginning around October, to '*cortar café*,' harvest coffee.

In some families, only the men would migrate. In others, the whole family would migrate together, children coming along to work in the harvest too. In these families, often only a few women or elders might remain behind during the peak months of local milpa harvest, which overlapped with café harvest season. Those children, who are now in their 20s and 30s, their parents, grandparents describe their time at la finca as '*muy duro*,' very tough/difficult. They depict harsh working conditions, laboring in the coffee fields from early morning into the

evening every day for low pay, and living conditions, sharing small quarters with many other workers and receiving only tortillas, rice, and beans to eat from la finca's kitchen.

One year, a few growers had the idea to bring a handful of fresh beans they harvested at la finca back home to Chichum Majadas with them. As Emanuel explains: "In Chiapas, there was café. Thus, (some collected) a little seed to test in this area. My father...planted his café and it produced beautifully. Thus, I came, planted two of my own trees here to see if they would grow...And the café criollo is beautiful. There it is, see. It looks taller and produces more. For this reason, it is better."

These first seeds were shared with other growers in the community. Óscar, whose seed came from his father, recalls beginning to plant café in 1996. After getting together with his wife he began a café nursery, using seed and cuttings from those beans from the Chiapas finca to start 200 to 300 seedlings. Once they were big enough, he planted them below his milpa and then migrated to la finca for the months of coffee harvest season. Upon return, he saw that the café had 'stuck.'

As the café began to 'stick' on a number of parcelas, growers started to envision the possibilities—including an alternate reality in which the growers harvested their own fields of café rather than migrating to la finca every year. Inspired by this dream, growers began sharing among themselves knowledge and learning around café growing. Óscar explains that he has been learning how to grow café since he was a '*chamaco*' (a kid) through a lifetime of la finca migrations. While not having grown it in their own community before, growers in Chichum Majadas had an abundance of experience around café drawn from their times working on la finca and they were quick to 'get the idea' on how to grow it on their own lands which they know so well. Still, motivated to manifest their vision into actuality, growers began seeking resources to
support them. Alliances with Pastoral de la Tierra and then, especially, Red Kuchub'al took on a new level of appeal. Ricardo describes:

"Through when we used to go more to work in Chiapas and we collected (café) seed in order to do a sample/test here—that is when we started realizing that, yes, the café can (grow). Due to this, we entered into an organization and we continued learning so that other consultations would come to us so we could analyze and learn (more about café production). And (now) this terreno is a little profitable thanks to café."

Pastoral de la Tierra trainings, growers found, complemented the understandings they already had about growing café. Many growers recall the Pastoral de la Tierra *ingeniero* Juan Monterroso coming to Chichum Majadas and teaching that certain terrenos were good for maize and beans and that others were better planting trees like café. By the time Red Kuchub'al arrived, café was at the forefront of many growers' minds. The socios told Red Kuchub'al that what they most needed were café and fruit trees. For socios who covered a reduced portion of the cost, Red Kuchub'al procured the sought-after saplings. They provided workshops on how to graft so that growers could start more trees.

After the first '*remesa*' (delivery) of saplings arrived around 2015 or 2016, membership in the local grower organization shot up. Many growers—the majority of those I interviewed now wanted to be socios so that they too could receive café and *arboles frutales* (fruit trees) from Red Kuchub'al. Ofelia explains her husband's thinking at the time, "'A café program is going to come,' he said, 'I am going to get hold of a little bit.'"

By the time the delivery of saplings had ended after the second and third *remesas*, café had become a clear presence along the slopes of Chichum Majadas. Café has been re-envisioning the landscape. Where it now grows was often once milpa or monte. Many growers explain that

certain areas of their land where they had been growing milpa are actually better suited to bosque. Jayro, like many others, says that on his lands where trees, such as *roble* and *saqmuj*, grew up on their own around the milpa, lots of animals and squirrels used to eat his maize crop. For café, on the other hand, this land is ideal because it is higher altitude, closer to a water source, more humid—and the surrounding trees provide shade and preserve additional humidity.

Growers are revaluing these lands that before they had considered 'descampados,' left bare, dry, and eroding after futile annual cropping attempts. They point out how, where the café and accompanying shade trees grow, much land has greened up all year round. Felix credits café for turning the dry season green in places as more and more neighbors plant the trees. Some saplings do dry up in the drought-like conditions of *verano*, he says, but those who survive continue to grow and provide for years thereafter.

This perennial characteristic of café—how it grows all year and year-after-year without replanting—is why some, like Magda, have decided to plant it but also why it is transforming the Chichum Majadas landscape. Some of the oldest café trees in the community are already 25 and continue producing. As growers continue to plant young café trees, and accompanying shade trees, the future takes root in their parcelas. "Our (agriculture) is already changing because everyone is planting café," states Felix, "Our lands are changing." (While not 'everyone' in Chichum Majadas is planting café, all 17 of the growers who partook in mappings were indeed growing café.)

And growers are continuing to plant café. Although the Red Kuchub'al *remesas* have ended, many socios and non-socios alike are finding ways—be it by purchasing saplings or planting/grafting their own starts—to obtain more café plants. They are also looking for land on which to plant them. A number of growers have bought additional terreno in recent years—often land that the previous owner left to woodland—in order to be able to grow more café. The desire for more café is strong among many growers, especially those who have been experiencing some of their first harvests. Ricardo, after seeing that his first planting of café was growing and adapting well to the land, had just planted another thousand café saplings in 2 months.

Many see it as an investment in their children's future. Perennial plants which '*no lleva mucho trabajo*, ' 'don't require too much labor' could be passed along as a livelihood for the next generation. Still, some café growers are also seeing limits to their coffee-growing endeavors. Sergio says he doesn't feel up to planting more café because it is already a lot of work. Angélica says that her family doesn't have and won't be able to acquire other land to plant in café.

Change is multi-sided. The fervor for café and its continuing spread across Chichum Majadas has shifted relations with other plants. As mentioned, many of the lands on which café trees now grow was once milpa. Over and over, current café growers say that, before planting café, they had grown '*pura milpa*,' 'pure milpa.' Most view it as advantageous, for the land and their income, to decrease their cuerdas of milpa and add/expand café in their parcelas.

But few growers are doing away with milpa entirely. In the 17 Chichum Majadas mappings, only one café grower was not also growing maíz. While its especially steep slopes, its dry environment and limited irrigation, and its distance from el centro make agriculture a certain sort of challenge in Chichum Majadas, most growers agree that what their community does have is land. Growers in Chichum Majadas generally have larger tracts of land and also larger parcelas of milpa than in Los Limones or Unión Reforma. This partially explains why Chichum Majadas growers can plant large areas in café and still also continue to grow milpa.

According to Felix, "Honestly, we continue planting (milpa) because we are still initiating (with café). We don't have much café...And since from back in time we have been cultivating el maíz and with (maíz) we continue to sustain ourselves, we have to plant (milpa) always." This quote reveals an important side of the story too—that a long relationship with the milpa leads growers to continue to trust maize, to understand their lives are still deeply interwoven with it, to not just leave it by the wayside when another plant comes along.

Balancing the tension between excitement for change, for learning, for new opportunities and respect for that which has endured, for long-passed-down wisdom, for sustaining relations has manifested into some interesting dynamics between café and milpa. Jaime, for example, planted some 200 café saplings within his family's milpa. Accustomed to growing maize synergistically with other plants, like beans and squash, Jaime had the idea that maize could also serve to provide shade for the café trees while still small and growing (and then Jaime's family could still have a maize harvest from the land before the café began to bear fruit). Noé, similarly, is starting to surround his plot of young café trees with milpa and fruit trees to prevent grazing animals from being able to browse the café leaves and branches. Rather than thinking of milpa and café as being in competition for land and attention, many growers are thinking of the milpa as a shelter for new life, a source of security amidst experimentation, a place of safety.

In this non-competitive environment, café is becoming important to the community of Chichum Majadas like, but differently than, milpa. When I asked growers in Chichum Majadas which crops were most important to them, both milpa and café came up regularly. While they explain that milpa is their crop, their culture, their sustenance and way of life, they also recognize the intention they are putting into café and the ways that café is giving back to them and becoming a part of their lives.

In a house spilling over with family and neighbors at a celebration of Día de San Lucas, a long-running annual celebration of the harvest, the room hushes as the host offered prayers. For

the sun, for the rain, for the maíz, the frijol, güicoy, ayote. And for the café and the guineo (banana). As café is becoming sacred, it has already become criollo. Not all café, but all those original trees and offspring brought by from la finca a few decades ago by now have become criollo. They emerged from a relation of migration with the Chichum Majadas growers and, through years of relationship, have integrated into their new home. Regardless of—or perhaps even because of—where the seeds of these trees' origin lie, growers are now proud to recognize them as of Chichum Majadas, as of their community.

Seeds

While the seeds of café criollo come from la finca, most growers say they don't know the name of the specific variety (or varieties) of bean that la finca was cultivating. A few growers do call their café criollo by additional names. Some refer to it as '*café árabe*,' the broader category of Arabica coffee. One has café criollo that he also refers to as 'café borbón' (Bourbon coffee), one called their 'caturra amarilla' criollo and another named their 'caturra amarilla' and their 'caturra roja' as criollos. (Notably, the Caturra coffee variety is a natural mutation of the Bourbon coffee variety.) For most growers, though, other names are at this point irrelevant to them—this café variety is now their own, a variety simply called 'criollo.' The oldest trees in the community are all criollo, although there are younger criollo trees as well.

However, the majority of the café trees now in Chichum Majadas, are of the Sarchimor variety, or as some simply call them, 'café de Red Kuchub'al.' These trees are the dominant variety because they are the variety which Red Kuchub'al decided to send in their remesas. Sarchimor is a cross between the Villa Sarchi and Timor hybrid varieties of coffee, selected by Red Kuchub'al, according to the organization, for its resistance to 'la roya,' coffee leaf rust—an outbreak of which had begun spreading across Guatemalan coffee plantations in 2012 before Red Kuchub'al sent their first remesa. Café growers don't speak of this reasoning for growing Sarchimor. Rather, they grow it because the remesas from Red Kuchub'al were the resource that allowed most growers to really expand their café production. They accepted the variety which arrived.

Now that the Red Kuchub'al remesas have ended, some growers are buying coffee saplings, usually from wherever they can find them. One grower bought his Catimor variety of café in San Pablo, a town near Malacatán in the San Marcos municipio, closer to the coast. Magda planted 10 cuerdas of café comprado a few months before my 2021 visit. Cars come down to Chichum Majadas to sell coffee seed/plants she told me when I asked her where she bought her saplings.

Growers are also being creative in reproducing café on their own lands. A number have now created viveros (nurseries) in which they are using cuttings from existing trees (largely the criollos) to start new ones. Some growers mention that their Sarchimor trees are all *injertos*, grafted trees, with Robusta rootstock. Inspired by this understanding and by grafting trainings given by Red Kuchub'al, a few growers are experimenting with their own grafted café trees. Óscar plans to use the many criollo saplings in his vivero as the rootstock for *injertos* with Sarchimor and other varieties. Such *injertos* blur the boundaries between criollo and non-criollo café and create new avenues for and meanings of 'becoming criollo.'

Life with Roots

Most growers plant café in its own parcela. The ranges of area planted in café varies across families from as little as one cuerda to as much as 80 total cuerdas. While café may have its 'own' designated parcela, it rarely grows alone. Café's need for shade cover and ability to provide shade for smaller plants encourage diversity. Some growers have left trees who were already growing on their land to continue growing as shade trees for coffee. Many growers have taken café as an opportunity for experimental intercropping. Among the café trees of Chichum Majadas, one can find growing: chalum, guineo/banano, durazno, mango, árbol de yaca, caña de azúcar, chile, tomate de árbol, chayote, frijol, manzana, ayote, granadilla, anona, chipilín, amaranto, pino, madrón, aliso, frijol, calabaza, hierbamora, limón, albahaca, té de limón, setaria, canela, chayote/güisquil, papaya, camote de guía, hierbabuena, flor muerta/flor de muerto, milenrama, apazote, pericón, azúcar, mandarino, aguacate, quixtan, ciprés, mora de guía, árbol camaros, naranja, hoja de canaque, hoja blanca, árbol comida de paloma, roble, calabaza, campana, toronja, bijao, plátano, laurel, guinda, cedro, maxán, ciruela, níspero, manzana, melocotón, tomate.

The trees growing alongside the café also provide *brosa*, leaf litter, that decomposes and thus fertilizes the soil around the café roots. Growers pay attention to which trees provide better shade and brosa for their café trees. They also recognize the benefits of intercropped trees beyond what they provide the café. Bananos/guineos, for example, not only provide shade. They also provide a food that families love to eat, share with their neighbors, even take into town to sell. Noé too sees planting trees for shading coffee as conducive to a larger vision: "Before there was an immense forest here...When I was a child, there were huge pines here...Now we want to

recover this. We want to one day see the trees grow—they are the most important...for all human beings."

Besides with *whom* café is planted, there is also *how* café is planted. Spacing of trees is important, given that the café will continue to grow across the years. Many growers have been adjusting their spacing in more recent plantings as they've seen how—after initially being afraid of wasting space by spreading the trees out too much—their growing trees are now starting to crowd each other, stifling production. Once the trees are planted, the main practice involved in maintaining café is doing limpias—the amount varies by grower. Some growers are also doing *'la poda,'* pruning to promote continued growth and fruit production.

Use of químicos varies highly by grower. Some growers regularly apply chemical fertilizers, herbicides, and pesticides. Others only apply some chemical fertilizers when first planting young trees to help them with initial growth. Others only use 'natural' fertilizer and manure. A few growers even state that with good companion tree plantings that provide lots of *brosa*, leaf litter and organic matter, their café does not need other fertilizing. The type of café, growers point out, also matters for the practices one uses. A number of growers declare that café criollo is more resistant to *plagas* and thus requires less maintenance and químico usage.

Harvest and Beyond

Growers do drink some of their own café. Better to drink their own café, some say, than to go pay to buy coffee, especially a coffee that is likely produced with lots of chemical. Plus, their café is 'rico, bien agradable,' 'tasty, very pleasant.' Still, in the communities' nascent coffee culture that has grown from drinking Nescafe and similar coffees—often prepared by adding a few spoonfuls to a large pot of sweetened boiling water—drinking one's own coffee is not enough of driver in itself to plant a spread of café trees for most Chichum Majadas folk.

From their days migrating to la finca, growers see how selling coffee is a profitable business for plantation owners. They are hoping to create a small portion of that wealth at home, rather than having to get their cut by working for la finca bosses. Above all, growers plant coffee to sell. Angélica's words, "the café helps us a little to have money," were echoed by many.

While hopes are high, most growers are only beginning to have their first real harvests of café. They are anticipating improved harvests as their trees further mature. Some growers, though, are already noting the tendency of the café harvest to cycle—one year the harvest is big, the next year the trees 'rest' and harvest is lower. Growers are also observing differences in production of different varieties. Sarchimor supposedly produces higher yields. While they look 'pretty,' a few growers are noticing that the Sarchimor beans 'don't weigh much.' The café criollo beans, meanwhile, while looking smaller and 'más chupado' ('skinnier'), are heftier, weighing more than the Sarchimor beans.

They are also seeing that harvest is not the only variable which fluctuates across the seasons. So too do prices. Emanuel raved about how the price of café had recently risen to 1000 quetzales per *bulto*. Ofelia, however, lamented how after harvest the year before, when her household had sold 3 *bultos*, that the price of café had dropped and the buyer who came only paid 300 or 400 quetzales per *bulto*. When prices drop, some growers take advantage of the fact that coffee, unlike more perishable crops such as tomatoes, once processed can be stored and they hold onto their harvests until prices hopefully increase again.

The buyer to whom Ofelia refers is known in Chichum Majadas as a 'coyote.' Coyotes come through the community at the end of coffee harvest season (January to April in the

community) to buy growers' café. "A man comes from Motocintla," explains Emanuel. "He only comes to look for where there is café. 'We want café!' he says. 'We buy café! Who has café?' he says. 'Here there is!' says someone who has two quintales, a quintal, whatever there is."' Most growers sell to a coyote, even though they are aware that the coyote pays a worse price, that he will take their coffee to some city to sell it on to another buyer at a better price. Sometimes the coyotes don't come when anticipated and growers have to transport their café harvest to a buyer, such as in Tacaná. Jaime regularly takes his harvest with him to Chiapas, Mexico where he knows he can get a better price for it than selling it in Chichum Majadas.

Growers understand that buyers, processors, vendors further up the supply chain, especially those who export to countries like the U.S., are earning much more than them from their café. Currently, Chichum Majadas growers ferment, depulp and dry the beans. They recognize the possibility that if they further processed the beans themselves they might be able to earn more. Some express the dream of one day being able to toast and grind their café to then sell it as a final product. Seeing that such a process would require a fair of amount of learning, time, resources, and investment, some café growers toy around with the idea of organizing themselves into a group, a cooperative of sorts, which could process and sell—ideally even export—their own brand of coffee together. Maybe one day, they say. Maybe one day.

The Matter of Migration

Walks in Chichum Majadas tend to be winding. The community is set along a mountain ridgetop, spreading out homes and fields along the steep slopes and little peaks that ripple out from the main ridge. This setting used to make walking, if not riding a horse, essential. Even as recently as 2019, the road only reached as far as a turn-off aways above the community—from there one made it into Chichum Majadas on foot, maybe a motorcycle. On my winding walk this day, I see a small crowd gathered on the new dirt road that now extends along the main ridge of the community—a road that has opened new levels of mobility into and out of the community.

The crowd shifts slowly with the slow creep of the '*máquina*' along the road. The *máquina* is an excavator for which every family in Chichum Majadas pooled their funds to rent. Now it has arrived, here for a few days to '*arreglar la carretera*,' smooth out the road which, in the rainy season since its construction, has become variously flooded, rutted, and eroded. Its presence has been the talk of the town.

As Emanuel and I connect the wooded trail from which we came with the main road, we converge with the gathered crowd. The women from the group, loaded down with big baskets and pots, peel away from the group, heading back home after delivering lunch to their husbands and sons. The men who remain sprawl in the shade, unclear to me whether they are watching the *máquina* for entertainment or to monitor the job. Perhaps a bit of both.

As we walk closer, between our exchanges of 'buenas tardes,' I hear the men's conversation. They're speaking of café—comparing notes on their methods, on how it is growing, on how it is selling. Café, I would hear again and again, has become a central point of conversation in Chichum Majadas. In the twists of the conversation, which inevitably flow toward land and family, another familiar topic surfaces: migration. That these two themes—café and migration—continually arise in conversations throughout the community, and often in tandem, is no coincidence.

Always on the Move

Notions of Indigeneity often come wrapped up with notions of connectedness to place, to land. The communities of Chichum Majadas, Los Limones, and Unión Reforma—in their nuanced, fluid more-than-Mam, more-than-Indígena identities—complicate these notions by living out lives of place-connectedness that do not exclude movement, exchange, even migration.

For these communities and many Indigenous communities in Guatemala, reckoning with maintaining a sense of home and identity based in their lands while also staying in motion has been an essential act of existing. Movement has become tied up in relationships, of people, plant, and land. In the face of a history of displacement—from Spanish colonization to the Rufino Barrios era of coffee plantation expansion to the Conflicto Armado—Guatemala's Indigenous peoples continue to endure, staying connected to place even as part of being separated from it. The seasonal migrations to la finca in previous decades were common across all communities because of political policies and systems of exploitation which have continually deprived Indigenous communities of land in order to make them reliant on earning an income laboring at a cheap wage for the country's big coffee economy—the same coffee economy that only generations ago displaced many *gente Indígena* from their lands.

In Chichum Majadas, when growers brought back seed from the coffee plantations and started growing their own, they turned this situation on its head. As Óscar and I walk around his café parcela, he offhandedly remarks, "Instead of working in la finca, I am working here in my own parcela." He is not the only one recognizing this connection:

"The people before, we went to harvest café in other areas, in Chiapas. Now, the people realized that here there is money too, that one earns producing right here. We can make our own seedling nurseries, make café saplings. Here, lots of people come to sell café plants but we can also produce them here...We can cultivate and produce café in order to not go buying in the stores...(producing) organically to not contaminate more with chemicals."

Mónica, Chichum Majadas

As Chichum Majadas growers have started growing café, the seasonal migrations to la finca have all but ceased. In Los Limones and Unión Reforma too, seasonal migrations to la finca have petered out. There, where café doesn't really grow, the new(ish) crops on the scene who have shifted the making of income close to home are predominanly hortalizas (vegetables) and plantas medicinales (medicinal plants) in Los Limones and flores (flowers) and hortalizas in Unión Reforma. Lorenzo, of Los Limones, explains:

"The hortalizas have come to help and continue helping us. Before, we didn't used to work here. We planted the milpa and went to work in a different area, there in Chiapas...In that time, we were not here. We were there harvesting café. Now, we're not. We have begun to work here and here we are. In the summer/dry season, we plant pure vegetables here. Thus, that leaves no time to go someplace else. Right here, we harvest what we used to leave to bring back."

The shift away from seasonal migrations to la finca has not meant a shift away from migration entirely. Alongside growers working to make a living at home, from their own land, new forms of migration have emerged.

In Unión Reforma especially and also Los Limones, daily migrations have become commonplace. Facilitated by their proximities to the *centros* of Sibinal and Tacaná, respectively, most families in these communities have someone who works in town. In Los Limones, husbands and fathers in particular are often away working—constructing homes, driving taxis, or doing whatever temporary work they find—while the women work the land. This work away from home is recognized as contributing funds which help support agricultural operations. Nonetheless, less people, many growers noted, are working the land now. As I walked through communities each day, elders and children were the ones who I most consistently saw home, tending the households' parcelas and the animals.

In Unión Reforma, it is not unusual among current generations for both heads of household, mother and father, to have jobs in town as '*profesionales*' (professionals) to which they travel each day. Who works the parcela then? Some heads of household work double duty, working both a regular job and a parcela. Dominga is a teacher in a different community. She leaves her home early each morning and upon returning late in the afternoon tends to her hortalizas and seedlings before preparing dinner for her children. Manny works 48 hours in a hospital each week. He finds the work tending flores in his invernaderos relaxing after spending 2 whole days shut up in the hospital, and the income from the parcela provides something 'extra' for his family.

There are also the migrations which leave visual marks on the communities. Some parcelas go unharvested, unplanted. Big fresh houses built with cement block, even sometimes wood walls, shingled rooves, touches of U.S. architectural style, sit half-constructed, not yet inhabited. These signs point to a now-pervasive form of migration in all three communities migrations far away and long-term. International migration has become a part of life in the communities. Situated far from the national capital of Guatemala City and close to the border with Mexico, Chichum Majadas, Los Limones, and Unión Reforma have long been marked by a border culture. This extends beyond seasonal migrations to work in la finca. Many of the words, including names for plants, used by community members are considered more 'Mexican.' (For example, some growers in the communities refer to what most Guatemalans who call 'güisquil' as 'chayote,' the term more commonly used in Mexico.) Trade and sales across the border are common. When the exchange rate is in Guatemalans' favor, community members regularly commute to the nearest Mexican cities (closer than the nearest Guatemalan cities in the case of Chichum Majadas) to purchase goods. Because some folks from the area fled across the border during the Conflicto Armado and some of those never moved back, it is not uncommon for community members to have family in Chiapas.

This border proximity has historically enabled a culture of fluid movement and exchange back and forth. More recently, it has proven a temptation, a representation of hope, too hard for many to pass up. Now, many community members who cross the border do so with no intent to return, at least not for a very long time. I became accustomed to responding to a joke I heard very repeatedly in the communities, that would pop up after someone would learn I was from the United States—'Seño, take me with you in your suitcase when you go! Or take my child and just say she's yours!' We found a way to laugh about this idea, but it brought back to focus a prickly truth. Despite the hassle I receive at customs, I pass easily into the U.S., while many of the people around me in the communities are plotting to risk their lives and all their savings to make it there.

The costs of migration can be heavy. Many fall into deep debt to 'coyotes'—the kind who deal in undocumented migrants, not in coffee—who promise to help them, in a multi-month journey, to get across the border. Some of these promises are empty and the coyotes run off with the money and leave the attempted migrant stranded somewhere in Mexico. Others are good on their word but still don't always manage to outsmart authorities. When a community member has to return home after a thwarted migration attempt, their debt follows them home, where they have no clear way of paying it off. And some community members don't make it home, nor do they make it to the U.S. Sitting in a surprisingly somber kitchen with an elder couple on my most recent trip, their eyes began to water as we caught up on each other's lives. A young neighbor leaned over and whispered in my ear—they were in the process of getting their grandson's body shipped back to the community. He had died in the journey migrating to the *los estados unidos*.

Those who do make it often spend much of their first year in the U.S. working long hours in hard jobs every day simply to pay off the debt of making it there. But where the debt ends the dream begins—the dream to earn U.S. dollars (one U.S. dollar is currently valued at nearly 8 quetzales) to send back to their families and communities, to have enough food and maybe a gas oven and a car, to start building their house, to buy another parcela, to send their children to school in the city. Then, they'll return home. At least this is the dream imagined and reimagined. The reality is not always so kind. I met many wives who have been waiting years for their husband to finally return. Next year, he keeps saying. I met many now-grown children who barely remember their father. He met another woman in the U.S. and started a new family there, dashed his original plan to return to his home community.

It is not just husbands and fathers who migration has disappeared. Chichum Majadas, Los Limones, and Unión Reforma are communities drained of their youth. Teenagers and young adults are some of the most frequent (attempted) migrants. Limited local education and job prospects lead many children in the communities to envision their futures elsewhere, where money is supposedly easy to come by, life supposedly easier and more developed. While returned migrants report that the U.S. is both amazing and not all it's cracked up to be, many young people especially believe that they could better support their family by sending remittances than by working in the family parcelas.

Making a Life Here (and There)

At first glance, the prevalence of international migration seems at odds with continuing community-based lives supported by agricultural diversity on the land. In some ways, it is. With children, fathers and husbands, and mothers and wives too migrating for indefinite periods of time, the remaining family members left behind, often struggle to keep up with farm labor that had typically been shared—especially in big fields like the milpa where whole families would historically come together to plant, do *la limpia, cortar hojas*, and harvest. Most elders won't be stopped from heading out daily to tend their plants and cut *zacate* for their livestock. Still, their families would take on this work if they became sick, once their bodies wear down, after they die. To make up for the decreased family work force, some growers have found it necessary to hire farm labor for important periods of the milpa season and, in Chichum Majadas, for the café harvest.

On some areas of land, there is no labor. When unmarried men or whole families migrate, their land sometimes sits uncultivated, taking on a life of its own in the intermediary before their possible return. And for some, they purport to want to migrate, or for their family member(s) to

migrate and provide remittances, so that they don't have to work the land any longer. Agriculture, they say, is a hard way to live.

Yet, quite a few growers see migration as supporting their parcelas and their agrodiversities. With the money earned or sent working abroad, they can practice agriculture without it placing as much pressure on their land/plants to be the source of their family's whole subsistence or of enough saleable goods to earn a livable income. They can potentially buy more land on which they can further diversify, on which they can keep planting milpa and experiment with planting new plants or old plants remembered. These growers and their families, the majority of those with whom I worked on this research, think of migration as a means to keep living in and with their community of plants, land, and people. They are looking, in the long term, to stay and to keep growing and cultivating. Migration remittances or savings—by providing funds to invest in more land, more agricultural inputs, more resources to start up creative new agricultural ventures—serve as a way to keep the community's agriculture persisting, thriving, evolving.

In Chichum Majadas, the commitment of some migrants to community's and land's ongoing wellbeing is clear in the way that they remain active community members even while abroad. They send payments for all community projects, such as the construction of the local road. As the local Chichum Majadas government tried to figure out an upcoming community-wide celebration, one leader in the meeting reported that 'hermanos' ('brothers') working in the U.S. planned to send 10,000 quetzales to pay to bring a good band to play.

One Chichum Majadas grower shrewdly summarized the relationship of agriculture and migration: "There is food here, but there aren't *billetes* (bills/cash)." This has been the reason

many have left. Their solution to this conundrum: go find *billetes* somewhere else and bring them back. Others, though, see a different way to solve this riddle.

When I meet Titi for the first time at her *tiendita* (corner store), she is quick—after finding out where I was from—to usher me back into her kitchen, away from the children figuring which candies they can buy with one quetzal and men laughing over a gambling machine with their coca-cola bottles. Although I insist that I have already eaten breakfast, Titi plops a plateful of scrambled eggs and tomato in front of me and starts whipping fresh tortillas off the griddle while nursing her baby. As it turns out, she has been to the U.S., working there for a few years before returning. I ask why she decided to come back when she did. She looks at me with a soft smile, "My mother reminded me that there's not any money or jobs here, but that there is food and family." The reason for leaving becomes the reason for returning.

Some growers are trying to utilize the fact that their communities are rich in home-grown food and deeply-connected family as a means by which to stay in the first place. Café, with its migratory origins, is becoming a way in Chichum Majadas to *not* migrate. Ricardo describes: "Our goal is to harvest and sell (café). Because, look, here there isn't a source of jobs. We are already enchanted with going to Chiapas...Due to that we brought back these (café) trees to see if they would function...in order to sell (café), in order to sustain ourselves from there. We sell this café and buy things for the kitchen."

Café provides a way to earn an income without having to leave Chichum Majadas. Crops originating in the communities through processes of movement and exchange—café in Chichum Majadas, different plantas medicinales and hortalizas in Los Limones, various flores in Unión Reforma—are being fostered by growers in recognition of their roles as key actors to potentially help families continue to live land-based lives in their communities. In the relational agrodiversities of the communities, origins beyond the community do not necessarily prevent plants from coming into belonging and acceptance. Rather, movement and migration can form part of the relationship between growers and plants, part of the evolving diversity. Whether notyet criollo or becoming criollo, plants in motion are simultaneously joining the communities and helping keep them in place.



Mam name(s): Xko'ya = tomate; Shu'u'õ = miltomate

Variedades:

Miltomate, Tomate de riñón Tolstoi, Retana, Atitlán, San Rafael, Rojo

Fuentes de Semillas:

Semillas guardadas (especialmente de tomate de riñón) Solo sale (especialmente miltomate) Compradas del agroservicio, en Tacaná o San Marcos Experimentación con semilleros

Usos:

Consumo familiar—más saludable producir sus propios tomates Para vender, a los vecinos, en los mercados, a las escuelas—un producto muy buscado especialmente durante el verano





Meet Tomate

Tomate (tomato) arrived to Guatemala before colonization. The tomate one will find in Chichum Majadas, Los Limones, and Unión Reforma, though, are both new and old there. The nativo, the criollo, and the mejorado all intricately intermingle in tomate. Through the power of their seed, tomate have abounded, gone into hiding, had irrigation, hoophouses, químicos catered to them, sold like hotcakes and sold poorly, and grown when least expected. Agents of diversity, tomate seeds are full of surprises, full of hope.

History in the Communities

Many growers recall with nostalgia a time in their youth or in the time of the abuelos when *tomate de riñón*, the posterchild tomate criollo, grew in abundance. Most growers planted it and it grew well, giving excellent fruits. In Unión Reforma, Sebastián remembers, "The tomate de riñón used to give some really big and delicious tomatoes that the abuelos used to use to make their chirmol"—a staple condiment made from a base of tomato. Now though, he says, "There is no more tomate de riñón." He can only think of one grower in the area who still grows them. Practically no one in Unión Reforma has the seeds anymore.

A similar trajectory occurred in Chichum Majadas. From around the 1980s to the early 2000s, nearly everyone used to grow tomato, tomate de riñón as well as the small-fruited nativocriollo *miltomate*. They saved their own seed and replanted tomate every year without having to invest in inputs. Tomate sold for a good price and, for a while, it was profitable to take one's tomate to market. But because it was profitable, lots of growers planted more and more tomate. Plagas and hongos (pests/disease and fungus) started to become a problem, proliferating easily on the dense and wide-spread plantings of tomate. At the same time, the abundance of tomate flooding the markets led their price dropped. The combination of the ailing tomate crop with the drop in tomate value was the perfect storm. Most growers gave up planting tomate.

Felix explains the shift away from tomate:

"Before, I used to always plant tomato or chile peppers. I used to go sell in the municipio. Now, I don't anymore. I stopped planting (tomate)...I tired of that, because tomate requires more work. You have to plant it. After it gets big, you have to 'clean' it, fertilize it, fumigate it with different liquids. Because before—before before—one didn't have to treat the tomate. It (grew from just) the value of the soil/earth! But afterward, when there was plaga, each week, every four days, we were applying some liquid...And then a foliar (treatment) for the (plant) growth and a foliar treatment so that the fruits grow. And when the tomate isn't valued—the is what happens—the price drops. Before, yes, I used (to plant) tomate but not anymore. That is what we have tried to do, but from here, we are going to look for means through other crops."

In the wake of the abandonment of tomate, the tomate de riñon and miltomate seeds were lost—nearly.

In the meantime, projects and collaborations with external organizations ramped up in the communities. In Los Limones especially, and also Unión Reforma, irrigation systems (often referred to as '*miniriego*') and invernaderos arrived on the scene. Prior to the installation of irrigation systems on many growers' lands, they depended on the rains to water their crops. This meant that plants who required a consistent water supply didn't thrive and generally just didn't grow at all during the verano, the dry season. Before hoophouses, the cooler temperatures of the two higher altitude communities, especially at night and in the verano (which starts with high

winds and progresses to times of frost and sometimes even snow), inhibited the growth of plants who need consistently warmer environments.

According to Lorenzo, a group called Agua de Pueblo worked with certain growers in Los Limones on the project to install irrigation, as well as providing some with invernaderos and tomate seed plus seed of other vegetables like cabbage, broccoli, and cauliflower. In Iris' case, while she received some funding support from an organization, the idea of building an invernadero came from her father-in-law. They collaborated on constructing it and beginning their tomate operation within. Iris has since put up more invernaderos to grow more tomates. Marcos, on the other hand, brought the idea of growing tomatoes in an invernadero back with him from his time in 'el norte' ('the north'), referring to the U.S. When the 'miniriego' became available, he saw his opportunity to make his vision happen.

As more growers gained irrigation and hoophouses, the landscape of plant diversity shifted. Other plants could grow, so growers wanted to try them out. Organizations responded by providing, especially, *hortaliza* seeds and trainings on vegetable growing techniques. Growers would continue to expand their horizons beyond the seeds given by organizations, finding seeds for other plants, other types of vegetables, herbs, medicines, and flowers. However, the initial flush of agrodiversity change largely arrived on the back of irrigation, invernaderos, and hortaliza seeds acquired through collaboration between the local grower organizations with external organizations. One of the 'new' hortaliza seeds to arrive: tomate.

Lorenzo, of Los Limones, narrates:

"The newest (crop) would be the hortaliza, because before we only planted the maiz...only the milpa, chilacayote, frijoles, habas...There weren't invernaderos. One didn't know what an invernadero was, didn't know if here tomates, chile, cebolla would produce. Here, they didn't

use to produce...We initiated with the invernaderos...We got a miniriego project...We started with the tomate, the chile, all that."

Iris explains that her family started cultivating tomate 10 years ago. Much like growers in Chichum Majadas credit café, she credits tomate with ending her seasonal migrations to la finca: "Before we didn't used to cultivate this tomate...We decided to start (growing tomate) with the support of Kuchub'al—they helped us with the invernaderos. We constructed the invernaderos. Now we don't migrate to another place. We dedicate ourselves to the work here. We harvest. We have what is necessary and it's all natural, for family consumption. For me, it is very nice, very beautiful because I have grown up in las fincas and now I don't go anymore. I dedicate myself to being here. In this time, instead of going there, I harvest my tomate and sell the tomate, sell the vegetables I have. Now, we are living from that."

Lorenzo extends the gratitude to tomate to include attributing his not having visited 'my place' (aka the U.S.) to it. I heard similar sentiments from other growers with tomate or other hortalizas. Many growers without invernaderos hope to build one and many of those with them hope to build more. They recognize the role of tomate and hortalizas, especially those grown in invernaderos, in helping them provide for their families from their own land, without seeking money through migration. Iris has been able to fund her son's studies through her income from selling tomate.

But how did tomate go from being a common then abandoned crop to being a 'new' gamechanger crop? Not all tomate are created equal. The criollo varieties of tomate which communities had previously grown are not the same ones for which organizations brought seed. On the exterior of some invernaderos in Los Limones, one finds signs advertising USAID. The sort of tomate they promote in their projects is indeed new to the communities. Other organizations too have offered tomate mejorado or híbrido seed, sometimes because they have ideological buy-in to improved crop varieties and other times because this is what seed is available or what they think will produce well.

With irrigation, invernaderos and, not infrequently, a suite of inputs, the tomate mejorado have done well for many growers. At least for a time. Some growers, though, have experienced a growing disillusionment with them. In Unión Reforma, Edwin was excited about his invernadero lined full of rows of tomate 'Retana' in 2021. A plaga was spreading across some of the tomate leaves, but he was still harvesting tomate every week and neighbors frequently came looking to buy them. By the next year, the same invernadero was full of flores. Edwin isn't going to give up planting tomate forever necessarily, but the seed is expensive, plaga is hard to combat without heavy applications of químico. It is a costly endeavor and, if he isn't quick to harvest and tomate before spoiling, it isn't worth the maintenance required. Better to invest in risky endeavors with potentially higher rewards.

The nuisance, the expense, and the dependence of buying new seed every planting for tomate híbrido-mejorado is being questioned by other growers too. With the resurgent interest in tomate, what about tomate criollo? What ever happened to those criollo seeds?

Seed

Nativo/criollo plants aren't always as 'gone' as they might at some point appear to be. Walking through the milpas and fruit and café forests of Chichum Majadas, tangled up with other plants in the abundant growth I notice pops of tiny red fruits. "They are nativos from here," explains Emanuel as he props the miltomate plant up with his machete for me to get a better look. "*Siempre se da*." In the context in which Enamuel speaks, it becomes clear he doesn't meant that miltomate is constantly growing or producing, but rather that it always comes back, always grows again.

Despite the loss of seed saving by growers, miltomate semilla (seed) lived on in the soil. They continued to spread themselves. Now, miltomate plants crop up in unexpected places. *Solo salen*. Miltomate has an agency of its own. Regenerating itself after apparent loss, some growers are rebuilding an intentional relationship with it—letting it grow, tending it where it does, or even recollecting the seeds of the nativo plants to intentionally plant and produce miltomate.

The tomate de riñón is also making its own quiet comeback. As Emanuel and I admire the potted plants lining the edges around Ofelia's home, Emanuel gasps upon setting eyes on one pot. Shooting up from it is one tomate de riñón plant, displaying itself with a few of its distinct kidney-shaped tomatoes. Emanuel hasn't seen one in Chichum Majadas for years. Ofelia had also once lost her tomate de riñón. "I got sick 3 years ago. I was going to have to get surgery but, thanks to God, I cured myself with medicinal plants...But now I can't work like before. I used to have more strength. I planted that tomate (de riñón) by the cuerda...(but then) my strength decreased because of the illness."

However, more recently in the recovery from illness, Ofelia has been able to also recover tomate de riñón seed from her mother-in-law. She used that seed to replant tomate de riñón, saving the new resulting seeds and planting them out in plots of land around her house and in seedlings in *piloncitos*—in order not to lose them again. Once the seeds are gone, Ofelia says, they are hard to get back.

When we're about to go, Emanuel asks Ofelia if she could please spare any of her tomate de riñón seeds. She passes around to the other side of her house and returns with a little pot of

two small tomate de riñón plants which she hands to Timo. He pulls out some quetzales, which Ofelia quietly refuses. We part with many thanks. Upon returning home later in the day, Timo rushes to his wife to show her their new plants, excitedly telling her how they need to split the tomate plants and replant them in a bigger vessel right away.

The story behind the semillas of tomate mejorado-híbrido does not begin in the communities. Less seed, if any, now comes from organizations. Most growers who are planting tomate mejorado-híbrido—such as varieties which go by the names of Tolstoy, Atitlán, Retana, and San Rafael—are now buying the seeds or starts themselves, from the *agroservicio* (agricultural shop) in Tacaná or San Marcos. They have to rebuy the seeds before each planting since they can't save seed from these varieties of tomate. Or can they?

One tomate grower explains why they don't call these tomates transgénicos. "Maybe (they are). But we don't have an idea of whether we can save their seeds." The great fear with transgénicos is that they won't allow for the saving of seed. Thus, if it turns out a plant that one might otherwise label as transgénico shows potential for seed-saving, the transgénico label becomes irrelevant. But agriculturalists know that hybrid seed shouldn't be saved because offspring grown from hybrid seed are unpredictable and don't grow true to form—a benefit to the companies who breed and sell hybrid crops, as their customers have to keep coming back for more each growing season.

The growers in Los Limones, Unión Reforma, and Chichum Majadas though are operating from a very different mindset than those agro-corporations. Not all-consumed by a focus on yield, they make space for unpredictability, for irregularity, for the alchemy that can happen when not trying to exert full control over plants. They experiment. In the end, they listen to what the plants tell them more than they blindly follow what a workshop, an organization, or a company teaches them. Through relationship with tomate, a number of growers are playing with the assumption that one ought not save semillas híbridas.

Iris has three invernaderos of Tolstoy tomate for which she always has to buy new seed. In one row in one of the invernaderos grows cilantro, cebolla (onion), hierbamora and other plants for her family's own consumption. Amidst the diverse intermingling of this row rises a big tomato plant. It looks out of place, as though it ought to be slotted in amongst the long monocultural lines of tomate híbrido. Except it doesn't look quite like those neat tomate plants either, rather more like their oddball cousin. It sprouted, Iris explains, from seeds dropped by one of the purchased tomate plants:

"I would like (to save tomate seed) but...we have tried and it doesn't function so much. Because the plant gets tall and the tomates begin to grow up to here." Iris raises a hand up by her head. I ask if they're hybrid or transgénico seed and Iris answers by way of re-emphasizing that they're still trying to figure out whether the Tolstoy tomate might be able to produce seed for future plantings. "See that here the same tomate drops seed and already a little plant is growing? And we have already tried to plant (them), but (it hasn't worked) so much. We have to make a semillero (seedling nursery) or something. I don't know. We don't have the idea yet."

Despite not knowing, Iris hasn't given up on her experiments yet. She's leaving that big, slightly odd tomate plant to keep growing in the invernadero. She wants to see how it does, see if there is potential to produce tomatoes from tomate mejorado/híbrido's 'volunteers'—who are verging toward the criollo and nativo.

Life with Roots

Iris isn't the only one experimenting. Despite the teachings of some organizations who have brought seed for tomate híbrido and trainings on monocultural, chemical-input methods, many growers are crafting their own practices of tomate care. Samuel, in Unión Reforma, is growing tomate Atitlán and tomate San Rafael alongside tomate de riñón and miltomate in the same invernadero, enjoying the high yields of the former and the resiliency and independence of the latter—and seeing no reason to choose between the mejorado-híbrido and the criollo.

Samuel is one of the tomate growers who also mixes tomate with other crops, rather than the invernaderos of a single tomate variety and nothing else which some tomate growers favored. Lidia intercrops her tomate with chipilín, cebolla, espinaca, chile, and apio. In Chichum Majadas, with its warmer climate, miltomate can grow outside. Either planted or when it 'just grows,' it is found among a diverse range of neighbors, maíz, café, arboles frutales, hortalizas and plantas medicinales alike.

The variety of tomate and the diversity of its company weigh into whether growers apply chemical inputs to their tomate. Growers with invernaderos of just tomate híbrido are most commonly the ones to rely on químicos in their practices. But even this is not so cut and dry. Edwin (Unión Reforma), for example, says his invernadero full of tomate Retano was almost 'orgánico' thanks to applying large amounts of home-produced bokashi fertilizer. He only uses químicos sometimes, such as in the case of an 'emergency' in order to control a breakout of disease or similar issue.

Beyond the Harvest

A part of tomate's appeal, like a number of other hortalizas, is that it sells. And many tomate growers are growing it in order to have a source of income. Mayra (Los Limones) in discussing her selling of tomate, said "All vegetables are saleable." The matter is usually one of being able to grow at a larger enough scale to take one's hortalizas to market. Invernaderos have enabled a number of growers to be able to fairly reliably produce tomate.

And when they do, they find tomate is often a very sought-after product. As a longtime ingredient in typical foods, such as chirmol, most households want to have tomato. Thus, growers can sell well to neighbors in the community and at markets in *el centro*. Iris never has enough tomate to meet the demand of selling both to her local school and her neighbors.

Tomate is also fickle though. Growers emphasize it is a time sensitive product. They have to harvest and sell it quickly, otherwise it spoils and they lose much of (or sometimes all of) their harvest. Consumers are also particular about their tomate. Iris explains that she grows tomate Tolstoy now because she had been planting another variety of tomate before but shoppers at market weren't buying much of it. Many people seek out a tomate like Tolstoy which is 'firm like an apple.' The once over-abundant tomates criollos, like tomate de riñón, are now also sought after by consumers for their superior and familiar flavor. As the Los Limones grupo de mujeres tried not-so-successfully to combat with their initial tomate-canning project, the price of tomate can also experience big swings, especially as dry season (when prices are high) moves to rainy season (when prices can drop precipitously due to abundant production).

Risky markets have stopped some growers from planting or replanting tomate. Other growers, though, aren't even growing tomate just for markets or for markets at all—they're

growing them for their own households. As growers have (re)integrated tomate and other hortalizas into their fields, they have also further integrated them into their diets. When tomate and hortalizas are not something they have to go buy but rather something they can harvest off their own land, families' diets' look different. Lorenzo (Los Limones) says, "Before, we didn't used to eat many vegetables (because) we used to (have to) go buy them. And now we don't go to the market, we don't buy. Now it's more than enough to go grab the vegetables from what we have (growing, like) tomate."

Many prefer that their families consume their own tomate and vegetables because they see them as better for their health. Elsa explains, "Because if we buy our tomate, it already comes (with chemicals). Although one doesn't want to consume chemicals here in the household, our (purchased) products are already made by the force of chemicals."

When Mayra contemplates why tomate is among the most important crops she grows, alongside corn, beans and other vegetables, it isn't because she can sell them. "We consume all of these (and) we grow (them) here."

Following the Power and Magic of Seeds

Ofelia is a self-professed lover of seeds. The seeds of tomate de riñón are not the only special seeds she has carefully tended and saved. On multiple visits, as we talked and I admired myriad seedlings on her patio, she would dip inside her home and return with repurposed plastic 2-liter pop bottles full of seeds—maíz moro, multi-color frijol, arbeja (pea) criolla and arbeja china, a plant she only knows of only as 'té.' The list goes on. When Ofelia learns I too am a lover of seeds, she sends me off with a bagful of her finest güicoy seed.

Ofelia is one of a number of growers I met whose main motivations for seeking out, saving, and planting seeds of less common plants and plant varieties are not described in terms of straightforward pragmatism or practicality, nor in terms of idealistic saviorism and rescues from the brink. The first way Ofelia, like these other growers, speaks of her relations with seed is through intention and attention, joy and continual re-learning.

On my most recent visit to Chichum Majadas in October 2022, upon arriving to Ofelia's house again we quickly fall into conversation of seed, a topic that has always seemed to put her at ease and lift away her shyness. As I circle her home observing each plant, I keep my eyes peeled for tomate de riñón, curious to see how much more she has planted from the seeds of the plant I had seen the year before. When I fail to find it, I asked Ofelia where her tomate de riñón is. She shakes her head. The illness that had slowed her down hasn't fully let go its grip on her and, as a result, she hasn't had the time and strength to tend all her plants as much as they need. She lost some of them, including her tomate de riñón. She hadn't saved its seed in time.

Hope remains. I recall how Ofelia had given Emanuel the tomate de riñón seedlings and he too was on the case of saving seed in order to start growing tomate de riñón again. When I saw Emanuel later that day, I explain the situation to him and ask whether he might have some seed to share with Ofelia. He does not. In fact, he does not have any tomate de riñón at all. The seedlings Felipa gifted him had not made it, dying before he could collect any seed. Emanuel reflects, "Maybe now there is no one who has it anymore." The outlook for tomate de riñón in Chichum Majadas has shifted. Not on a dime, but on a seed.

Agency Amidst Precarity

The precarity of in situ seed saving extends beyond tomate de riñón. In Chichum Majadas too, a host of families in 2021 had lost the seed for their calabaza, long a staple in their milpas. One family told of an illness in the family preventing them from having the time to save seed and then finding themselves with none to plant the next year. Others spoke of a plaga overtaking their whole calabaza crop the year before and leaving them seedless.

In Unión Reforma and Los Limones, growers reflected on other criollo plant losses as seed losses. Many have lost the seed for certain varieties of maíz, such as rojo and moro. Dominga (Unión Reforma) lost her maíz seed altogether after giving up on the milpa one year when the *ardillas* (squirrels) ate too much of her crop for her to feel it worth it to replant the next year. Some growers lament the loss years ago of the seed of trigo criollo and its relative trisco—a variety of grain, likely wheat, distinct to the area—after wheat become unprofitable to grow for a time. They could buy seed now to start growing it again, but it would not be the criollo.

Seed saving from trees and plantas nativas come with a different sort of precarity. The saving of 'seed'—'semilla' as community member use it can mean any means by which a plant can reproduce, including grafting, cuttings, and seedlings—from trees is predicated largely on
saving the trees themselves. As perennials, the trees are the live keepers of the seed. Sebastián (Unión Reforma) notes that the community is losing the seed of the community's criollo fruits, such as manzana (apple) criolla and anona criolla, as people have become busy enough away from the land (working other jobs, migrating, etc.) to not have time to maintain their criollo trees.

With plantas nativas that 'solo salen,' growers are less accustomed to storing and replanting seed and more accustomed to grabbing and tossing out seed from the plant when they find it or simply not 'cleaning' the plant so that it can eventually spread its seeds on its own. These are more subtle forms of 'seed saving' that have become complicated in recent times, as growers have noticed a number of plantas nativas—such as apazote, hierbamora, bledo, nabo, colinabo—not popping up on their own as much as they once used to.

Saving and losing. It can be hard to discuss the matter of seeds without using these words over and over. And in interviews, mappings, conversations, people do speak sometimes of saving seed and losing seed. Yet they also speak of picking, collecting/gathering, planting, tossing, finding, bringing, producing, giving, buying, exchanging, choosing, staying, changing seed. They speak of action and activity. They speak of live relationships in which seeds have their own unique characteristics and their own agencies.

In Chichum Majadas, Los Limones, and Unión Reforma, plants and seeds have agency. For this reason, saving and loss are rarely the full story. Growers do often express a great deal of responsibility and importance around saving seeds as well as remorse and grief around losing seeds. Such are the interwoven emotions involved in mutual relating. But mutual relating in which those involved all have their own agency also entails not trying to completely control the others with whom one is in relationship. It entails trust and interdependence. The growers in these communities understand themselves as one of many agents involved in agriculture, involved in who grows more and who grows less, involved in how the land shapes and reshapes itself. They understand themselves as one relation amidst deeply-intertwined relational agrodiversities. Neither saving nor loss are linear. The seeds are agents unto themselves. Growers are well-acquainted with, especially, criollo plants' seeds. But they also see that even amidst that knowing of seeds, the seeds can surprise them. And they do—by disappearing, by rotting, by not sprouting. And also by showing back up again when least expected, in the hands of a *vecino* or family member come to visit, in the soil on the side of the road, in the middle of the milpa, between rows of the invernadero.

Recognizing the innate power of seeds and plants does not, though, leave growers in a state of powerlessness. Rather, by being in constant relationship with seeds, it enables growers' actions to be guided by interconnectedness and entangled fates, by recognition of relationality and mutuality as part of their agrodiversities. As one grower posed in Chapter 1, "Who are we without the milpa?"

David (Unión Reforma) reflects, "Just like the seeds, the birds, the own culture of our communities has also been lost." What affects the seeds affects the communities and diversities entire. As interconnected beings, growers both afford seeds the freedom for autonomous expression and remember that their responsibility to seeds runs as deep as responsibility to kin, to self which is inextricable from community.

Vania (Unión Reforma) shows me the little pots in which she is trying to grow apazote, a planta nativa she didn't use to have to try to plant because it spouted 'on its own' in abundance. The apazote disappeared, she says, "because we didn't pay attention to it." Concerns over seed loss in the communities are not largely driven by fears of agrobiodiversity loss, be it global or local. Nor are they driven by the fears and agendas the organizations who work with them bring in with their projects. When fear is involved at all, it is a less abstract and more intimate fear the fear of neglecting a relation, the fear of letting down one's community.

Intimacy in relational agrodiversity enables a dynamic where fear is not the main driver of growers' concerns. When they speak of loss of seed—and of criollo-nativo plants, of foods and customs, of language and of culture—they speak less often from a place of fear and more often from a place of care. While acting out of fear can lead to desperation, acting out of care can lead to paying attention. As Vania points out, the plants and seeds notice when the growers are (or are not) paying attention. When the growers pay enough attention, they often find the seeds are offering them hope.

Seeds of Possibility, Seeds of Change

After the squirrels came and Dominga gave up on her milpa only to recognize too late this meant giving up her criollo seed, she wanted another chance. She wanted to grow milpa again, not just any milpa but milpa criolla. So she went asking around with her neighbors in search of seed and soon enough started to grow a little plot of milpa criollo again—not the very same seed as before but seed that in time would become particular to her land, her family.

The story of the bad year for calabaza for many growers in Chichum Majadas took a similar turn. Though they lost their seed, they were soon already off looking to see which growers had managed a calabaza crop in order to find calabaza criolla seed to start a new planting. In each community, I come upon growers with plantings of 'disappeared' plants uncommon varieties of maíz and frijol, papas criollas, trigo, avena, haba, arveja, caña de azúcar, tomate de riñón, manzana criolla, quixtan, colis, among many others. All over, I find growers who explain the reasons for their planting of milpa and other plants as continuing to have seed, to keep the seed alive.

As seeds contribute to sustaining communities' lifeways and identities, communities contribute to sustaining seeds. This relationship manifests in creative action and engagement on the part of growers too. Growers and seed have a way of finding each other. *Intercambios* (exchanges) and gifting of seed are part of the culture of all three communities, practices that extend as far back as pre-colonization times. Especially with maize, bean, and squash seed but with many other plants too, growers credit exchanges with or gifts from family (local or in another community) or neighbors as the reason they are able to change, add, or reintroduce a certain plant or variety of crop. When I spend a day walking with Emanuel to various growers' parcelas in Chichum Majadas, he spots plants of interest around nearly everyone's homes. He openly expresses his enthusiasm for these plants and finishes the day walking home with an accumulated armload of seeds and seedlings.

After talking for a while with Lidia and Lorenzo about their parcela, Eva insists I stick around for dinner, as she has already boiled up some güisquiles. As I observe how the güisquil Lidia serves me is free of spines unlike some other varieties I have seen hanging from the vines outside their home, Lidia and Lorenzo explain how they had acquired the seed for the nonprickly variety from a vecino upon passing their parcela and admiring their güisquiles. Lorenzo explains that they had proceeded to just ask the neighbor for some seed and the neighbor obliged, because that is how they do it here, have always done it here. Maybe one day the vecino will come to them seeking some seed too and then they will also be able to give. Exchanges also happen beyond the community. Many growers have family members and connections in neighboring or further-away communities. When they exchange seed with families at different altitudes, their seed offerings often complement each other. Growers will explain that they have this plant that is from the coast, from higher altitude, from Chiapas, because family who lives there gave it to them. Bernardo (Unión Reforma) credits his having six varieties of maíz and other unique varieties of plants with exchanges facilitated by a grower group:

"They do exchanges of seeds. For that reason, I have lots of varieties of seeds. I go to the level of Tacaná. I bring seeds from there and take seeds from here to there. So it is. And it is because of that that I have so many varieties of seeds."

I watched growers find seeds on the ground, pick seeds off plants, save seeds from eaten fruits. In his parents-in-law's milpa, Edwin waves me over to a rotten ayote and kicks it open to reveal the seeds nested in the slimy pulp within. We pick through, coating our bare hands in ayote guts and the putrid smell of rot. Edwin lifts a handful of seeds and describes how we'll dry them out and then they'll be good for planting.

Growers even participate in the seeds of plantas nativas and monte. Many are accustomed to grabbing a handful of seed from a monte-nativo plant who grew 'on its own' and tossing them out into the surrounding soil. One grower explains how assisting the monte seeds in this way helps to keep them growing, to keep the monte plants from disappearing. Despite the nature of plantas nativas and monte as plants that 'solo salen,' growers are also becoming more directly involved in seed propagation of monte and plantas nativas. Some growers bring seed from plants in the woods back to plant in their own parcelas. Dominga takes cuttings of colis (monte-nativo) plants to start new ones. A number of growers have branches of colinabo (monte-nativo) with little seed pods hanging from their roof to dry in the sun. 'For saving the seed,' they explain. Many growers are now seeking seeds of plants they used to largely forage. Recall how hierbamora, once nearly only monte-nativa, now must be distinguished between hierbamora criolla-nativa and hierbamora sembrada. Hierbamora, among other monte, is now being planted.

Many growers are taking the lead on producing their own seed. The 'proyecto de viveros agroforestales' (agroforestry nursery project) just beginning in Unión Reforma in October 2022 promises to bring viveros of trees and plantas nativas to growers' land so that they can have the seed resources—and the resources to keep propogating more seed—to grow fruit trees, trees for wood and lumber as well as plants nativas that have become harder to find growing on their own. In a meeting, one member of the project proclaims, "We are going to learn to value the seeds where there are (still seeds)."

There are seeds in the communities and growers are trying to value that gift by creating spaces to foster the growth of the seeds around them. The Los Limones grupo de mujeres has their vivero of plantas medicinales. Some Chichum Majadas café growers have their semilleros of café and fruit/shade trees. In all communities, growers are increasingly starting, even if in earnest, viveros and semilleros for wide varieties of plants as a home-based source of seed, a place where seed can continue to be or become criollo.

The need for viveros and semilleros has arisen in the wake of shifting diversities in growers' plantings. Back in the 'pura milpa' times, when milpa plantings and monte were the primary makeup of the agricultural landscape, growers didn't need to start seeds. Maize, bean, and squash seed are fairly easily harvested and stored, and then can be planted directly, not necessitating a vivero/semillero. With the arrival of new seeds to the communities, though, seed saving and propagating has complexified.

When it comes to hortalizas, most growers buy the majority of their hortaliza seed (when not getting it from an external organization or project), usually in the centro from the *'agroservicio,' 'veterinario,'* or market. Why are people buying these seeds? Because purchased seed is the way growers were largely introduced to many hortaliza varieties. There are exceptions, of course, in the case of some criollo plants, such as tomate de riñón and cilantro criollo, for which growers have a history of saving their own seed. With many hortalizas— zanahoria, coliflor, brócoli, chile pimiento, rábano, and others—growers only know purchased seed. Their relationship with that purchased seed only runs as far back as their trip to the *agroservicio* in town where they bought it. When I asked growers where the seed originated before the *agroservicio* or *veterniario* or market, they simply shook their heads or shrugged their shoulders.

When relying on purchased seed, growers need to have some form of cash income with which to buy seed. With hortalizas, which growers typically grow in successive plantings throughout a single rainy season (or all year in the case of some growers with consistent irrigation), the need to buy seed can also be more continual than once a year. Some growers have recently decreased their hortaliza plantings in order to not have to keep buying more seed to replant after each harvest.

I asked growers whether they'd prefer to be saving seed for their hortalizas rather than buying it. The answer was obvious to most—they would clearly *like* to save seed. So why don't they? They don't know these seeds. They're not criollo and growers don't often know whether to call them mejorado, híbrido, or transgénico either. Most growers are uncertain whether they even could save seed from hortalizas compradas (vegetables from purchased seed). This uncertainty, though, is not stopping some growers from trying. A number of growers have started semilleros of hortalizas in efforts to produce, rather than buy, their seeds. Iris continues to watch the 'volunteer' tomate plants, sprouted from seeds dropped by the tomate híbrido, to see whether she can use the volunteer seedling to grow more tomato plants.

In the communities, seeds are valued and storied. Growers save them, look for them, collect them, buy them, love them, miss them when they're gone. Through relational agrodiversity, seeds are allowed to be agents in the relationships at play between growers, land, plants. There is always the possibility of new relationship formation, to grow more acquainted with 'new' seeds and reacquainted with 'old' ones. There is always the possibility they might become part of the family. As Iris watches her tomatoes, she watches to see where the criollo might take root and fruit.

Chapter 7

The View from the Lilies and Elotes

Four-year-old Karla has her way today and convinces her older sister Estefanía, 11, to let her join us on our rounds to visit the neighbors. Joselyn knows where everyone lives, the map of the small community etched into her brain from a childhood of making her way up and down this mountainside. She knows where the mean dogs live, where to pick up stones to fend them off in time, where to take shortcuts and hidden routes. We make our way along a similar path, as all paths become in a matter of days in Unión Reforma.

I recognize the house lower on the hillside as the home of an elder man I visited a few days ago. We must be visiting his daughter, whose new house—still in the process of being built—he pointed out to me above the milpa. Children run loops around the fresh walls in the streaming sunlight of late morning. As we approach, Estefanía calls out "Is your mother here?" The children stop to look at us and yell through the open windows of the simple house. Luz emerges from the door frame and the children resume their game, Estefanía and Karla dashing into the fold with peals of laughter.

I walk over to greet Luz to introduce myself and she greets me with a soft, uncertain smile. She begins with an apology for having nothing to offer me, as the new house doesn't yet have a stove to cook or to heat water for café. I reassure her that I am just grateful for her time. Like everyone, she has heard about me already and, like everyone, she wants to ask for herself what exactly I'm doing here in Unión Reforma, coming to talk to her. She nods as I explain, staring toward the ground in thought. She scoots us a few steps over toward the invernadero she thinks it a good spot for recording. I don't question her reasoning, simply ask permission to turn on the microphone.

As my questions begin to feel like a comfortable conversation, her posture and face relax. She periodically flicks her eyes at me to smile or giggle, each time lifting a hand to cover her mouth as our gazes meet. When memories and histories tangle into the present, she explains she—with the help of her children—is the one taking care of the plants these days (even as she heads into town to teach each day). Her husband left for the U.S. four months ago.

The invernadero behind us—now planted with rows of hierbamora sembrada for market and some tomate and a variety of hortalizas for home consumption—was filled with flores, *lilium* (lilies) specifically, in the early months of 2020. She and her husband had planted them after observing others in the community beginning to grow them and then buy new shoes for their children, buy more fruits for their families, maybe even slowly start to build their new home. The seed was very expensive, not so easy to come by, and a bit unknown. They had to take out loans to be able to buy it. But the risk could prove worth it. It could strike them that oftelusive balance of having the means to keep living here on their land and in their community without having to look elsewhere for the means to do so. As the lilies grew in the invernadero, hope grew with them.

Then a global pandemic began, its effects quickly working its way to the area. Markets and shops closed. Curfews and lockdowns were imposed. Luz's family found themselves with a hoophouse full of high-investment lilies and nowhere to sell them. Even with somewhere to sell them no one was buying. In the face of soaring prices for basic goods, even staple foods like maize, and greatly limited opportunities to work, people weren't using the limited funds they had to buy flowers amidst the height of the COVID-19 pandemic. Luz and her husband still had their loans for the lily seed to pay back, but no lily-based windfall with which to cover them. Indebted and limited in options, Luz's husband eventually made the hard choice that many do and left his family to begin his journey to 'el norte.' Luz and I go quiet. We hold each other's eyes as we let the gravity of the conversation settle into the air around us.

Somehow, our conversation picks back up. It turns back to the season, the milpa, as conversations so often do—not in the way of small talk, but in the way that the center of daily life continually recaptures attention. Suddenly reanimated, Luz beams as she asks me if I've eaten tamalitos de elote. "In other communities, yes. But I haven't eaten the ones here, of Unión Reforma." The taste of each community is different. Luz and I agree on this. She says she'll make some this afternoon, that she'll send some to me by this evening.

The evening comes and passes.

It's a few days later, another bustling morning in Milagros' and Edwin's home. Estefanía is hurrying to finish her homework for the school day. Edwin is making calls to find out who is around today, who will give him the time for a visit on behalf of Red Kuchub'al. Milagros is preparing breakfast and letting me wash last night's dishes in the cold basin of water outside the home. Karla is at my elbow, asking me all sorts of questions. A girl appears at the overlook above the house. Estefanía runs up to her and they exchange some words, before Estefanía returns excitedly to let me know the girl wants me to go with her to the Luz's old house.

I arrive to a smiling Luz welcoming me into her kitchen with a steaming pile of tamales de elote. We marvel together—isn't it the best gift to be able to eat elote? Doesn't the milpa take care of us?

When I returned to the San Marcos area of Guatemala in September of 2021, the world was not yet out-of-the-woods from COVID-19. The people of Chichum Majadas, Los Limones,

and Unión Reforma are familiar with being in the woods, in the *monte*. Being in the monte (not quite 'in the weeds'), they are with kin and they find the goodness. They gather the brosa, firewood, and carpentry wood, the food and the medicine, the seed, the special stuff by which they form and re-form home.

So despite the ways in which the COVID-19 pandemic hit the communities hard, it was not all bleakness. Many growers spoke of the struggles of the pandemic. With cash and work already hard to come by, the pandemic exacerbated this and topped it off with increasing prices of basic goods and foods as well as restricted mobility that limited making sales or picking up work outside the communities. Many of the organizations who were sources of resources to them could not come anymore.

But many growers also spoke of their strengths as campesinos. In Chichum Majadas, where most people couldn't even go to *el centro* for the first year of the pandemic, those families who still grew much of their own food fared best. Even in Los Limones and Unión Reforma where community members were slightly less restricted from going to shop in *el centro*, families who grew their own food and a diverse array at that found that it helped them immensely at a time when to buy food had become a drastically greater expense. Some growers even spoke of benefiting—with the increased food prices, those who grew and sold food sometimes stood to turn increased profits. When unable to sell at market, growers got creative locally. Neighbors sold to neighbors. Agustín opened a little local food store in his *tiendita*. Beni started delivering his family's vegetables to others on his motorcycle. Growers were grateful for the support their plants offered them. A number even expressed gratitude for staying home, for staying with family, with community. The pandemic hasn't affected them so much, they said, because they have always had each other and this place. They still have each other and this place.

When following the stories of seeds past their origins, along the long, winding, interwoven threads of their lives, this is not infrequently what one finds. Ways of persisting through change, amidst ongoing injustices, climate crises, migration waves, even worldwide pandemics. Ways of continuing. Ways of making it.

Ways of continually becoming.

Sara has a certain refrain to which she often returns, "It's hard, but we can make a living here." Quite a few of the growers with whom I spent my days in Chichum Majadas, Los Limones, and Unión Reforma spoke words of a similar hard-won but hopeful sentiment. 'Making a living here' for these growers has a lot to do with the co-making of life, with the cocreation of ways of existing with the plants and land around them. Building and rebuilding relationships with the plants who they know, come to know, and come to re-know co-creates a landscape of continual change—change that need not be marked only by the fear of loss but which itself becomes essential to identity, tradition, continuing on.

The great pride in criollo plants in the communities emerges from the centrality of relationships in this living. Luz and her new lilies hadn't gotten to really know each other yet by the time the pandemic hit. The issue was not simply that the lilies had come from elsewhere but rather also that, in their truncated span with Luz, they hadn't become criollo. So when they didn't pan out, Luz moved on. In the background, the milpa criolla persists. When hard times come, the milpa criolla is there.

This is not to say that the milpa never 'fails.' We have seen how the relationship with the milpa in the communities has ebbed and flowed across the years. But the opportunity in 'criollo' agrodiversities is that many relationships are in concert at once—some voices dim or drop away for a time but the song still goes on. In this dynamic, there is not only dependence on input- and

investment- intensive hybrid crop varieties. Nor is there only dominating fear of losing 'native' plant varieties, bandaged over by desperate attempts to 'save.' Rather, while there may still be struggle (inevitably will be struggle), there is always opportunity to shift and grow as relationships—grower-plant, plant-plant, plant-land-grower—shift and grow too.

In the criollo, there is opportunity. Opportunity for histories and stories, for fluid and interwoven identities, for empowered engagements with external organizations, for nuanced resistances in the face of attempted erasures, for namings that move past binaries and slide with context, for agencies for all beings, for the bringing forward of 'hidden' women and plants, for land connection that can include movement, for seeds with the power to manifest multiplicities of worlds.

In the relational agrodiversities of Chichum Majadas, Los Limones, and Unión Reforma, there is room for the milpa, the papa, the hierbamora, the bledo, the amaranto, the ruda, the café, the tomate, every plant written amidst these pages (even sometimes the lilium) and more I may never meet. There is room for the criollo but also the monte, the nativo, the plants who blur these names or defy naming, even, in certain spaces, the mejorado and the híbrido. There is room not quite for everyone, but for the more-than and not-quite Indigenous, for the ancestors and coming generations, for every plant and grower—maybe even organization and researcher—who is willing to engage in intentional and ongoing relating as part of the greater multispecies whole of the community.

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Appendices

Methods

| Table 1. | Participatory | Mappings Plant | Inventory – Sum | marized by Comm | unity |
|----------|---------------|----------------|-----------------|-----------------|-------|
|----------|---------------|----------------|-----------------|-----------------|-------|

| Plant | Total | Total | Total | |
|-----------------|------------|------------|------------|---------------|
| | Growers | Growers | Growers | Total growers |
| | with Plant | with Plant | with Plant | with plant |
| | (Los | (Chichum | (Union | (all |
| | Limones) | Majadas) | Reforma) | communities) |
| acelga | 3 | 0 | 1 | 4 |
| aguacate | 13 | 11 | 7 | 31 |
| ajenjo | 0 | 0 | 1 | 1 |
| ajo | 0 | 0 | 1 | 1 |
| albahaca | 7 | 8 | 2 | 17 |
| aliso | 6 | 4 | 1 | 11 |
| altamis | 0 | 0 | 1 | 1 |
| amaranto | 2 | 2 | 0 | 3 |
| anona | 1 | 5 | 0 | 6 |
| apio | 1 | 0 | 0 | 1 |
| arbeja | 1 | 0 | 0 | 1 |
| arbol camaros | 0 | 1 | 0 | 1 |
| arbol comida de | | | | |
| paloma | 0 | 1 | 0 | 1 |
| arbol de hierro | 0 | 1 | 0 | 1 |
| arbol de salvia | | | | |
| simorrante | 0 | 0 | 1 | 1 |
| arbol de yaca | 0 | 1 | 0 | 1 |
| arbol moco | 0 | 0 | 1 | 1 |
| arjeña | 1 | 0 | 1 | 2 |
| arnica | 0 | 0 | 1 | 1 |
| astromelia | 0 | 0 | 6 | 6 |
| ayote | 12 | 5 | 13 | 30 |
| baricuote | 0 | 0 | 1 | 1 |
| bijao | 0 | 1 | 3 | 4 |
| bledo | 2 | 2 | 0 | 3 |
| boraj | 0 | 0 | 1 | 1 |
| brocoli | 4 | 2 | 3 | 9 |
| buscapina | 0 | 1 | 1 | 2 |
| café | 1 | 17 | 1 | 19 |
| calabaza | 0 | 10 | 0 | 10 |

| campana | 0 | 1 | 0 | 1 |
|-------------------|----|----|----|----|
| caña de azucar | 0 | 9 | 0 | 9 |
| canaque | 0 | 4 | 2 | 6 |
| canela | 0 | 2 | 0 | 2 |
| cebolla | 5 | 2 | 7 | 14 |
| cedro | 0 | 1 | 0 | 1 |
| chalum | 0 | 9 | 0 | 9 |
| chicajol | 0 | 0 | 1 | 1 |
| chilacayote | 2 | 0 | 2 | 4 |
| chile | 2 | 9 | 5 | 16 |
| chile pimiento | 3 | 1 | 0 | 4 |
| chipilin | 1 | 1 | 1 | 3 |
| chocon | 0 | 1 | 1 | 2 |
| cilantro | 3 | 2 | 1 | 6 |
| cipres | 2 | 1 | 0 | 3 |
| ciruela | 0 | 1 | 6 | 7 |
| col/repollo | 7 | 4 | 0 | 11 |
| cola de caballo | 0 | 0 | 1 | 1 |
| cola de quetzal | 0 | 0 | 1 | 1 |
| coliflor | 3 | 1 | 2 | 6 |
| colinabo | 0 | 3 | 2 | 5 |
| colis | 0 | 0 | 2 | 2 |
| crisantemo | 0 | 0 | 1 | 1 |
| durazno/melocoton | 11 | 10 | 7 | 28 |
| encino | 0 | 2 | 1 | 3 |
| epazote/apazote | 5 | 5 | 5 | 15 |
| escoba rejan | 0 | 1 | 0 | 1 |
| espinaca | 2 | 0 | 0 | 2 |
| eucalipto | 0 | 0 | 1 | 1 |
| flor de muerte | 1 | 2 | 3 | 6 |
| flor nora | 0 | 0 | 1 | 1 |
| flores de pascua | 1 | 0 | 0 | 1 |
| fresa | 0 | 0 | 1 | 1 |
| frijol | 12 | 16 | 10 | 38 |
| gerbera | 1 | 0 | 2 | 3 |
| girasol/mirasol | 0 | 0 | 2 | 2 |
| gladiola | 0 | 0 | 1 | 1 |
| granado | 0 | 3 | 0 | 3 |
| guayaba | 0 | 2 | 0 | 2 |
| guicoy | 3 | 8 | 1 | 12 |
| guinda | 3 | 3 | 2 | 8 |
| guineo/banano | 1 | 15 | 2 | 18 |

| guisquil/chayote | 7 | 13 | 2 | 22 |
|---------------------|----|----|----|----|
| haba | 7 | 0 | 4 | 11 |
| hierbabuena | 4 | 3 | 8 | 15 |
| hierbamora | 8 | 9 | 11 | 28 |
| higo | 1 | 1 | 1 | 3 |
| hinojo | 2 | 2 | 3 | 7 |
| hoja blanca | 0 | 1 | 0 | 1 |
| inciensio | 0 | 0 | 1 | 1 |
| isote/guinte | 0 | 1 | 0 | 1 |
| jocote | 0 | 2 | 0 | 2 |
| labio | 0 | 0 | 1 | 1 |
| latse | 0 | 0 | 1 | 1 |
| laurel | 0 | 2 | 2 | 4 |
| lechuga | 1 | 0 | 0 | 1 |
| lengua de vaca | 0 | 0 | 1 | 1 |
| lilium/lili | 0 | 0 | 2 | 2 |
| lima | 0 | 2 | 0 | 2 |
| limon | 7 | 12 | 6 | 25 |
| llanten | 1 | 0 | 3 | 4 |
| madron | 0 | 2 | 0 | 2 |
| maiz | 13 | 16 | 11 | 40 |
| malango/camote | 0 | 4 | 0 | 4 |
| malva | 0 | 0 | 1 | 1 |
| mandarina | 0 | 6 | 0 | 6 |
| mango | 0 | 7 | 0 | 7 |
| mania | 0 | 1 | 0 | 1 |
| manzana | 8 | 8 | 5 | 21 |
| manzanilla | 3 | 0 | 2 | 5 |
| marialuisa | 2 | 1 | 1 | 4 |
| mashan | 0 | 1 | 0 | 1 |
| matasana | 0 | 4 | 0 | 4 |
| mecate | 0 | 0 | 1 | 1 |
| menta (te de mente) | 6 | 1 | 1 | 8 |
| mich / piñon | 0 | 1 | 0 | 1 |
| milenrama | 0 | 5 | 1 | 6 |
| mish | 0 | 0 | 1 | 1 |
| moquillo | 0 | 0 | 1 | 1 |
| mora (de arbol) | 0 | 5 | 2 | 7 |
| mora (de guia) | 0 | 2 | 0 | 2 |
| nabo | 2 | 0 | 1 | 3 |
| naranja | 1 | 5 | 0 | 6 |
| nectarina | 1 | 0 | 0 | 1 |

| nispero | 1 | 3 | 0 | 4 |
|-------------------------|---|---|---|----|
| oregano | 1 | 2 | 2 | 5 |
| pacaya | 0 | 1 | 0 | 1 |
| pachan | 0 | 1 | 0 | 1 |
| pajon (chum) | 0 | 1 | 0 | 1 |
| palma | 1 | 0 | 0 | 1 |
| palo de agua | 0 | 2 | 0 | 2 |
| palo de reina | 0 | 0 | 1 | 1 |
| papa | 0 | 1 | 6 | 7 |
| papaya | 0 | 0 | 1 | 1 |
| paruts | 0 | 0 | 1 | 1 |
| pasionaria/granadilla/f | | | | |
| rutanario (inc. de | | | 0 | ~ |
| monte) | 2 | 3 | 0 | 5 |
| pasto de napier | 0 | 0 | 1 | 1 |
| pasto neno | 0 | 0 | 1 | 1 |
| pasto morero | 0 | 0 | 1 | 1 |
| | 1 | 0 | 1 | 2 |
| pera | 2 | 0 | 0 | 2 |
| pericon | 3 | 4 | 1 | 8 |
| pinabete/pashac | 0 | 0 | 2 | 2 |
| pino | 7 | 5 | 1 | 13 |
| platano | 0 | 2 | 0 | 2 |
| quishtan | 1 | 2 | 3 | 6 |
| rabano | 5 | 3 | 3 | 11 |
| raigras | 0 | 0 | 1 | 1 |
| remolacha/betabel | 2 | 0 | 6 | 8 |
| roble | 2 | 2 | 0 | 4 |
| romero | 0 | 2 | 1 | 3 |
| rosa | 0 | 1 | 3 | 4 |
| ruda | 7 | 7 | 6 | 20 |
| sabila | 2 | 4 | 6 | 12 |
| sacatan (pasto) | 2 | 2 | 0 | 4 |
| saqmuj | 0 | 1 | 0 | 1 |
| salvavida | 0 | 0 | 1 | 1 |
| salvia santa | 0 | 0 | 1 | 1 |
| sauco | 1 | 0 | 0 | 1 |
| setaria | 0 | 1 | 2 | 3 |
| tamarindo | 0 | 1 | 0 | 1 |
| te de limon (te | | | | |
| limonada) | 6 | 6 | 1 | 13 |
| te rusa | 1 | 3 | 0 | 4 |
| tomate | 5 | 4 | 3 | 11 |

| tomate de arbol/ | | | | |
|------------------|---|----|---|----|
| tomate de palo | 3 | 10 | 3 | 16 |
| tomillo | 0 | 2 | 0 | 2 |
| toronja | 1 | 1 | 0 | 2 |
| toronjil | 2 | 0 | 1 | 3 |
| trigo | 1 | 0 | 1 | 2 |
| tuna/nopal | 2 | 0 | 2 | 4 |
| uchuva | 0 | 0 | 1 | 1 |
| vics/ vaporub | 0 | 1 | 0 | 1 |
| yuca | 0 | 1 | 0 | 1 |
| zacate | 0 | 1 | 0 | 1 |
| zanahoria | 3 | 1 | 4 | 8 |

| Community Name | English Common Name | Scientific Name |
|----------------------------|---------------------|--------------------------------|
| acelga | Chard | Beta vulgaris subsp. Vulgaris |
| aguacate | Avocado | Persea americana |
| Ajenjo | Wormwood | Artemesia absinthium |
| Ајо | Garlic | Allium sativum |
| albahaca | Basil | Ocimum basilicum |
| Aliso | Alder | Alnus spp. |
| altamisa | Ragweed | Ambrosia spp. |
| amaranto | Amaranth | Amaranthus spp. |
| anona | | Annona spp. |
| apio | Celery | Apium graveolens |
| arbeja | Pea | Pisum sativum |
| árbol camaros | | |
| árbol comida de paloma | | |
| árbol de hierro | | |
| árbol de salvia simorrante | | |
| árbol de yaca | Jackfruit | Artocarpus heterophyllus |
| árbol moco | | Saurauia spp. |
| árjeña(o) | | |
| árnica | | |
| alstromeria | Peruvian lily | Alstroemeria |
| ayote | Figleaf gourd | Cucurbita ficifolia |
| baricuote | | |
| Bijao | | Calathea spp. |
| Bledo | | Amaranthus spp. |
| Borajja | Borage | Borago officinalis |
| Broccoli | brócoli | Brassica oleracea var. italica |
| buscapina | lichwort | Parietaria officinalis |
| Café | coffee | Coffea spp. |
| calabaza | Pumpkin (general) | Curcurbita spp. |
| campana | Angel's trumpet | Brugmansia spp. |
| caña de azucar | sugarcane | Saccharum officinarum |
| canaque | monkey's hand tree | Chiranthodendron pentadactylon |
| canela | cinnamon | Cinnamomum spp. |
| cebolla | onion | Allium cepa |
| cedro | cedar | Cedrus spp. |
| chalum | chalum | Inga micheliana |
| chicajol | | |
| chile | hot pepper | Capsicum annuum |
| chile pimiento | bell pepper | Capsicum annuum |
| chipilín | | Crotalaria longirostrata |
| chocón | | |

 Table 2. Names of Plants from Mappings

| cilantro | cilantro | Coriandrum sativum |
|-------------------|------------------|---------------------------------|
| ciprés | cypress | Cupressus spp. |
| ciruela | plum | Prunus domestica |
| col/repollo | cabbage | Brassica oleracea var. capitata |
| cola de caballo | field horsetail | Equisetum arvense |
| cola de quetzal | Sword fern | Nephrolepis cordifolia? |
| coliflor | cauliflower | Brassica oleracea var. botrytis |
| colinabo | | Brassica spp. |
| colis | | Brassica spp. |
| crisantemo | chrysanthemum | Chrysanthemum spp. |
| durazno/melocoton | peach | Prunus persica |
| encino | oak | Quercus spp. |
| epazote/apazote | Mexican tea | Dysphania ambrosioides |
| escoba rejan | | |
| espinaca | spinach | Spinacia oleracea |
| eucalipto | eucalyptus | Eucalyptus spp. |
| flor de muerte | marigold | Tagetes spp. |
| flor nora | | |
| flores de pascua | poinsettia | Euphorbia pulcherrima |
| fresa | strawberry | Fragaria x ananassa |
| frijol | bean | Phaseolus vulgaris |
| gerbera | gerbera daisy | Gerbera jamesonii |
| girasol/mirasol | sunflower | Helianthus annuus |
| gladiolus | gladiolus | Gladiolus spp. |
| granado | pomegranate | Punica granatum |
| guayaba | guava | Psidium guajava |
| güicoy | squash (general) | Cucurbita spp. |
| guinda | cherry | Prunus avium |
| guineo/banano | banana | Musa spp. |
| güisquil/chayote | mirliton | Sechium edule |
| haba | fava bean | Vicia faba |
| hierbabuena | spearmint | Mentha spicata |
| hierbamora | black nightshade | Solanum spp. |
| higo | fig | Ficus carica |
| hinojo | Fennel | Foeniculum vulgare |
| hoja blanca | | |
| incienso | | |
| isote/guinte | yucca flower | Yucca guatemalensis |
| jocote | purple mombin | Spondias purpurea |
| labio | | |
| latse | | |
| laurel | bay laurel | Laurus nobilis |

| lechuga | lettuce | Lactuca sativa |
|----------------------------------|-------------------------------|---------------------------------|
| lengua de vaca | | |
| lilium/lili | lily | Lilium |
| lima | sweet lime | Citrus spp. |
| limón | lemon, lime | Citrus spp. |
| llantén | plantain | Plantago spp. |
| madron | madrone tree | Arbutus spp. |
| maíz | maize, corn | Zea mays |
| malanga(o)/camote | taro | Colocasia esculenta |
| malva | mallow | Malva spp. |
| mandarina | Mandarin orange, tangerine | Citrus spp. |
| mango | mango | Mangifera indica |
| mania | peanut | Arachis hypogaea |
| manzana | apple | Malus pumila |
| manzanilla | chamomile | Matricaria chamomilla |
| marialuisa/hierbaluisa | lemon verbena | Aloysia citrodora |
| mashan | | |
| matasano | white zapote | Casimiroa edulis |
| mecate | maguey, agave | Agave spp. |
| menta (te de mente) | mint | Mentha spp. |
| mich / piñón | | Jatropha Curcas |
| milenrama | yarrow | Achillea millefolium |
| mish | | |
| moquillo | | Saurauia spp. |
| mora (de árbol) | mulberry | Morus alba |
| mora (de guia) | blackberry | Rubus spp. |
| nabo | turnip | Brassica rapa subsp. Rapa |
| naranja | orange | Citrus × sinensis |
| nectarina | nectarine | Prunus persica var. nucipersica |
| níspero | loquat | Eriobotrya japonica |
| orégano | oregano | Origanum vulgare |
| pacaya | Pacaya palm | Chamaedorea tepejilote |
| pachan | | |
| pajón/chum | | |
| palma | palm | Arecaceae family |
| palo de agua | | |
| palo de reina | | |
| papa | potato | Solanum tuberosum |
| рарауа | papaya | Carica papaya |
| paruts | | |
| pasionaria/granadilla/frutanario | passionfruit | Passiflora spp. |
| pasto de napier | napier grass | Cenchrus purpureus |

| pasto heno | | |
|---------------------------------|----------------------------|-------------------------|
| pasto morero | | |
| pepino (& pepinillo) | cucumber | Cucumis sativus |
| pera | pear | Pyrus spp. |
| pericón | sweetscent marigold | Tagetes lucida |
| pinabete/pashac | fir | Abies spp. |
| pino | pine | Pinus spp. |
| plátano | plantain | Musa spp. |
| quixtan | giant potato creeper | Solanum wendlandii |
| rábano | radish | Raphanus sativus |
| raigras | ryegrass | Lolium spp. |
| remolacha/betabel | beet | Beta vulgaris |
| roble | oak | Quercus spp. |
| romero | rosemary | Salvia Rosmarinus |
| rosa | rose | Rosa rubiginosa |
| ruda | rue | Ruta graveolens |
| Sabila | Aloe vera | Aloe barbadensis miller |
| sacatán (pasto) | | |
| saqmuj | | |
| salvavida | | |
| salvia santa | sage | Salvia spp. |
| sauco | elderberry | Sambucus spp. |
| setaria | setaria grass | Setaria spp. |
| tamarindo | tamarind | Tamarindus indica |
| té de limon (té limonada) | lemongrass | Cymbopogon citratus |
| té rusa | | |
| tomate | tomato | Solanum lycopersicum |
| tomate de árbol/ tomate de palo | tamarillo | Solanum betaceum |
| tomillo | thyme | Thymus vulgaris |
| toronja | grapefruit | Citrus × paradisi |
| toronjil | lemon balm | Melissa officinalis |
| trigo | wheat | Triticum spp. |
| tuna/nopal | cactus fruit, prickly pear | Opuntia |
| uchuva | Groundcherry | Physalis peruviana |
| vics/ vaporub | Vicks plant | Plectranthus tomentosa |
| уиса | cassava, manioc, yucca | Manihot esculenta |
| zacate | forage grass | |
| | | |
Chapter 1

1.

"...Anteriormente, no estaba el lugar como está ahorita. En ese tiempo cuando me di cuenta yo, de muy joven, muy tierno, aquí los lugares eran muy descampados. No había arboles. Mas atrás donde yo estaba pequeño, arboles había bastante. Pero la gente, los abuelos destruyeron los arboles para poder sembrar su milpa, para poder sembrar su frijol, su ayote, su calabaza. Pero se producía la milpa sin abono en ese tiempo. A través del tiempo, cambió mucho...(Indicating to his padres) ellos crecieron desde aquel tiempo. 92 años tienen, la edad de ellos. Yo como hijo de ellos, mi mama, mi papa, aquí están... Aquí estoy vo, el primer hijo de ellos. Tengo 62 años. Mi esposa tiene 63 años. En ese tiempo la milpa se daba sin abono químico, puro natural...puro orgánicamente, la broza natural de la tierra. A través del tiempo...se quedaron todos ilusionados por la lluvia-caía. No había arboles...No había broza. Todos se quedaron ilusionados completamente y la broza quemó. Se barrió toda de la lluvia...una gran aguacero. Los ríos crecían con el agua que venían, caían. Hicieron aguaceros, aquí para abajo, ve...La lluvia que caía se reunía todo el agua. Toda la tierra, la broza iba, hasta el rio llegaba. Quedaba todas agujeradas las tierras. A través del tiempo, la milpa no se dio. Ya el maíz, poca producción, muy poquito. Y la gente, mucha compró de maíz...Y a través del tiempo, la gente que hicieron? Buscaron donde encontrar dinero. Se fueron para otro lados. Por Chiapas a cortar café, ganar dinero en otros lugares...Lleva mucha gente de Guatemala a trabajar en Chiapas en corte de café, cortar maíz, cortar frijol... Ya aquí las tierras, ya no producía. Los que tenían animales, caballos, vacas, juntaban broza, metían a la milpa, y así producía la milpa. Había maíz, había frijol. Los que no tenían, no se dio la milpa por no haber abono orgánico...Que hacían esa gente? Se fue a otros lados para ganar dinero para comprar su maíz para sustento de vida, para sus hijitos. A través del tiempo, hubo abono químico. Fue en al ano 1975 que entro el abono químico aquí en Guatemala...El abono (químico) entro por Chiapas. Allí se vino el abono... Y probaron la gente sembrar su milpa. Compraron abono (químico). En eso tiempo, valía 7 quetzales el quintal, o el saco de abono. Tenían 50 kilos ese saco, 100 libras...Compraron abono y probaron sembrar su milpa. Tiraron ese sulfato amonio. ¡Y se vino buen frijol y buen maíz! Que calidad de mazorcas, frijol! Ya no mucho emigraron la gente para otros lados. Aquí hubo maíz, hubo frijol. Y a través del tiempo, como la tierra siempre llovió, la lluvia cayo más vicio, más fuerte, erosionaba mucha la tierra. Mas bastante abono se echó otra vez y así producía la milpa. Y la tierra se acostumbró con química. El abono se fue del precio, bien carro, como a 780. Ya mucha gente cambió. Emigraron para los EEUU, Chiapas...Entonces nosotros, yo no salí a los EEUU ni en Cancun. A Chiapas yo fui a cortar café...Entonces vino en ano 1987 el Pastoral de la Tierra. Vino el ingeniero Don Juan Monterroso de San Marcos. Vio que no se da mucho la milpa. Por que? Porque hay que acostumbrar criar borregos, vacas, caballos. La vaca para producir abono, decía el. El caballo igual. Lo mas, el caballo es muy bueno para carear la pastura de la vaca. Eso decía el, el

ingeniero. Y la vaca es como el patrón, hay que mantenerla con mucha comida. Hay que hacer una galera, decía. Yo pensaba hacer eso...Ayudan las vaquitas...para sostener la vida, satisfacer la necesidad. Y dijo el ingeniero, sigue criando animalito para que los animales procesen abono. Pero hay que trabajar mucho—siembra pasto para que los animales coman...Hay que mantenerlas para sacar el billete...Siembro su mata de manzana, su mata de café. Sigo sembrando. Se probé y dio el cafe y la manzana. Esa matita allí. Esta ganamos en un curso en Tuicoche. Venía el ingeniero Don Juan Monteroso...Pero Pastoral de la Tierra somos nosotros porque cuidamos la tierra... (cuidamos) lo que se da la tierra o que productos da la tierra en cada lugar... Es eso nosotros como Pastoral de la Tierra, nosotros como humanos campesinos que vivimos aquí..."

2.

"Antes, cuando no había café aquí, que había?"

"Pura milpa! Pura milpa, sembrábamos la milpa. Aquí daba el frijol. Antes aquí nos daba el frijol, bastante. Y la calabaza, buenas calabazas. Antes no había café, no había guineos. La tierra estaba sin nada. Pura milpa. Teníamos una docena de ganados y con esos solo pastura...El terreno era hasta donde fuimos con mi hermano... caya hasta la vega y en esta vega donde yo mostré tal frijol llega hasta arriba donde usted va a estar mañana. Hubo otro cerro allá hasta la loma. El terreno era montaña para leña. Sembraba de esto hasta arriba, que era para milpa. Y... de allí quedaba para pastorear los ganados. Así sembrábamos un ano aquí, quedaba otro ano arriba..."

"Before, when there wasn't coffee here, what was there?"

"Pure milpa! Entirely milpa, we used to plant the milpa. Here beans grew. Here, before, beans produced for us—lots! And the squash, good squashes. Before, there didn't used to be coffee. There weren't bananas. The land was without anything. Purely milpa. We had a dozen cattle and with those, just pasture...Our land started where we went with my brother...went down to meadow and, from this meadow—where I showed you those beans—it continues up to where you're going to be tomorrow. There was another mountain until the hill. Our land was montaña for firewood. Planted from there up, it was for milpa. And... from there remained to graze livestock. In this way, we used to plant one year here and another year higher up...."

"Ha cambiado mucho (la agricultura), porque antes la mayoría de personas la que cultivaba más era solo milpa y frijol, que era lo común. Solo una cosecha al año y ya..."

"(The agriculture) has changed a lot, because before the majority of people, what they cultivated was only milpa and bean, which was the common thing. Only one harvest a year and that's it..." Los Limones

"Los abuelos sembraban las milpas antes. Solo cosechaban milpa. Solo milpa. Solo milpa se tapiscaba...Casi pura milpa (cultivábamos). Otra siembra no había."

"Los abuelos used to plant milpas before. They only harvested milpa. Only milpa. Only milpa was harvested...We cultivated almost pura milpa. There wasn't another crop." Los Limones

3.

"Antes la gente sembraba milpa. Sembraba trigo. Sembraba papa. Y ahora la gente la milpa casi no siembra... En cambio, antes aquí, en el principio-mira-aquí no se daba milpa. Aquí era puro pajonado—mira, este, este, puro campo para animales. Ya después, vinimos a vivir aquí, entonces a sembrar la papa, sembrar la milpa...Es diferente (ahora). En cambio, en el primero no, puro rebaño era. Pero el rebaño no dejaba nada. Eso es lo que pasa." "Before, people planted milpa. They planted trigo. They planted papa. And now the people practically don't plant the milpa...Whereas, before here, in the beginning—look—here the milpa didn't grow. Here it was pure grass. Look! (indicating to grasses) This, this, this—pure pasture for animals. Then, after, we came to live here, then to plant the potato, to plant the milpa...It's different (now). On the other hand, in the beginning, it was pure flocks of sheep. But the flocks didn't leave anything. This is what happened."

Unión Reforma

4.

(¿Por qué siembran ustedes menos milpa ahora?)

"Ya se trabaja más mejor que antes. No se abonaba como se estamos abonando ahora. Entonces no daba la milpa. Sembraba chingatal de milpa. Pero ahora ya es menos.

(Why do y'all plant less milpa now than before?)

"Now, we work better than before. They didn't fertilize as we are fertilizing now. Thus, the milpa didn't produce. They planted an abundance of milpa (then). But now it's less." Los Limones

"Viera que el maíz en ese tiempo (de antes)—los terrenos eran un poco más pobres. Se sembraba mucho y se cosechaba poco. Ahora he visto que se siembra poco, pero sí da. Se ve que el maíz quiere un poco más de fertilidad o los suelos más abonados, todo eso." "Look, the maize in that (earlier) time-the lands were a little poorer. One planted a lot and harvested little. Now I have seen that one plants little, but it does produce. One can see that the maize wants a little more fertility and the soils more fertilized, all that." Unión Reforma

"¿En general, las cosechas (de maíz) son mejores o peores que antes?" "Ahorita está un poco más o menos, no tan bien ni tan mal...Antes (durante el tiempo de) los abuelos...no había abono químico. Puro orgánico, pero menos...Los que tenían animales sembraban con abono. Los que no tenían, no. Tenían que comprar abono, pero dinero no había..."

"In general, the (maize) harvest are better or worse than before?"

"Right now, it's pretty so-so, no so good nor so bad...Before, (during the time of) the

abuelos...there wasn't chemical fertilizer. Purely organic, but less of it...Those who had animals planted with manure. Those who didn't (have animals), didn't. They had to buy fertilizer/manure but there wasn't money..."

Los Limones

5.

"(Durante el Conflicto Armado,) casi fue diferente pues, como daba miedo cuando decían 'están matando allá y están matando alla." Siempre a uno le daba miedo. Pero gracias a Dios, a nosotros no nos pasó nada...Aquí en Pin Pin, no. Pin Pin no estaba acusado. Por los areas Tocxoc... Allí si, el ejercito estaba matando."

"Pero aquí ustedes podrían seguir cultivando la milpa y todo eso sin problemas?"

"Sí, nosotros sí. A nosotros, no nos pasó nada."

"Tenían comida suficiente?"

"Ni tanto pero...no hubo hambre...Todo estuvo bien."

"(During the Conflicto Armado), it was somewhat different, how it gave one fear when (people) said, 'They're killing there and they're killing over there.' It always gave one fear. But thanks to God, nothing happened to us...Here in Pin Pin, no. Pin Pin wasn't accused. In the areas of Tocxoc... There, yes, the military was killing (people).

"But here you could continue cultivating the milpa and all that without problems?"

"Yes, us yes. To us, nothing happened."

"Did y'all have enough food?"

"Not lots but...there wasn't hunger...Everything was fine."

Los Limones

"Durante el conflicto armado, era diferente la siembra (de milpa)?"

"Era muy poco. No sembraba milpa entonces."

"Por qué?"

"Saber por qué! La gente no sembraba."

"During the Conflicto Armado, was the cultivation of milpa different?"

"It was very little. Thus, people didn't really plant milpa."

"Why?"

"Who knows why?! The people weren't planting." Unión Reforma

"Grupos vinieron aquí durante el Conflicto Armado?"

"Cuando fue el Conflicto Armado desaparecieron esos también porque ya no querían grupos en el Conflicto Armado como que descartó todos. Todo vino abajo porque no permitían eso...No pudimos organizar...era muy difícil. Pero antes cuando yo fue creciendo con mis papas, sembrábamos suficiente milpa y esto nos alcanzaba para el año. No comprábamos maíz. Porque nos quedaba bien la siembra, estaban los terrenos allí, como se dice, descansados. Entonces no fallaba el maíz."

"Did groups come here during the Conflicto Armado?"

"When it was the Conflicto Armado, all those (groups) disappeared too because they didn't want groups in the Conflicto Armado, as it ejected(better translation?) all of them. Everything fell by the wayside because they didn't permit this...We couldn't organize...it was very difficult. But before when I was growing up with my parents, we used to plant sufficient milpa and this lasted us the year. We didn't buy maize. Because the milpa planting remained good for us—the fields there were, as they say, rested, left to fallow. Thus, the maize didn't fail."

"¿Cuándo empezaron la conservación del suelo?"

"Como en el año 1970...Aquí en el municipio, apareció una organización que le llamaba Movimiento Campesino que lo traía una...Italiana o una persona extranjera del país. Era una mujer que traía la experiencia para trabajar con grupos y así que era abundando aquí la organización. Después fundó las cooperativas. Se llama Michelle...Es como usted que está ahorita aquí...Así trabajaba ella, hacía la capacitación y todo...Y tenía sus promotores (de la comunidad). Los promotores empezaron a promover la conservación del suelo, (lo) que (sea) de la organización. Y así fue por demanda la cooperativa. Entonces en esos años 70, se quiso formar la, como, la cooperativa a nivel del municipio.

"When did the soil conservation begin?"

"Around the year 1970...Here in the municipality, an organization called Movimiento Campesino appeared that brought an Italian or a foreigner from some other country. She was a woman that brought experience working with groups and so organizing began to abound here. After, the cooperatives were founded. Her name was Michelle...It's like you that is here now...That's how she worked, she did the trainings and everything. And she had her promoters from the community. The promoters began to promote soil conservation, whatever the organization promoted. And so it was by demand the idea of the cooperative. Thus, in the years of the 70s, there was desire to form, like, a cooperative at the level of the municipality." "Y el Movimiento Campesino siguió durante el Conflicto Armado también?"

"Sí...Era más difícil! Allí secuestraron, persiguieron a, digamos, los guías, los que empezaron. Por ejemplo, Michelle—no sé si se fue a su país, pero allí perdimos. Lo que pasó, saber. Era perseguida por venir acá. Los riesgos de los promotores—también era gente perseguida. Eran perseguidos todos.

"And the Movimiento Campesino continued during the Conflicto Armado too?"

"Yes...It was more difficult! They kidnapped, persecuted, as we say, the guides, the ones who started (organizing). For example, Michelle—I don't know if she went back to her country, but we lost her. What happened, who knows? She was persecuted for coming here. The risks of the promoters—they were also persecuted people. They were all persecuted."

"Ustedes entonces?"

"En este caso, estaba Don Benjamin...Lo persiguieron. Lo buscaron en su casa. A Don Isaías buscaron en su casa. Porque éramos primeros. Entonces, sí, hemos tenido tantos riesgos...Aquí estamos."

"You all then?"

"In this case, it was Don Benjamin...They persecuted him. They looked for him in his house. They looked for Don Isaias in his house. Because we were the first (organizers). Thus, yes, we had many risks...Here we are."

"¿Durante este tiempo la gente perdió un poco el movimiento?"

"Sí, así se fue perdiendo. Se estancó. Ya no podíamos trabajar."

"During this time, people lost a bit the movement?"

"Yes, in this way it was lost. It was blocked. We couldn't work then."

¿En cual año podía empezar a trabajar y organizar otra vez?"

"Ya fue después del Acuerdo de la Paz Firme, el '96. Allí más o menos pero ya muy poco. La gente tenía mucho miedo. Ahorita ya está llegando fuerza, ¿no? Ahorita ya está olvidando todo lo que pasó. Y como también la época de la juventud, pues--no todos conocieron el Conflicto Armado. Entonces ellos no tienen temor de nada."

"In what year could you begin to work and organize again?"

"It was after the Peace Accords, '96. Then more or less, but then it was still very little. The people had a lot of fear. Now recently is returning strength, no? Now the people are forgetting everything that happened. And as the era of the youth, well—not everyone knew/experienced the Conflicto Armado. Thus, they don't have fear of anything." Unión Reforma

6.

"¿Antes cuando solo se sembraba milpa, que practicas hacían?"

"No se hacía nada porque no teníamos ideas. Ni de los animales. Se sacaban a amarrar en el campo porque no había ideas. No había este, como ahorita, las galeras mejoradas. Y ahorita dicen los animales no salen al campo, todo encerrado, porque es el abono que se desperdicie, dicen, sacando en el campo...Y es ese abono que hace producir las tierras. Y antes... entonces la gente tenía que comprar químico y hacer solo el abonito que juntaba del animal en la noche..."

"Before, when only milpa was planted, what practices did you all apply?"

"Nothing was done because we didn't have ideas. Not even about the animals. People took them out to tie them up in the field/pasture/open land because there weren't ideas. There wasn't this, as there are now, improved livestock shelters. And now they say the animals don't go out into the pasture/open land, everything enclosed, because it's the manure that goes wasted, they say, taking the animals out to pasture/open land...And it's that manure that makes the land produce. And before...the people had to buy chemicals and get only the little manure that they collected from the animal at night..."

Los Limones

"¿Que hacían sus padres en la milpa?"

"Antes, a veces tiraba orgánico. Si no, no más sembraba así. Cuando ya estaban grandes, se venía el químico."

"What did your parents practice in the milpa?"

"Before, they sometimes put down organic (fertilizer). If not, they just planted it (in the field) asis. When they were older, the chemicals came."

Los Limones

"¿En cuál año llegaron los químicos aquí a la comunidad?"

ijAy madre, chucha! Llegaron en, saber, como en el 70...

"Antes, ¿cómo sembraba la milpa?"

"Con puro abono orgánico, como hacen los hermanos ahora...Con purín de vaca, de borrego, de coche, de caballo, de mula. De esa era. No había más...Cuando vino el químico, se terminó el hambre. Ahora estoy panzudito. Es cierto. Así fue, como en 70."

"In what year did the chemicals arrive to the community?"

"Well shit! They arrived in, who knows, around '70..."

"Before then, how did you plant the milpa?"

"With pure organic fertilizer, as los hermanos (of the local grower organization) do now...With cow urine, urine of sheep, pig, horse, mule. Organic fertilizer was made of that...When the chemicals came, the hunger ended. Now I have this little pot-belly. It's true. That's how it went, around the year '70."

Los Limones

"Allí viene la diferencia. Lo que nos han ido mejorando—voy a decirle sinceramente—es el químico. Cuando no había químico aquí, la milpa llegaba de este tamaño. O así, pero amarillo. Por eso nosotros comíamos elote. Cuando llegó el químico, la pesticida—fijase que ahora hay gente que ni se barbecha su terreno. Ni lo limpia. No más lo fumiga y siembra su maíz...(Sembrando la milpa en la manera de la organización) sí se da. Es más natural en salud. Pero cuesta mucho!"

"There's the difference. What has been bettering our lives—I am going to tell you sincerely—is the chemical (fertilizers). When there weren't chemicals, the milpa grew to this size. (He demonstrates a short height with his hand) Or like that, but yellowed. For that reason, we used to have to just eat the elotes (rather than waiting for the mazorcas to develop). When the chemicals arrived, the pesticides—notice how now the people don't even plow their land. Nor do they weed it. They just fumigate and plant their maize...(Planting the milpa in the way of the local grower organization), yes, it does produce. It's more natural for one's health. But it takes so much effort!"

Los Limones

"Hay prácticas que usaban antes en la milpa y ahora no?"

"Alla, sí. Alla lo abonaba con natural igual que aquí. Pero ahora puro químico. Y antes lo limpiaba con el azadón. Ahorita ya no limpian, puro fumigado con el Gramoxone...Pero aquí todavía se hace así, limpiar la milpa con el azadón..."

"Are there practices people used to use in the milpa and now don't?"

"Over there, yes. There, people used to fertilize with natural fertilizer just like here. But now, pure chemical. And before, people used to weed the field with the hoe. Now they no longer weed, completely fumigated with Gramoxone...But here, we still do this, weed the milpa with a hoe..."

Los Limones

"Lo que pasó, lo que dicen los abuelos...(cultivo de la milpa) ahorita ya es con puro químico. Antes era con puro orgánico...Ha cambiado mucho."

"What happened, what the abuelos say...(is that farming of the milpa) now is with pure chemical. Before, it was with pure organic (inputs)...It has changed a lot." Los Limones

"En Guatemala...el cultivo más grande aquí sería este maíz. Aquí, todas las personas siembran el maíz para el sustento diario y así a no comprar MASECA. Lo que nosotros sembramos es lo que consumimos. A veces hay personas que antes cultivaba más con puro orgánico pero fueron perdiendo eso porque a transcurso de los años ya vino la tecnología, vino ya el químico y esto viene a cambiar todo lo orgánico Porque antes había más el puro cultivo orgánico. Y eso era más agradable para las personas...El químico...es un poco caro pero la gente ya empezaron a producir más. Por ejemplo, el maíz, si solo abono orgánico se mete, ya no produce mucho, porque el químico le vino a cambiar. La gente hoy en día, lo que hace es, para no trabajar mucho, empiezan a fumigar la tierra con insecticida. Ya no se trabaja mucho. Pero ya estamos consumiendo más químico. Estamos tratando ahorita de cultivar con orgánico...con abono de animales o mezcla de abono que nosotros lo hacemos...con bokashi ..."

"In Guatemala, the biggest/most important crop here would be this maize. Here, all the people plant maize for daily sustenance and in order to not buy MASECA. What we plant is what we consume. Sometimes there are people who before grew (maize) more with purely organic (inputs) but went losing that because over the course of the years the technology came, the chemicals came and this came to change everything organic. Because before, there was more purely organic cultivation/crops. And that was nicer for the people...The chemicals...are a bit expensive but people already began to produce more (with them). For example, the maize, if one only adds organic fertilizers, now it doesn't produce much, because the chemicals came to change it. People today, what they do is, in order to not work much, begin to fumigate the land with insecticide. Now one doesn't work much. But we are already consuming more chemicals.

We are trying now to cultivate with organic (inputs)...with animal manure or a mix with fertilizer that we make...with Bokashi..." Chichum Majadas

"Químico—hasta desde que yo me di cuenta no en ningún momento he consumido químico porque el químico trae mucha enfermedad que viene a arruinar nuestras siembras. Quema a nuestros cultivos, más que todo a la madre tierra... El químico produce, sí da más pero nos afecta en la salud como tanto en las hortalizas e en la siembra de maíz."

"Chemicals—since I have come to realize (their effects), I haven't at any moment consumed chemicals because the chemicals bring lots of illness that comes to ruin our plantings. It burns (better translation) our crops, above all the mother earth...Chemicals produce, yes, they produce more but it affects our health as much as the health of the vegetables and of the milpa planting." Unión Reforma

7.

"Fue algo nuevo el químico para nosotros porque muy antes no (había) para nada. Y muy antes, muy antes, (no había), porque las tierras estaban muy fértiles, quizás porque hoy en día (las tierras) casi están un poco arruinadas por los torrentes de agua que caen, entonces arrastran...Es un poco laderoso el terreno. Entonces desde que yo era niña, no conocieron los químicos...Sabemos que no es recomendable poner químico a la siembra...Tengo yo 54 años. Tal vez (hace) unos 30 años...gracias a Dios, aquí han venido algunas capacitaciones a decir, a recomendar que no químico. Entonces allí fuimos tomando en cuenta...por qué no el químico. De allí uno se hace experimentos y uno se da cuenta con los experimentos que uno se hace que no es bueno usar el químico. Tal vez algunas personas sí pero es poco, es poquito...Pastoral de la Tierra...nos vinieron a enseñar a cómo hacer una abonera e otras capacitaciones así para vivir, para no consumir el químico. Entonces eso nos ayudó un poco."

"Chemical (inputs) were something new for us because, long before, there weren't any at all. And long long before, there weren't because the lands were very fertile—maybe because today the land are a little ruined because of the torrents of rain that fall. Thus, they erode (the land)...The land is pretty steep. When I was a girl, people didn't encounter/didn't know of chemical (inputs)...We know it's not recommendable to put chemicals on the crop fields...I am 54 years old. Maybe some 30 years ago then...thanks to God, some trainings have come to say, to recommend no chemicals. Thus, from there we went taking into account...why 'no' to chemicals. From there, one does experiments and realizes with the experiments one does that it's not good to use chemicals. Maybe some people, yes, but it's little, very little (the amount of chemicals they use)...Pastoral de la Tierra...they came to teach us how to make a compost/fertilizer system and other workshops like that in order to live, to not consume chemicals. Thus, that helped us some." "Dijo que también empezó a cambiar el año 90. ¿Por qué?"

"Por las capacitaciones...por parte de la Pastoral de la Tierra. En San Marcos en la diócesis. Allí nos dijeron este, más que todo, cómo mejorar el ambiente. Allí empezamos a sembrar casi los arboles frutales...injertar. Siempre hemos aprendido. Siempre tenemos árboles..."

"En el inicio, cuando vino Pastoral de la Tierra, ¿quería participar? ¿O tenía dudas?" "Muchas eran las dudas. Pero entre las dudas, nos daban la explicación. Vinieron también los ingenieros aquí a enseñarnos, a dar las charlas, más que todo al campo...Nos trajeron pastos para poder sembrar pastos en las acequias, en las curvas al nivel. Ya aprendimos también hacer estas terrazas. De allí es donde hubo el cambio. Y más que todo, varios se metieron también en la conservación del suelo, y a criar los animales, así, más adecuado. Casi en el año 90. Ya en el 2000 ya teníamos ya la práctica. Ya en el 2010, ya fuimos asesorando a otras

personas...También a ayudar a como sembrar sus pastos. Nuestra gente entendían. Y ahora casi todo lo que es Pin Pin, casi todos tienen pastos..."

"You said that (the milpa agriculture) began to change too in the year 1990. Why?"

"Due to the workshops...given by Pastoral de la Tierra. In San Marcos in the diocese. There they told us, more than anything, how to better the environment. There we began to plant some fruit trees...to graft. We have always learned. We always have trees..."

"In the beginning, when Pastoral de la Tierra came, did you want to participate? Or did you have doubts?"

"The doubts were many. But amidst the doubts, they gave us the explanations. The ingenieros also came here to teach us, to give talks, most often in the field...They brought us forage grasses to be able plant grasses along the irrigation ditches, on the edges of the terraced land. We have already learned to create terraces. From there is where the change happened. And more than anything, various people also became involved in soil conservation and raising animals in a more adequate way. Around the year '90. By 2000, we already had the practices. By 2010, we were already advising other people...also helping them understand how to plant grasses..." Los Limones

"¿Pastoral de la Tierra todavía está aquí?"

"Ya no. En otros lados, sí...(Han pasado) aproximadamente, unos 7, 8 años de que la Pastoral de la Tierra vino a orientarnos, a darnos temas, capacitaciones."

"Is Pastoral de la Tierra still around?"

"Not anymore. In other places, yes...It has been approximately 7 or 8 years since Pastoral de la Tierra came to guide us, give us teachings, trainings."

Los Limones

8.

"Durante mi vida, en el año 90, casi fue cambiando la agricultura. Teníamos una agricultura convencional, o sea una agricultura que no era adecuada. En primer lugar, no estaba

conservado el suelo. No teníamos árboles frutales, no teníamos pastos para nuestros animales. Pero ya en el año 2000, ya hubo pastos para nuestros animales. Fuimos de, más que todo, conservación del suelo, teniendo animales adecuados, ya no animales en el terreno sino todos en la galera. Ya en el año 2010 es donde la Red Kuchub'al nos dio más acompañamiento de cómo mejorar los suelos, cómo preparar aboneras, y cómo tener animales. Entonces casi ahorita ha cambiado mucho tanto como la agricultura orgánica y tanto como pecuarios. Y gracias a la Red Kuchub'al también que nos dio el acompañamiento a enseñar cómo preparar medicinas para los animale...Estamos trabajando casi más que todo conservando el medio ambiente, no dañándose, sino que mejorando más porque también estamos mejorando los abonos orgánicos. No usando abonos crudos es importante. Tiene un proceso para usar a nuestros cultivos y así no dañamos al medio ambiente, a los suelos...Si no tenemos animales, no podemos mejorar el suelo. Tenemos los animales para juntar el abono orgánico que va directamente a los cultivos y a los terrenos...Hemos dado charlas a nuestra gente, a la comunidad. Entonces la comunidad ahorita también prepara abonos orgánicos. Ya no es tanto el químico. El químico ha reducido tal vez a un 30 por ciento. Entonces el 70 por ciento ya es orgánico. Pero casi en el año 2000 todo era químico. Yo usaba suficiente químico, pero ahorita ya se redujo. Ya es un mínimo que se usa, más el orgánico. Por eso, nuestros vecinos, la comunidad, todos tienen sus animales. Tienen ovejas, tienen vacas, v cerdos...Son partes donde sembramos lo que es la hortaliza..." "During my life, in the year '90, the agriculture was starting to change. We had a conventional agriculture, or an agricultura that wasn't adequate. In the first place, the soil wasn't conserved. We didn't have fruit trees. We didn't have grasses for our animals. But in the year 2000, there were aleardy grasses for our animals. We started, more than anything, soil conservation, having adequate animals, not anymore animals loose on the land but all in enclosures. In the year 2010 is when Red Kuchub'al gave us more accompaniment in how to improve the soil, how to prepare compost/fertilizer systems, and how to maintain animals. Thus, now the a lot has changed as much in organic agriculture as in livestock. And thanks to Red Kuchub'al also, that gave us accompaniment to teach how to prepare medicines for the animals. We are working almost more than anything on conserving the environment, not hurting it yet even improving it more because we are also improving our organic fertilizers. Not using raw manure is important. (Manure) requires a process to use it on our crops and thus to not hurt the environment, the soil...If we don't have animals, we can't improve the soils. We have animals in order to collect the organic manure that goes directly to the crops and the lands...We have given talks to our people, to the community. Thus, the community now also prepares organic fertilizers. Now there aren't so many chemical (fertilizers). Chemical (inputs) have reduced maybe to 30 percent. Thus, 70 percent is now organic. But in 2000, almost everything was chemical. I used to use a fair amount of chemicals, but it has already reduced now. It's the minimal amount I use, (I use) more the organic (inputs). For this reason, our neighbors, the community, everyone has their animals. They have sheep, they have cows, and pigs...There are parts (of Pin Pin) where we plant vegetables..."

Los Limones

"¿Qué otras organizaciones han venido aquí a trabajar con la comunidad?"

"Casi solo la Red Kuchub'al. Antes era la Pastoral de la Tierra. Ya después, como la Pastoral de la diócesis de San Marcos nos fue olvidando, es porque nos metimos más a la Red Kuchub'al en Quetzaltenango. Entonces allí casi llegamos en el año 2006. Pero también es la misma parte, porque es de la Pastoral de la Tierra, no más que en Xela. Fue como una asociación...Casi hasta ahorita tenemos el acompañamiento de la Red Kuchub'al...Hemos tenido giras, intercambios..."

"What other groups have come here to work with the community?"

"Almost only Red Kuchub'al. Before was Pastoral de la Tierra. Then after, since the Pastoral of the diocese of San Marcos went forgetting us, is why we involved ourselves more with Red Kuchub'al in Quetzaltenango. Thus, there we arrived around the year 2006...Until almost now we have the accompaniment of Red Kuchub'al...We have had tours and exchanges..." Unión Reforma

"Ha cambiado mucho (la agricultura aquí). Por ejemplo, nos han dado la capacitación. Se sienten también que podemos trabajar orgánicamente. Ya no tanto utilizamos lo que son los abonos químicos y también lo que es esas insecticidas que se compran. Que también podemos elaborar aquí en nuestra comunidad, también los abonos orgánicos. Nos han venido a capacitar sobre eso. También ha cambiado mucho la vida porque antes solo sembrábamos lo que eran maíz únicamente. En cambio, ahora sembramos verduras de diferentes clases para poder alimentar y también vender en el mercado."

"(Agriculture here) has changed a lot. For example, (Red Kuchub'al) has given us training. They feel that we can work organically. Now we don't use things like chemical fertilizers and also those purchased insecticides. We can also create here in our own community organic fertilizers. They have come to train us about that. Life has also changed a lot because before we only planted just maize. Whereas now we plant different kinds of vegetables in order to feed ourselves and also to sell on the market."

Los Limones

"Yo también trabajé en la Red Kuchub'al como unos 5 años como promotor, llevando también las charlas, enseñando también a muchas comunidades. Estuvo por parte Xela, estuvo también por parte de Huitán, y aquí, Pin Pin, enseñando a nuestra gente. Y también cómo elaborar abonos orgánicos, el bokashi y otros abonos orgánicos más rápidos...Ahorita tenemos esas prácticas y nunca los vamos a olvidar. Y esto lo estamos dejando a nuestros hijos." "I also worked for Red Kuchub'al for around 5 years as a promotor, giving the talks, also teaching lots of communities. It was around Xela, it was also around Huitán and here, Pin Pin, (that I worked) teaching our people. How to make organic fertilizers, bokashi and other fertilizers quicker to make...Now we have these practices and we aren't going to forget them. And this we are leaving for our children." Los Limones

9.

"Sus padres o abuelos hablan Mam?"

"Mis abuelos. Mi mama un poco entiende todavía...Mi papa no."

"Usted es Mam o Maya o Indígena o mestiza? O no piensa en eso?"

"No. (Laughing) A veces le ayudo a alguien que habla así pero no entendemos. Porque no nos enseñaron desde pequeño. Tal vez si alguien viniera a enseñarnos, tal vez lo aprendimos todavía..."

"Do your parents or grandparents speak Mam?"

"My grandparents. My mom still understands a little bit...My dad doesn't."

"Are you Mam or Indígena or mestiza? Or do you not think about this?"

"No. (Laughing) Sometimes I help someone who speaks that way but we don't understand.

Because they didn't teach us since we were children. Maybe if someone came to teach us, maybe we would still learn (Mam)."

Los Limones

"¿Sus padres o abuelos hablaban Mam?"

"Sí, ellos. Pero no les gustó enseñar a nosotros. Cuando llegaban a su visita, a nosotros nos sacaban porque no les gustaba que uno hablara eso. No sé por qué. Y a mí me gustaba hablar de eso. Cuando mi suegra vino a vivir conmigo, tampoco ella. Si era su visitante, hablaba así en dialecto. Pero ella decía, 'vete, vete, porque tú no puedes entender lo que estamos hablando.' Y nos corría. Por lo mismo, no aprendimos..."

"Pero la gente aquí son...bueno, los abuelos son gente Mam?"

"Sí, ellos, sí. Ellos eran Mam. Ellos hablaban Mam."

"¿Y ahora la gente no es Mam? ¿O todavía? ¿Es gente Maya, gente indígena, o más mestizo, o?"

"Casi más ya mestizo. Ya no hay gente Maya como antes, que usaban corte, que usaban güipil. Ahora la gente ya no. Ya puro vestido, pantalón..."

"Do your parents or grandparents speak Mam?"

"Yes, them. But they didn't like to teach us. When they arrived to their visit (with a Mamspeaking friend), they sent us out because they didn't like that one of us spoke that. I don't know why. And I liked to speak that (language). When my mother-in-law came to live with me, she wouldn't speak in dialect (around us) either. If her visitor was (a Mam-speaker), she would speak in dialect. But she would say, 'Go, go, because you can't understand what we're saying.' And we ran off. For this reason, we didn't learn..."

"But the people here...well, the grandparents are Mam people?"

"Yes, them, yes. They were Mam. They spoke Mam."

"And now the people aren't Mam? Or they still are? The people are Maya, Indígena, or more mestizo, or?"

"Almost more mestizo now. Now there aren't Maya like before, who dress in the traditional skirt, who dress in the güipil. Now, people don't do that anymore. Now pure dresses, pants..." Los Limones

"Todavía hay gente que habla Mam en la comunidad?"

"Si, hay todavía algunos. Algunos—ya no son muchos. Los más ancianos. Porque ya a mi edad casi no sabemos nada."

"Pero sus abuelos, sí?"

"Sí. Pero mis abuelos ya no existen."

"Los padres no hablan Mam?"

"Ellos no. Algunos que sí lo entienden pero en hablar, no"

"¿Por qué han perdido el idioma?"

"La verdad es que no sé cómo se ha ido perdiendo ese idioma. No se. Tal vez los papás, los abuelos se olvidaron también del idioma y ya no nos enseñaron a nosotros."

"Pero la mayoría de la gente que vive aquí son Mam? O indígena? O...?"

(pausa)

"¿No está segura?"

"No estoy segura. (Muchas risas)"

"Y usted?"

"(riéndose) No hablo Mam—no sé qué soy! (más risas) Ay!"

"Ni Mam ni mestiza?"

"Parece que sí."

Otra persona: "Mestiza, porque el Mam, más que todo, ya se perdió."

"No sé cómo rescatar, de verdad, este idioma, esta cultura."

"La gente aquí no autoidentifican como indígena?"

Otra persona: "Por el idioma, ya no. Pero sí, somos Mames, porque somos del área de donde algún día se practicaba el Mam. Pero ahorita se ha ido perdiendo. Pero, sí, venimos de esa cultura Mam."

(Silencio largo)

"Are there still people who speak Mam in the community?"

"Yes, there are still some. Some—not a lot anymore. The most elderly. Because of my age, we almost don't know anything (of Mam)."

"But your grandparents did?"

"Yes. But my grandparents don't exist anymore."

"Your parents don't speak Mam?"

"They don't. There are some (words) they understand but speaking, they can't."

"Why have you all lost the language?"

"The truth is that I don't know how that language has been lost. I don't know. Maybe the parents, the grandparents forgot about the language too and didn't teach us anymore."

"But the majority of the people who live here are Mam? Or Indígena? Or ...?"

(long pause)

"Are you unsure?"

"I am not sure. (Lots of laughter)"

"And you?"

"(laughing to herself) I don't speak Mam-I don't know what I am! (more laughter) Ay!"

"Neither Mam nor mestiza?"

"It seems so."

Other person: "Mestiza, because Mam has mostly already been lost."

"I honestly don't know how to rescue this language, this culture."

"The people here don't self-identify as Indigenous?"

(Long silence)

Other person: "Due to the language, not anymore. But yes, we are Mams, because we are from the area where at some point Mam was spoken. But now it has been lost. But, yes, we come from this Mam culture."

Los Limones

"Sus abuelos hablaban Mam?"

"Si! La mayoría de nuestros abuelos, incluso mi mama—en paz descanse—ellos hablaban también el Mam. Mi mama hablaba bastante el Mam y nuestros abuelos hablaban sin duda la mayoría hablaba el Mam y un poco el castellano. Ya nosotros de rebelde ya no queremos el Mam."

"Por que?"

"Tal vez nuestros papas no nos inculcaron un poquito más hablar el Mam. Porque si nuestros abuelos habían enseñado a nuestras papas un poco más el Mam y nuestras papas nos vienen enseñando a nosotros un poquito más el Mam, hablaríamos el Mam e el castellano. Pero como ellos nos hablaban en puro castellano—aunque ellos hablan el Mam pero solo hablaban el Mam con las personas que hablaban Mam. Ya con nosotros, no hablaban Mam. No nos enseñaron..." "¿Por que ellos no les enseñaron a los hijos el Mam?"

"Tal vez porque no querían dedicar su tiempo a enseñarnos, diría yo. No sé por qué no nos enseñaron."

"Did your grandparents speak Mam?"

"Yes! The majority of our grandparents, including my mom—may she rest in peace—they spoke Mam too. My mom spoke lots of Mam and our grandparents spoke, without a doubt, the majority spoke Mam and a little castellano. Now we're rebellious and don't want to speak Mam." "Why?"

"Perhaps our parents didn't instill it in us to speak more Mam. Because if our grandparents had taught our parents a little more Mam and our parents had continued on to teach us a little more Mam, we would speak Mam and castellano. But since they spoke purely in castellano—even though they speak Mam, they would only speak Mam with other people who spoke Mam. Now with us, they didn't speak Mam. They didn't teach us..."

"Why didn't they teach their children Mam?"

"Maybe because they didn't want to dedicate their time to teaching us, I guess I'd say. I don't know why they didn't teach us."

Los Limones

(Los abuelos hablaban Mam?)

"Mi abuelita hablaba este idioma, se llama (pause of uncertainty), pero yo casi no aprendí en eso...Mi abuelita, sí. Yo escuchaba—saber me decía pero yo nunca aprendí. Pero era, ¿cómo se llama este idioma? (Rosy: "Mam") Mam era? Saber..."

"Did your grandparents speak Mam?"

"My grandma spoke this language, called (pause of uncertainty), but I never really learned that...My grandma did. I listened to her—who knows what she said to me, but I never learned. But it was, how do you say the name of this language? (Rosy: "Mam") It was Mam? Who knows..."

Los Limones

"Los padres hablaban Mam?"

"Sí, los papás de mi mamá hablaban otro idioma...Mi mamá ya no sigue masticando ese idioma. Eso hubiera sido bonito si ella hubiera tratado de enseñarnos. Dice mi mama, si hablan así, como se burlan, como se reían del idioma. Y como no se entienden como nosotros, si ellos no estaban, yo miraba a mi abuelita, la mamá de mi mamá, cuando hablaba así en idioma. Nos regañaba así pero nosotros no entendíamos, nos reíamos. Pero según ella, regañaba pero no entendíamos el idioma. Pero para mí hubiera sido bonito si ellos nos dejaran el idioma" "Did your parents speak Mam?"

"Yes, my mom's parents spoke a different language...My mom no longer uses (literally, chews) that language. That would have been nice if she had tried to teach us. My mom says, if they speak like that, how they mock, how they laugh at the language. And as some didn't understand such as us, if they (my parents) weren't around, I'd look at my grandma, my mom's mom, when she spoke in the language. She scolded us like that but were didn't understand, we laughed. But according to her, she was scolding, but we didn't understand the language. But for me it would have been nice if they had passed the language on to us. Unión Reforma

(¿Los abuelos o padres hablaban Mam?)

"Mi abuelo, sí. Mis padres no porque no hablamos...No aprendimos. En primer lugar, en la escuela no nos enseñan. No hay maestro propio para esto."

"Did your grandparents or parents speak Mam?"

"My grandfather did. My parents didn't because they didn't speak it...We didn't learn. In the first place, they don't teach us in school. There isn't a teacher specifically for this." Los Limones

"Aquí es una comunidad Mam?"
"Sí, es comunidad Mam...Es bonita."
"This is a Mam community?"
"Yes, it's a Mam community...It's beautiful."
Chichum Majadas

Me: "¿Quién es ACDIM?"
E: "ACDIM es el nombre del programa..."
R: "De la asociación. O del grupo, pues. ACDIM quiere decir Asociación de Desarrollo Integral de Mames"
Me: "¿Toda la gente son Mames?"
R: "Somos Mames."
Me: "Who is ACDIM?"
E: "ACDIM is the name of the program..."
R: "Of the association. Or, well, of the group. ACDIM stands for Asociación de Desarrollo Integral de Mames"
Me: "All the people are Mam?"
R: "We are Mam people."
Chichum Majadas

10.

"Si, aprendí...pues, las prácticas...la fecha de que siembra el maíz. Hay que tener una fecha. Nosotros aquí sembramos el 15 de marzo. Siempre. Tenemos que sembrar en la luna...llena. "Yes, I learned...well, the practices...the date for planting the maiz. One has to have a date. We here plant the 15th of March. Always. We have to plant on the full...moon." Unión Reforma

"Usan ciclos de la luna para sembrar y cosechar?"

"Sí. Mis papás traen esa idea. Cuando la luna está llena, hay que sembrar. Y cuando está llena, igual, hay que cosechar."

"Do y'all use the moon to plant and harvest?"

"Yes. My parents passed down that idea. When the moon is full, one has to plant. And when the it's full, also one has to harvest."

Los Limones

"...Si se siembra cuando la luna está tierna, la milpa cae. Porque está muy tierna la luna cuando se siembra, la milpa sale tierna. Hasta que sea adulto, muy temblorosa es la caña. Pasa el viento, el aire, se lo tumba. Todo cae. Entonces la milpa hay que sembrar hasta la luna

llena...Se siembra (en la luna llena) y la milpa viene bien maciza en raíz. Sale bien todo el maíz. Cuando pasa el aire, no pasa nada...Sus raíces están deteniendo..."

"If one plants when the moon is new, the milpa falls. Because the moon is new when planting, the milpa grows weak. Until it becomes adult, the stalk is very tremulous. The wind passes, the air, it knocks (the stalk) down. All (the maize) falls. Thus, one has to plant the milpa around the full moon. Planting (on the full moon), the milpa develops good solid roots. All the maize grow well. When the wind passes, nothing happens...Their roots are holding (the maize) up..."

"(Cosechamos la milpa) en la luna llena."

"¿Por qué cosechan y siembran en la luna llena?"

"Porque dice que el maíz es, podemos decir, más macizo. Y si sembramos el maíz en la luna tierna, dice que todo viene débil. Es como que se ahoga. No sale bien como que se quedan allí ahogadas. Así es."

"(We harvest the milpa) on the full moon."

"Why do you harvest and plant the milpa on the full moon?"

"Because they say that the maize is, we could say, more solid/strong. And if we plant the maize on the new moon, they say all (the maize) grows up weak. It's like it's stifled. It doesn't grow well as it stays there stifled. So it is."

Unión Reforma

(¿Ustedes usan los ciclos de la luna para sembrar?)

"¡Sí, sí! Cuando está llena la luna, sembramos para que no caiga antes también. Mi papá decía, hasta cuando botar un árbol la luna hay que estar llena..."

(¿Eso es para la milpa o para todas las plantas?)

"Para todas las plantas, para hacer leña de los árboles, también para sembrar la milpa, para empezar a tapiscar también. Todo es cuando luna llena."

"Do you all use moon cycles to plant?"

"Yes, yes! When the moon is full, we plant so that (the milpa) doesn't fall early. My dad used to say, even when cutting down a tree the moon has to be full..."

"That (use of moon cycles) is for the milpa or all the plants?"

"For all the plants, for making firewood from the trees, also to plant the milps, to begin to harvest it as well. Everything is when the moon is full."

Los Limones

"Y ustedes usan los ciclos de la luna para la agricultura?"

"Sí, todavía. Porque la luna es muy importante, porque si sembramos sin luna, la caña se viene muy débil, cae fácilmente aunque no hay aire. Entonces nosotros lo que hacemos es sembrar en luna llena. Entonces todo se viene macizo, las cañas hasta los granos. Y cosechamos en luna llena, para que ese maíz no se pique, más que todo, no se pudra. Entonces tenemos que guardar nuestro maíz hasta el próximo año. "And you all use the moon cycles for agriculture?"

"Yes, still. Because the moon is very important, because if we plant without the moon, the stalk becomes very weak, it falls easily even when there isn't wind. Thus, what we do is plant on the full moon. Thus, all (the maize) becomes solid/strong, from the stalks to the grains. And we harvest on the full moon so that that maize doesn't deteriorate, more than anything, that it doesn't rot."

Los Limones

"¿Ahora, o antes, la gente usa los ciclos de la luna en la agricultura aquí?"

"Todavía se usa. Los ciclos de la luna son base primordial para nosotros aquí para la siembra. Para la siembra, nosotros todos aquí respetamos la luna. Digamos que la luna está enterada, como decimos nosotros aquí. No sembramos—esperamos que haiga luna nueva o luna maciza. Sí, porque esa forma nos ha enseñado nuestros abuelos y ha dado buen resultado. Nos ha funcionado bien porque hemos fracasado unas veces en la siembra cuando sembramos sin la luna. Hemos perdido nuestras cosechas porque no nos fijamos en la luna. Entonces todos nos fijamos en la luna para poder sembrar. Muy importante."

"Now or before, the people here use moon cycles in agriculture?"

"They are still used. The moon cylcles are the fundamental base for us here for the planting. For planting, all of us here respect the moon. Let's say that the moon is knowledgeable, as we say here. We don't plant—we wait until the moon becomes new or full. Yes, because our grandparents have taught us this way and it has given good results. It has functioned well for us, because we have failed sometimes in our plantings when we have planted without the moon. We have lost our harvests because we haven't paid attention to the moon. Thus, we all pay attention to the moon to be able to plant. Very important."

Los Limones

11.

"La manera de sembrar la milpa ahora es la misma manera de los abuelos? O ha cambiado?" "Siempre ha cambiado un poquito. Porque antes solo sembraba así—los terrenos no contaba con ninguna cuneta ni barreras. Hoy, pues, tiene por lo menos sus barreras donde se puede. Entonces hemos visto que el suelo, digamos, es más fértil. Produce más...Antes...el maíz no da porque los terrenos eran barreales. Muy pobres, ¿verdad?"

"¿Ustedes empezaron con conservación del suelo?"

"Allí empezamos, conservando los suelos, haciendo barreras acequias, como se decía, cunetas." "The way of planting the milpa now is the same way as the abuelos? Or has it changed?" *"It has always changed a little. Because before one just planted—the fields didn't have any ditches or borders. Now, the land has at least borders where one is able (to implement them). Thus, we have seen that the soil, we say, is more fertile. It produces more...Before...the maize didn't produce because the fields were heavy clay. Very poor, right?"* "Y'all started soil conservation?"

"There we began, conserving the soils, making irrigation diches, as they said, ditches." Los Limones

"Ahora lo que sí ha cambiado es la tendencia de los suelos. Porque antes el suelo era así, pendiente. Seguía trabajando y viendo una erosión del suelo. Ahorita lo que si ha cambiado un poquito es, digamos, la conservación del suelo. Donde se puede hacer terrazas, hacen terrazas. Y si no, por lo menos, los curvas de nivel con el fin de que no haiga mucha erosión." "Now what has changed is the tendency of the soils. Because before, the soil was like this, sloped. People continued working (the land) and seeing erosion of the soil. Now what has changed a little is, we say, soil conservation. Where one can make terraces, they make terraces. And if not, at least contour lines with the intention to not have much erosion..."

"¿Han cambiado las prácticas que usan en la milpa?"

"Han cambiado...Antes el terreno estaba suelto. No había barreras vivas...Todo parejo, no había barreras vivas. También a veces tirábamos orgánico y a veces solo el químico...Entonces ahorita tenemos los animales, el borrego, los ganados y tiramos todo el abono y está abonado ahora con orgánico..."

"¿Y de dónde aprendieron de esas cosas?"

"Del orgánico, la Kuchub'al nos ayudó bastante en hacer aboneras y nos han ayudado también con galeras mejoradas para poder procesar los abonos"

"Have the practices you all use in the milpa changed?"

"They have changed...Before the soil was loose. There weren't live borders...Everything level, there weren't live borders. Also, we sometimes threw down organic (fertilizer) and sometimes just chemical...As for now, we have the animals, the sheep, the cattle, and we put down all the manure and it's fertilized with organic (manure)..."

"And from where did you all learn of those things?"

"Of the organic (fertilizer), the Kuchub'al helped us a lot to make fertilizer systems and has helped us also with the improved livestock shelters to be able to process the manure." Los Limones

12.

"¿Antes, las prácticas de los abuelos en la milpa eran diferente?"

"Mire, antes no estaba el corredor como este monte. Mire, ve. Bien raspado, bien barbechado (era). Uno entrando con un azadón grande para darle vuelta. Y quedaba pura flor la tierra. Si no, con los bueyes. Como los tractores que hay en los Estados Unidos, pero aquí eran ganados...que estaban revolviendo la tierra. Ellos así barbechaban... Eso es lo que se trabajaba. No como ahora..." "Before, the practices of the abuelos in the milpa were different?"

"Look, before there wasn't this corridor like this vegetation. (pointing to a barrera viva) Look, see. Well hoed, well plowed it was. One entering with a large hoe to turn (the soil). And it remained very fine the soil. If not, with the oxen. Like the tractors that there are in the United States, but here they were cattle...that were turning the soil. They plowed like that...That is how one used to work. Not like now..."

Los Limones

"Las prácticas tradicionales, la tradición de nuestros abuelos es comó se calza la milpa... También, por ejemplo, se acostumbra a preparar la tierra, barbechar la tierra. Nosotros sabemos barbechar así, no es con maquina sino puro azadón y eso es lo que nuestros abuelos nos enseñaron. Así lo hacemos aquí en nuestro lugar."

(¿Usted sigue usando las prácticas de los abuelos?)

"Sí, seguimos usando las prácticas de nuestros abuelos."

"The traditional practices, the tradition of our grandparents is how to calzar the milpa...Also, for example, we are accustomed to preparing the land, plowing the land. We know how to plow, not with a machine/tractor but just a hoe, and this is what our grandparents taught us. This is how we do it here in our place."

"Do you continue using the practices of your grandparents?"

"Yes, we continue using the practices of our grandparents." Los Limones

"¿Cómo sembraban la milpa los abuelos, los padres?"

"Ellos sembraban como que fuera un técnico...Sembraban como era en pura vista. Sacaban rectos sus líneas..."

"¿Usted siembra la milpa con prácticas diferentes?"

"Sí, con abono, abono orgánico...Se pone su poco de abono, su calcio..."

"How did the grandparents, the parents used to plant the milpa?"

"They used to plant as though they were a technician/expert/specialist...They planted as though with pure vision. They achieved straight rows..."

"Do you plant the milpa with different practices?"

"Yes, with manure/fertilizer, organic fertilizer...We put down a little of fertilizer, calcium..." Los Limones

(¿Aprendió de la milpa de los abuelos?)

"Sí, de los padres también...Ellos lo que hacen es primero preparar los abonos, sacar el abono en el lugar donde va a sembrar. Y el día en que va a sembrar, tiene que dejar (la semilla de maíz) un día remojando en agua, o dos días queda en agua para que el maicito se vaya poniendo así todo suavecito, que vaya hinchándose...Ya en el momento de sembrar, más rápido germinan. El día en que se siembra, los hombres van haciendo la barbecha con el azadón y nosotros van metiendo abono...y después un poquito de tierra, va la semilla, más tierra y se deja allí, solito germina. Después hay que limpiarlo, nosotros decimos, calzar la milpa, juntar la tierrita...así en el pie de la milpa. Para que vaya creciendo, después cortamos hojas. Después esperamos que crezcan los elotes. Ya cuando hay elotes, comenzamos a comer los elotes, las ardillas también (Nos reímos) Para cada quien, un poquito. Todos nos aprovechamos de un poquito." "Did you learn about the milpa from your grandparents?"

"Yes, from my parents too...What they do is first prepare the manure/fertilizer, put the fertilizer out where they are going to plant. And the day on which they are going to plant, one has to leave the maize seeds one day soaking in water, or two days they remain in water so that the little maize becomes all soft, so that it swells...Thus, at the moment of planting, (the seeds) germinate more quickly. The day of planting, the men go plowing with the hoe and we go putting on manure/fertilizer...and then a little bit of soil, the seed goes in, more soil, and then it's left there. It germinates on its own. Afterward, one has to clean (the field), we say, calzar the milpa, gather some soil around the base of the milpa. So that it continues growing, we after that cut the leaves. After, we wait for the elotes to grow. Once there are elotes, we begin to eat elotes, the squirrels too. (We laugh.) For each being, a little bit. We all enjoy a little bit." Unión Reforma

"Los abuelos sembraban diferente, fijese. Por lo menos, mi padre sembraba milpa pero muy abierto, una mata hasta por aquí, otra mata hasta por allá. Ahora ya es diferente la siembra porque ...Se junta más el maíz."

"The abuelos planted differently, you see. At least my father planted milpa but very open, one mata here, another all the way over there. Now planting is different...The maize is closer together."

Unión Reforma

"...Las distancias de mata a mata era de una barra, decían ellos, cuadrada, una distancia de aquí a aquí, cuadrada. Ahorita la única diferencia es sembrar un pocos más cerradas las matas, y entre surcos..."

"The distances from mata to mata were of barra, (the elders) said, squared, a distance from here to here, squared. Now the only difference is planting the matas a little more closed and in furrows..."

Unión Reforma

(¿Qué aprendió usted de los abuelos de cómo sembrar la milpa?)

"Los abuelos lo que nos enseñaron es que nosotros sembráramos siempre con el orgánico...Antes, nos enseñaron sembrar con una mata distanciada, con 6 granos hasta 8 granos de maíz. Pero ahorita ya no sembramos con esa cantidad de granos. Ahorita solo de 4. Y cosechamos más maíz porque crecen más las mazorcas. Entonces no es fácilmente que los bota el aire. Hemos tenido los cambios, pero uno mismo tiene que experimentar como agricultor..." "What did you learn from your grandparents about how to plant the milpa?"

"The abuelos, what they taught us is that we always plant with organic (manure)...Before, they taught us to plant one mata, distanced, with 6 grains up to 8 grains of maize. But now we don't sow this quantity of grains. Now, only 4. And we harvest more maize because the mazorcas grow more. Thus, it's not so easy that the wind knocks (the maize) down. We have had changes, but oneself, as a grower, has to experiment..."

Los Limones

13.

"Cuando mi papá dice cual día vamos a sembrar, allá estamos todos. Tal día vamos a limpiar, allí estamos todos. Tal día vamos a cosechar, allí estamos todos..."

"When my dad says which day we are going to plant, we are all there. Such-and-such a day we are going to limpiar, there we all are. Such-and-such day we are going to harvest, there we all are..."

Los Limones

"¿Aprendió de cómo sembrar la milpa de los padres?"

"Sí, ellos me enseñaron a, más que todo, limpiar el terreno y después sembrarlo. Yo casi aprendí con mis abuelitos porque ellos fueron los que más nos enseñaron a trabajar."

"Did you learn how to plant the milpa from your parents?"

"Yes, they taught me to, more than anything, clean the field and afterward plant it. I mostly learned with my grandparents because they were the ones who most taught us to work." Los Limones

"De allá, hace las limpias?:

"Así. Haces la limpia. Dos veces. La primera cuando está pequeño." "From there, you do the cleaning/weeding?"

"So it is. You do the cleaning. Two times. The first when (the milpa) is small."

Los Limones

"¿Las prácticas de la milpa ha cambiado?"

"Por ejemplo, lo de antes ha cambiado un poquito porque antes...la tierra se abundaba más. A veces eran 2 veces—una decía la limpia, otra decían la segunda. Ahorita solo se da una limpia nada más..."

"Have the practices of the milpa changed?"

"For example, the (ways) of before have changed a little bit because before the land was more abundant before. Sometimes there were two times—one they called the limpia, the other they called the segunda (second). Nowadays one only gives (the milpa) one limpia, no more..." Los Limones

14.

"Cuando cortaban las hojas, las primeras hojas que decimos—será en Mayo—se invitaban unos a los otros e iban a cortar las hojas, mataban a unos pollos y la sangre de pollo iban a dejar debajo de la milpa. Entonces las mamás doblaban las hojas y pasaban en las manos de los hombres, dice, para que no se acalambraran las manos de los hombres como son los trabajadores. Bonitas costumbres. Cuando quitaban las primeras hojas, invitaban a un almuerzo."

"When they used to cut the leaves, the first leaves we say—which would be in May—some invited others and they would go cut the leaves, kill some chickens and the blood of the chicken they went to leave below the milpa. Then the mothers folded the leaves and passed them over the men's hands, they say, so that the men's hands didn't cramp, as they were the workers. Beautiful customs. When they took off the first leaves, they invited (others) to a lunch." Unión Reforma

"Siempre los abuelos tenían muchas costumbres. Por ejemplo, cuando se cortaban las hojas, se acostumbraba a matar un gallo y hacían caldo de gallina con hojita de tamales, hoja de milpa fresca. Unas costumbres muy bonitas."

"The abuelos always had many customs. For example, when they cut the leaves, they were accustomed to killing a rooster and they made hen stew with tamales in leaves, fresh leaves of the milpa. Some very lovely customs."

Los Limones

"¿Cuándo corta la hoja?"

"En julio, agosto."

"¿Y por qué haces esto?"

"Porque es para dar gracias a Dios y estar felices que ya hay hojas para los tamales. Entonces los abuelos nos enseñaron. Y ahora que nosotros tenemos nuestra familia aparte, pues también. Y si no podemos invitar a los familiares, allí la familia no más, mi esposo y yo sola con mis nenas."

"When do you cut the leaves?"

"In July, August."

"And why do you do this?"

"Because it is to give thanks to God and be happy that now there are leaves for the tamales. So the abuelos taught us. And now that we have our family apart, well also (we do this). An if we can't invite our relations, then just the family, my husband and I with only my little daughters." Los Limones

"...El otro que hacemos es cuando se quitan las hojas. Cuando la milpa está creciendo a esta altura, aquí la mayoría acostumbran de hacer un convivio, una comida, matar pollos y hacer un

almuercito y cortar las hojas. Esa es parte de la tradición que tenemos, yo diría no solo aquí en Pin Pin porque es a nivel nacional del país...

"The other thing we do is when we remove the leaves. When the milpa is growing to this height (indicating height of around their stature), here the majority are accustomed to doing a gettogether, a meal, killing chickens and making a little lunch and cutting leaves. That is part of the tradition that we have, I would say not only here in Pin Pin because it's at the national level of the country..."

Los Limones

"Ellos tenían costumbres hasta para cortar la hoja. Ellos, cuando cortaban la hoja, cuentan ellos, que primero comenzaban a cortar en las cuatro esquinas y de ultimo cortaban el mero centro. Y ese día mataban gallinas criollas, invitaron a todos los vecinos, los nietos, tíos, todos los familiares. Mataban gallinas (para) caldo de gallina criolla. Después pasaban unas hojitas calientes a los manos de los varones. Decían que quita el calambre para que aguanten trabajar cuerdas y cuerdas de terreno y que no se canse, no se cansa. Es lo que decían ellos. Y la primera tacita de caldo allí en la siembra de las matas de milpa, en la tierra. Ellos decían 'siempre primero come la Madre Tierra, después nosotros.' Tenían bonitos costumbres, pero ya no se practican hoy. Algunas, sí. Cuando se corta la hoja, así nosotros siempre hacemos, matamos gallinas, invitamos a unos familiares. Cuando alguien sale a cortar las hojas, igual se pasa en los manos de los varones, de todos para que no se calambre. Es una costumbre...Nosotros sí seguimos practicando."

"They (the abuelos) had customs even to cut the leaves. They, when they cut the leaves, they recount, that first they would begin to cut in the four corners and lastly they cut in the very center. And that day they killed hens for criolla hen soup. Afterward, they passed hot leaves over the men's hands. They said that it got rid of cramps so that they could endure working cuerdas and cuerdas of fields and so that they wouldn't tire, wouldn't tire. So they used to say. And the first little mug of soup in the field of the stocks of maize, in the soil/land. They used to say, 'Mother Earth always eats first, afterward us.' They used to have beautiful customs, but now people don't practice them anymore. Some do. When cutting the leaf, we always do this, slaughter some hens, invite our relations. When someone goes out to cut the leaves, they also pass (leaves) over the hands of the men, of everyone so that they don't cramp. It's a custom...We do continue practicing."

"Una costumbre que tenían ellos, cuando ya van a ver hoja, vamos a quemar, matar una gallina. Cuando se habían ovejas, lo mataban, los cabros. Invitan a la familia convivir con ellos. Ponían a las manos la primera hojita de la milpa. Pero yo también lo hago esa costumbre cuando ya hay hojas. Hago mi tamalito de milpa. Mato un pollo para convivir aquí con los nietos, la familia" "A custom that (our ancestors) had, when they go to see the leaves, we are going to slaughter a hen. When there were sheep, they slaughtered them, goats. They invited the family to share with them. They used to put the first little leaf of the milpa on their hands. But I also do that custom when there are leaves. I make my little tamales from the milpa (leaves). I kill a chicken to share here with the grandchildren, the family."

Chichum Majadas

15.

"El 8 de septiembre es día de natividad decían los abuelos. Hay que cortar los primeros elotes. Y mataban otros pollos, pues, para hacer un almuerzo. E iban a cortar los elotes... y decían que así rapidito amacizaba la milpa. Rapidito se secaba decían ellos...La generación de hoy casi no practica eso...No se cuál sería causa. Pero, yo en mi caso mío, hago eso todavía. Pero los demás casi no. Con mi familia, con mis papás, yo invito cuando se corten las primeras hojas y cuando se corten los primeros elotes. Hacemos una comidita y comemos todos...Mis hijos también, ellos siguen haciendo esto. Porque sí es bonito la costumbre de nuestros abuelos, nuestros antepasados. Se compartían, se ayudaban."

"The 8th of September is the day of nativity, my grandparents used to say. You have to cut the first elotes. And kill some chickens, well, to make a lunch. And they used to go cut the elotes...and they said that in this way the milpa quickly matured. Quickly (the grains) became dry they said...Today's generation practically doesn't do that...I don't know what the cause would be. But me in my case, I do that still. But the others, barely. With my family, with my parents, I invite them when we cut the first leaves, cut the first elotes. We make a little meal and all of us eat together...My kids too, they continue doing this. Because it is beautiful the custom of our grandparents, our ancestors. They used to share with each other, help each other."

16.

"¿Hay costumbres de cosecha también, de elote o de mazorca?"

"De mazorcas, casi no, pero cuando hacen atolitos de elote, igual. Cuando se hace la primera vez, el primer vasito que sale se va a dejar en la tierra. Es para madre tierra. Así es. Ahorita la mayoría hacen muchos tamalitos de elote, atol de elote, tortilla de elote para el Día de los Difuntos. Ya acostumbran a llevar los tamalitos al cementerio a dejar unos tamalitos GRANDES allí, o atolito dejado allí sobre sus difuntos. Muchos muelen elotes estas fechas. Desgranan elotes, lo muelen, hacen sus tamalitos doraditos, atolito"

"Are there customs of the harvest too, of elote or mazorca?"

"Of the mazorcas, nearly none, but when people make atolitos de elote, yes. When one makes it the first time, the first glass ready one goes to pour on the soil. It's for Mother Earth. So it is. Nowadays, the majority make lots of tamalitos de elote, atol de elote, tortilla de elote for Día de los Difuntos. Now they're accustomed to taking the tamalitos to the cemetery to leave some BIG tamalitos there, or a little atol left there over the dead. Many people grind elotes these dates. They de-kernel elote, grind them, make their golden tamalitos, atolitos." Unión Reforma

"¿Qué son las costumbres de la milpa?"

"La costumbre solo es cuando quita las hojas, hay que hacer un almuerzo. Tal vez cuando es el Día de los Muertos, juntar elote para hacer atol de elote, tamales de elote. Es el único. Solo eso nada más."

"What are the customs of the milpa?"

"The custom is just that when you harvest the leaves, you have to make a lunch. Maybe when it's the Day of the Dead, gathering elote to make atoll de elote, tamales de elote. That's it. Just that, nothing more."

Los Limones

"¿Ustedes van a llevar atol, tamalitos al cementerio?"

"Como yo, gracias a dios, no tengo familiares. Los demás, sí. Los que tengan familiares van a dejarlo. El 2 van, 2 de noviembre. Llevan flores, llevan tamalitos, atolito, unas tortillas...Cada año es así en esas fechas"

"Are you all going to take atol, tamalitos to the cemetery?"

"As I, thanks to God, don't have relatives (in the cemetery). The others will. Those that have relatives (there) got to leave (atol and tamalitos). The 2nd they go, November 2nd. They take flowers, they take tamalitos, atolito, some tortillas...Every year like that on those dates." Unión Reforma

17.

"Cuando, pongamos, se siembra, se hace comida, compra carne. Y también cuando se corta la hoja. Invitamos casi, al menos ahorita, a mi papá, a mis hermanos, a sus hermanos de mi papá. Y ahorita en el tiempo en que hay elotes, pues convivimos en comer elotes tiernos. Y este mes, la mazorca, el maíz ya está, se dice, macizo...Cuando también se va a tapiscar—ahorita es mi hermano que tapisca. Nos llama y le vamos a ayudar cuando él está y nosotros también tapiscamos...Estamos en familia, ayudando."

"When, for example, one plants, they make a meal, buy meat. And when one cuts the leaves. We invite now, at least, my father, my siblings, my father's siblings. And right now in the time that there are elotes, we share in eating tender elotes. And this month, the mazorca, the maize that is, one says, hard/solid...When one also goes to harvest—right now it is my brother who harvests. He calls us and we go to help him when he is there and we too harvest...We are among family, helping."

Los Limones

"...Cuando se va a cosechar y se va a juntar la mazorca igual, se tiene que matar las gallinas y convivir con las famlias. Ha sido parte de la cultura de nuestro pueblo."

"...When going to harvest and going to collect the mazorcas also, one has to kill hens and share with the families. It has been part of the culture of our community." Los Limones

"Cuando recogen la cosecha, matan un carnero, hacen un convivio." "When they gather the harvest, they slaughter a sheep, make a meal to share." Los Limones

"La cosecha también es la misma fecha en diciembre. En diciembre, cortamos el maíz, también cuando esta así la luna, lo vemos en la luna. Cortamos, recogemos. Porque antes mis abuelos tenían, los llamamos, costumbres. Cuando ellos levantaban el maíz, se reunían. Cuando recogían todo el maíz, pues ellos dejaban aquí un montón de mazorcas y mataban un borrego. Cuando ellos levantaban la cosecha de maíz, se reunían todos, comían."

"The harvest also is the same date in December. In December, we cut the maize, also when the moon is right, we see (the right time) in the moon. We cut (the maize), gather it. Because before my grandparents had, we call them, customs. When they harvested the maize, they came together. When they gathered all the maize, well, they left a mountain of mazorcas here and killed a sheep. When they harvested the maize, they all came together and ate." Unión Reforma

18.

"Y otra de las tradiciones que nosotros tenemos aquí es de que la semilla de la milpa nunca la aporreamos. Siempre amarramos en mancuerna...En la milpa, cuando se escoge la semilla, escogemos la mejor de todas y se amarran y las colgamos. Y esa significa que esa es la semilla...Entonces la semilla de nosotros nunca la dejamos sino la colgamos así. Y todos los vecinos tiene su semilla colgada así. Y uno ya sabe que es esa la semilla que tiene así." "And another of the traditions that we have here is that we never pound the seeds of the milpa (to de-kernel it). We always tie it up with rope...In the milpa, when selecting the seed, we select the best of all and tie (the mazorcas) up and hang them. And that signifies that that is the seed...Thus, we never leave our seed, rather we hang them like that. And all the neighbors have their seed hung up the same. And one already knows that that (hanging mazorca) is the seed." Los Limones

19.

"Y ahora ustedes siguen haciendo (estas costumbres)?" "Sí, algunos. Y otros no. Está perdiendo una parte de la cultura de nuestro pueblo. Pero sí, es bonita la cultura de aquí." "And now do you all continue doing these customs?"

"Yes, some. And others don't. A part of the culture of our community is being lost. But yes, the culture of (this place) is beautiful."

Los Limones

"Cuando hay posibilidades, hay costumbre al sembrar. Porque a mi papá, antes, así sembraba la milpa. Hay que matar una gallina o dos, dice, para poder sembrar la milpa. Aquí no he hecho yo como no cosecho bastante. Mi suegra, sí ...hacen comida, van a matar sus gallinas, van a invitar a sus vecinos para cosechar la milpa. Antes, así vivía mi mamá. Cuando levantaba toda la cosecha, lo aporreaba, lo guardaba...Pero como yo no cosecho bastante, no hago convivencia yo."

"When there are opportunities, there are customs that accompany planting. Because my father, before, planted the milpa in this way. One had to kill a hen or two, he says, in order to be able to plant the milpa. Here I haven't done that as I don't harvest that much. My mother-in-law does...they make food, they go slaughter their hens, they invite the neighbors to harvest the milpa. Before, my mom lived like that. When she brought in the whole harvest, banged (the kernels off the cob), stored them...But since I don't harvest much, I don't make a meal to share." Los Limones

"¿Pero muchos ya no siguen esas costumbres?"

"Más los que no siembran, pero todos los que siembran, sí, lo hacen."

"But many no longer follow those customs?"

"More those who don't plant (milpa don't follow the customs), but all those who plant, yes, they do them."

Unión Reforma

20.

"Siembran la misma cantidad de milpa como antes?"

"Es menos. Porque antes se sembraba acerca de quintal y media. Había maizal, había graneros. No ocupaban el granero. Mi suegra (tenía) unas chamarras, allí se montaba el maíz y cerraba la puerta. Nadie se entraba allí, como el mismo maíz se vendía para comprar abono, para comprar el chile, la sal, una bolsa de arroz para comer. Frijol había por 40 quintales, se levantaba. Tenía otra parcela de terreno hasta allá, hasta arriba. Alla se sembraba más maíz. Por eso, cuando sacaba maíz para vender, 40 quintales vendía. El frijol se fue a vender 12 quintales y el resto para comer"

"Do y'all plant the same amount of milpa as before?"

"It's less. Because before we used to plant close to 150 pounds. There were corn fields, there were granaries. The granaries weren't big enough (for all the maize). My mother-in-law had some blankets, there she piled the maize and shut the door. No one entered there, since that same

maize was sold in order to buy fertilizer, to buy chile, salt, a bag of rice to eat. Beans, one harvested 4000 pounds. She had another parcela of land over there, up there. There more maize was planted. For that reason, when she took maize to sell, she sold 4000 pounds. She went to sell 1200 pounds of beans and the rest to eat." Chichum Majadas

"¿Por qué muchas personas han dejado de sembrar la milpa?"

"Algunos que han crecido sus hijos y luego se van y se quedan a vivir en otro departamento o en otro municipio. Ya solo quedan los 2 papás y ya no pueden trabajar ellos. Tienen animales, ya no les da tiempo para trabajar. Así como allá, ve, es puro montaña. Antes sembraban todo de milpa, todo lo cultivaban. Pero ahora no.

"¿No había todo ese bosque?"

"No, no había. Ahora, mira, todo puro bosque, por el mismo que los dueños, por ciertas razones, se han ido. El dueño de este terreno se fue a vivir en San Marcos. Y después, dejó abandonado el terreno. Ya no vive aquí, ya no puede trabajar. Ya la montaña ya creció. Ya solo viven los animales allí"

"Why have many people given up planting the milpa?"

"Some whose children have grown up and then they go and they stay in another department or municipality to live. Now only the two parents remain and they can no longer work. They have animals, they no longer have time to work (the milpa). Like over there, look, is pure woods and wild plants. Before they planted all of it in milpa, they cultivated all of it."

"There wasn't all that forest?"

"No, there wasn't. Now, look, all purely forest, for the same reason that the owners, for certain reasons, have gone. The owner of this land went to live in San Marcos. And afterward, he left the land abandoned. He doesn't live here anymore, can't work (the land) anymore. Already the wild plants have grown. Now only the animals live there." Unión Reforma

"¿Ustedes siembran menos milpa que antes?"

"Sí, así es... Yo tengo poca tierra para producir maíz. Yo tengo cierta cantidad de terreno, lamentablemente es para bosque. Para bosque va. En esta parte, la mayoría de las personas dejan su tierra para bosque. Entonces ya hay mucho daño, muchos animales, pájaros, ardillas, cualquier animal hace daño (a la milpa). Entonces no se puede porque allá sale uno perdiendo en vez de ganar...Solo en unos pedacitos que unos están produciendo el maíz. Ya la parte aquí no porque ya es un área de bosque."

"Do y'all plant less milpa than before?"

"Yes, so it is...I have little land in order to produce maize. I have a certain quantity of land unfortunately, it is for forest. For forest it goes. In this part, the majority of people leave their land for forest. Thus, there is now a lot of damage, many animals, birds, squirrels, whatever animal does damage (to the milpa). Thus, one can't (grow milpa) because one ends up losing instead of earning there...Only in little parts (of land) some are producing maize. Already the part here isn't because it is an area of forest." Unión Reforma

"¿Por qué solo hay 4 familias que tiene milpa en la comunidad ahora?"

"Dice que no le sale. Es tardada la cosecha de maíz dicen ellos. Por ejemplo, los que siembran ahora se están poniendo a sembrar las flores. Ellos sembraban maíz, pero ahorita dicen que producen más rápidas otras cosechas, por ejemplo, flores, la papa. Dicen ellos que, con el maíz, es más el trabajo. Y ahora los animales son muchos...En el caso mío, no tengo un varón quien cultivar, entonces sigo sembrando maíz...ya sé cómo sembrar el maíz y ahora para sembrar otro cultivo, no pues..."

"Why are there only 4 families who have milpa in the community now?"

"They say it doesn't turn out. The maize harvest is late, they say. For example, those who plant now are starting to plant flowers. They used to plant maize, but now they say other crops produce more quickly, like flowers, potatoes. They say that, with the maize, it's more work. And now the (wild) animals are many...In my case, I don't have a son to cultivate (the milpa), so I keep planting maize...I already know how to plant maize and now to plant another crop, well I don't..."

Unión Reforma

"¿Siembran más o menos milpa que antes? ¿La misma cantidad?"

"Igual...Ahorita ha bajado por la parcela. Antes sí, porque muchos padres tenían bastante terreno y ya no. Porque los hermanos, cada quien con su parcela. Allí bajó. Se disminuyó la parcela."

"Do you all plant more or less milpa than before? The same amount?"

"The same...Now it has decreased due to the parcela. Before, yes, because many parents had lots of land and now they don't. Because the brothers, each one with their own parcela. There it decreased. The parcela shrank."

Los Limones

"¿No tienen suficiente maíz para todo el año?"

"Ahorita no porque es poco lo que sembramos. Y el terreno también es poco. También como solo yo estoy cultivando, entonces me cuesta. Yo y mis hijas tenemos que sacar el abono, fregar en el rastrojo y limpiar la milpa...para que el maíz crezca, produzca."

"You all don't have enough corn for the whole year?"

"Not anymore because it's little what we plant. And the land is also little. Also, as I'm the only one cultivating, I thus struggle. My daughters and I have to put on the fertilizer, clean the stubble, and clean/weed the milpa...so that the maize grows, produces." Unión Reforma "¿Hay muchos que han dejado de sembrar la milpa?"

"Aquí sí. Porque a otros no les da el tiempo. Trabajan en otros lados. A veces trabajan en las oficinas. como los profesionales, los maestros. Casi no les da el tiempo. Entonces ellos no pueden producir eso, ¿verdad? Se dedican más a sus trabajos."

"Are there many who have stopped planting the milpa?"

"Here, yes. Because others don't have the time. They work in other areas. Sometimes they work in offices. As professionals, as teachers. It almost doesn't leave them time. Thus they can't produce (the milpa), right? They dedicate themselves more to their jobs." Unión Reforma

F: "...Lo que yo veo es que las plagas nos afectan un poco. Esas que entran la milpa... Ya vemos las plantas que ya vienen creciendo y ya pegaron. Entonces nosotros seguimos trabajando."

R: *"Ahorita la siembra está bajando…Viene el aire y lo tire. Entonces tenemos una perdida grande… Lo que está fregando es la paga…"*

F: "...What I see is that the pests/plant disease are affecting us a little. Those that enter the milpa...We already see the plants that are growing and are already appearing on them. Thus, we keep working."

R: "Now the production of milpa is decreasing...The wind comes and knocks it down. Thus, we have a big loss...What is causing us problems are the pests/plant disease..." Chichum Majadas

21.

"Antes la gente sembraba milpa. Sembraba trigo. Sembraba papa. Y ahora la gente la milpa casi no siembra. Los únicos que siembran milpa es solo yo y Don Cecilio y Don Isaias, los únicos 3 nosotros que sembramos milpa. Y este viejito que vive aquí arriba, Don Fecundo..." "Before, the people used to plant milpa. They used to plant trigo. They planted potato. And now people practically don't plant milpa. The only ones who plant the milpa are only me and Don C and Don I, us the only ones who plant milpa. And this elderly man who lives here above, Don F..."

Unión Reforma

"La mayoría (en Unión Reforma) no siembra (milpa). Son poquitos. Como unas 3, 4 personas tal vez. Hay uno que siembra bastante maíz—él casi no compra maíz. Produce su propio maíz. Pero uno o 2 personas. Los demás siempre compramos. Yo compro la mayor parte de maíz. Porque no sembramos mucho. Pero hay como 2 personas que sí producen su propio maíz para todo el tiempo."

"The majority (of Unión Reforma) doesn't plant (milpa). They are very few. Like 3, 4 people maybe. There is one who plants lots of maize—he almost doesn't buy maize. He produces his own maize. But one or two people. The rest, we always buy. I buy the majority of my maize.

Because we don't plant much. But there are 2 people who do produce their own maize for all times."

Unión Reforma

22.

"Ustedes siguen sembrando la milpa en la misma manera?"

"Si, seño. Seguimos sembrando porque de allí consumimos...Pero tal vez lo vamos a quitar. Antes sembrábamos bastante...Teníamos para vender y comer. Pero ahorita ya no es tanto porque ahorita pasa el aire, a veces viene el verano, y a veces uno compra fertilizante, una compra líquido, hace un consumo más grande y a veces no da...Entonces ahorita ya es poco lo que sembramos. Solo para comer no más hay allí."

"Do you all continue planting the milpa in the same way?"

"Yes, miss. We continue planting because from (the milpa) we eat...But maybe we are going to stop. Before we used to plant so much...We had (maize) to sell and to eat. But now it's not so much anymore because the wind passes, sometimes the dry period comes, and sometimes one buys fertilizer, one buys liquid (pesticide/herbicide), one spends more and sometimes (the milpa) doesn't produce..."

Chichum Majadas

23.

"Cuando quitamos el primer elote, antes, invitábamos a toda la familia para comer los primeros elotes. También lo sigo haciendo. Cuando quitamos la hoja, matamos gallinas, de que hacemos tamalitos y caldo del pollo de rancho. Se invita a los vecinos. Bueno, antes había muchos vecinos que ya eran los mayores. Nos queríamos. Pero ahora las nueras a veces ya no. Se burla ya...Entonces solo invitamos a mis hijos, como ya viven mis hijos aparte. Solo ellos. Ellos ya tienen la costumbre, 'Mami, ¿cuándo vamos a quitar la hoja? Mami, ¿cuándo vas a quitar los elotes?'...A celebrar el Día de San Juan, lavar la cabeza, dicen, matar unos pollos. Comemos." "When we harvest the first elote, before, we invited the whole family to eat the first elotes. I also continue doing this. When we harvest the leaves, we slaughter hens, from which we make tamalitos and farm chicken soup. One invites the neighbors. Well, before there used to be lost of neighbors who were already the elders. We loved each other. But now the mother-in-laws sometimes don't (participate). They mock/make fun...Thus, we only invite my children, as my children now live apart. Only them. They already have the custom (of asking), 'Mami, when are we going to cut the leaves? Mami, when are you going to harvest the first elotes?'...To celebrate the Day of San Juan, wash the head, they say, kill some chickens. We eat." Los Limones

"Solo milpa (sembrábamos), pero casi igual no daba la milpa. Y ahorita ya que se quitamos el nylon, sembramos milpa allá sin necesidad de abono ni de nada. Da bastante."

"¿Por qué ahora da?"

"Creo que nosotros nos dedicamos aquí a tirarle abono natural, broza, todo eso. Al sembrar la milpa, pues igual. ¡Ya no ponemos abono ni nada, pero sí produce!"

"We only used to plant milpa, but the milpa didn't really produce. And now that we have taken off the nylon, we plant milpa there without the need for fertilizer or anything. It produces lots." "Why does it produce now?"

"I think that we dedicated ourselves here to spreading natural fertilizer, leaf litter, all that. Upon planting the milpa, the same. Now we don't put fertilizer or anything, but it does produce!" Los Limones

25.

"¿Siempre siembran en mayo?"

"Sí, en mayo cuando cae la primera agua, sembramos."

"¿La lluvia ahora es diferente?"

"Es diferente. Otros años, el primerito del mayo. En marzo, sembraba. Pero ahora, el 29 o 30 de mayo. Es muy tardado."

"Y hay costumbres de la cosecha?"

"De los que vivían antes, cosechaba en fines de octubre, noviembre. Ahora, a veces en diciembre hasta enero...Porque llueve más luego. Tarda más"

"Do y'all always plant (the milpa) in May?"

"Yes, in May, when the first rain falls, we plant."

"Is the rain different now?"

"It's different. Other years, the very beginning of May (the rain began). In March, we used to plant. But now, the 29th or 30th of May (the rain comes). It's very delayed." Los Limones

"¿Cuándo siembra la milpa?"

"La milpa se siembra en mayo, depende del agua. Sembramos el 25 de mayo o el primero de junio. O este año, sembré el 16 de junio."

"Más tarde. ¿Por qué?"

"Porque me atrasé...Pero gracias a Dios, ya están elotes...Estaba afuera del tiempo. ¡Pero eso es tiempo también! Si fuera más luego, la milpa ya hubiera secado pero cabal es su tiempo. Quisiera uno sembrar al tiempo que uno quiere, porque a veces no da tiempo. Hay salidas, trabajo en otros lados. Salimos, no estamos permanente allí cuando vamos a decidir de sembrar la milpa...A veces lo sembramos en esa fecha porque a veces cuando uno lo siembra viene el verano, a veces lo afecta el verano. Entonces es cuando uno a veces siembra, pongamos en 10 de junio, 15 de junio. O a veces ya no tanto pasa el aire o a veces no pasa el verano, ya cuando a veces llueve en Septiembre y también empieza a reventar...Hay desventaja en la siembra de milpa. Por eso a veces atrasamos o sembramos luego...Cuando no pasa el aire, se siembra luego—buena milpa, buena cosecha. Y cuando pasa el aire, lo lleve..."

"¿Cuándo van a cosechar la milpa este año?"

"Este año, en diciembre—¡en noviembre! El 20 de noviembre."

"Siempre el 20 de Noviembre?"

"Sí, el 20 de noviembre, el 10 para adelante..."

"When do you plant the milpa?"

"The milpa is planted in May, depending on the rain. We plant the 25th of May or the first of June. Or this year, I planted the 16th of June.

"Later. Why?"

"Because I was behind...But thanks to God, there are already elotes...(The planting) was out of the time (for planting). But that is the time too! If it were later, the milpa would have already dried but it was exactly its time. One would like to plant at the time one wants, because sometimes there isn't time. There are trips, work in other places. We leave, we aren't permanently there when we are going to decide to plant the milpa...Sometimes we plant (the milpa) on that date because sometimes when one plants it the dry period comes, sometimes the dry period affects (the milpa). Thus, that's when one sometimes plants, let's say, the 10th of June, the 15th of June. Or sometimes, the wind doesn't pass so much or sometimes the dry period doesn't occur as much, when sometimes it rains in September and it also begins to ruin (the crop)...There is disadvantage in the planting of milpa. For that reason, we sometimes delay or plant later...When the wind doesn't pass, one plants later—good milpa, good harvest. And when the wind passed, it takes (the milpa) with it."

"When are you going to harvest the milpa this year?"

"This year, in December-in November. The 20th of November."

"Always the 20th of November?"

"Yes, the 20th of November, the 10th onward..."

Chichum Majadas

26.

"Ustedes tiene que comprar maíz del mercado?"

"La parcela cuando nos da un buen año, a veces es de allí. Y cuando no, a veces compramos algunos quintalitos. Depende del año."

"¿Por qué a veces es un buen año y otras veces un mal año?"

"...A veces viene el aire y la bote y algunas matas, las quebra por una vez. Y por eso no queda buena y no levantamos mucho...Hay años, cuando pasa el aire, toda la milpa ya está maciza. Entonces pasa el aire pero ya se logra la cosecha...Este año decimos que no vamos a comprar maíz porque vemos que están buenas las plantas de maíz."

"Do you all have to buy maize from the market?"

"When the parcela gives us a good year, sometime (all our maize) is from there. And when not, sometimes we have to but some few hundredweights. It depends on the year."

"Why is it sometimes a good year and other times a bad year?"

"Sometimes the wind comes and some matas, it breaks them in one go. And for that reason, (the milpa) doesn't remain good and we don't harvest much...There are years, when the wind passes, all the milpa is already mature. Thus, the wind passed but one still achieves the harvest...This year we say that we are not going to buy maize because we see that the plants of maize are good."

Los Limones

27.

"Por qué no siembran más frijol o ayote en la milpa?"

"Por qué, sabe, teniendo mucho frijol, lo tira mucho el aire. Y el ayote también. El ayote antes, fijese usted, solo en el suelo corría la guía. Ahora no. Ahora el ayote solo va encima de la milpa, tapa la milpa. Bota la milpa. (Y es la misma semilla?) Y es la misma semilla, fijese! (risas)" Unión Reforma

"Antes la gente sembraba la haba en la milpa? Y ahora no?"

"Junta a la milpa. Ahora, no. Nosotros sembramos pura haba, haba toda. Antes sembraba la haba junta con la milpa, pero a veces no daba mucho por la sombra de la milpa. Y si caiga la milpa, la haba queda bajo la milpa. Y ahora no. La idea de nosotros es sembrar pura haba, la milpa aparte."

Los Limones

28.

"Ustedes siempre han sembrado la misma semilla de maíz?"

"La misma semilla."

"Antes no sembraba otro tipo de maíz?"

"... Cuando muy antes sembramos, sembramos un maíz coloradito, una semilla que se ve en Cuilca, rojito. Pero después lo fui cambiando. Era muy cascarudo, dicen las mujeres...Ahora lo cambio por esta semilla que tengo ahorita."

"De donde vino esta semilla?"

"De un vecino, aquí no más. Cambiado hicimos"

Unión Reforma

"Y son las mismas plantas en la milpa?"

"Es la misma. No hemos cambiado semilla. Algunas han cambiado semilla. Es el mismo criollo que hemos cosechado"

Los Limones
"Siempre han sembrado el mismo color de maíz?"

"Primero era un color así pintito, entre negro y blanco. Ahora no. Ahora es solo un color amarillo."

"Por qué?"

"Porque esta semillita, no crece tanto la milpa. Y aparte de eso, alcanza más la cosecha" "Donde encontraron esa semilla amarilla?"

"Aquí con los abuelos. Semillas criollitas."

Unión Reforma

"Siempre han sembrado las mismas variedades de maíz?"

"Muy antes cuando yo venía creciendo (sembramos) un maíz que era varios colorcitos, pintillo lo decíamos. Pero ya está mezclando también porque a veces el vecino abajo siembra de un color. A veces cuando están floreciendo allí se van injertando. Pero de nosotros es una clase de maíz, es amarillo. Pero a veces se mezcla...Si, (siempre uso la misma semilla pero) a través el tiempo, cambia."

"Por que siembra esta variedad de maíz?"

"Porque esta variedad...Por ejemplo a mí me dejaron estas semillas. Mi esposo cambio la semilla y ahora yo sigo sembrando esta clase de maíz. Pero a veces de tanto, degenera y, si, vamos a conseguir otra clase de semilla. De allí vamos cambiando"

"Este maíz aquí produce bien?"

"Sí, porque el elotillo es así, bien delgadito y los granos hay más. El elotillo chiquitito y los granos son muchos. Y hay una clase de semilla que es muy olotuda...Si, es rico...Hacemos atolitos de elote, tamalitos de elote. Aprovechamos los elotitos cuando están en elotes" Unión Reforma

"A veces venden semillas o hacen cambios de semillas con otros vecinos aquí?"

"La mayoría lo que hacemos es cambio...Tal vez hay unos que podrían venderlo pero la mayoría es cambiamos o regalamos. Por ejemplo, viene ella (Rosy) aquí a mi casa y me dice, 'Mire, me gusta su semilla. Véndame unas' o 'Vengan a darme un par de mazorquitas!' Nosotros no lo vendemos, aquí no más es su mazorquita, porque así es. No vendemos, no más regalamos o cambiamos...Así se maneja aquí las semillas." Los Limones

"¿Antes solo sembraba milpa aquí?"

"Sí, solo milpa...Era diferente la semilla. Era más alta la milpa y mas grandes los elotes." "¿Qué pasó?"

"Ya no les gusto la semilla. Les gusto otra semilla, la que está sembrando ahorita."

"¿Cuál semilla fue el otro?"

"Era rojo el maíz. Y ahorita es amarillo...porque crecía demasiado. Venía el aire y la botaba. Por eso, cambiamos la semilla."

Los Limones

29.

"Ese ingeniero viene a ver que aquí...hay parcelas buenas para sembrar café y partes para sembrar frijol, partes para sembrar maíz. Y donde se produce el maíz, no hay que sembrar café, decía el ingeniero. Entonces por eso, la gente allí se despertaron las familias que serían buenos los terrenos para sembrar café. Probaron sembrar. Pero ahora no solo hay esa matita, hay varias matas..." Chichum Majadas

"Ahora sembramos menos milpa. Porque antes, como le digo, sembrábamos puro maíz. Maíz y papa es lo que sembrábamos. Ahorita, solo sembramos por los elotes. (risa) Sembramos mas verduras..."

Los Limones

"Y ahora como estamos nosotros sembramos de todo...La ventaja de la parte baja es que, pongamos, aquí tenemos agua. Y también a veces, en vez de que sembremos milpa, mejor apartamos un pedacito de terreno para sembrar las hortalizas. Y si no, no hay espacio. Pero aquí, planificamos. Aquí vamos a sembrar milpa, aquí vamos a sembrar haba, aquí vamos a sembrar las hortalizas. Entonces cada pedacito con un pedacito de siembra para que mixteemos(¿). Antes, los abuelos solo nos ensenaban al maíz—solo siembran maíz y ya. O a veces se metía a la milpa, la haba y el ayote. Y aquí con mi suegra, ellos cosechan guicoyitos, muchos guicoyitos. Entonces yo ya aprendí mas que todo de mi suegra. A veces cuando ella siembra yo también siembra mi güicoy y, si, si, da." Los Limones

"¿Ustedes antes sembraba milpa, pero ya no?"

"Mis papás, sí. Yo todavía no tengo terreno. Pero si los ayudaba. Ellos si sembraba y ahorita ya es una parte nada más. Una parte para las hortalizas y otra parte para la milpa y los frijoles...para no tener solo maíz y frijol." Los Limones

30.

"...Ahorita el maíz es más saludable para comer. No es transgénico y no es producido con mucho químico. Esa es la ventaja de nosotros ahorita, como agricultores." "¿Ustedes no quieren sembrar transgénicos?"

"No! No...Si sembramos el transgénico, lo que hace es que nosotros perdimos nuestras semillas criollas. Y es eso lo que no queremos porque el transgénico hay que comprar semilla cada año. Y nosotros no compramos semilla. Al contrario, damos semilla a los que necesita. Esa es la ventaja de nosotros. Si sembramos transgénico, echamos perder nuestra semilla. Aunque ahorita varios están sembrando transgénico, porque, dicen ellos, es más rápido. Claro es más rápido pero no podemos guardar semillas... Y la semilla de transgénico es muy cara. En cambio, nosotros tenemos nuestra semilla. Entonces no gastamos nada. Solo cosechamos, guardamos, y ya a la siguiente siembra, ya tenemos nuestras semillas propias...Es muy importante tener las semillas criollas. Porque hemos hecho huelga más atrás. Hemos hecho huelga de no tener semillas transgénicas...para que esta semilla no viniera aquí. Gracias a Dios, casi detuvo. Y ahorita...sí, hay semilla, pero la gente no la hace caso. La gente lo que quiere es tener sus propias semillas y no perder. Porque la semilla—lo que viene de atrás y que estamos cultivando todavía—es una semilla fuerte. No es tan delicada y no es fácilmente que llega la plaga. Es resistente. Pero el transgénico es una semilla híbrida. Es más delicada y no tenemos mucha pastura porque es una semilla baja. En cambio, nuestro maíz es alto. Tenemos la pastura y entonces guardamos pastura..."

"...Now, maize is healthier to eat. It's not transgénico and it's not produced with much chemical (inputs). That is our advantage now, as farmers."

"You all don't want to plant transgénicos?"

"No! No...If we plant the transgénico, what it causes is that we lose our criolla seeds. And that is what we don't want because (with) the transgénico one has to buy seed every year. And we don't buy seed. On the contrary, we give seed to those who need it. That is our advantage. If we plant transgénico, we stand to lose our seed. Although now some folks are planting transgénico, because, they say, it's faster. Clearly it's faster, but we can't save seeds...And the seed of transgénico is very expensive. Whereas we have our seed. Thus, we don't spend anything. We just harvest it, save it, and then at the next planting we already have our own seeds...It is very important to have the criolla seeds. Because we have created a strike (against transgénico maize) in the past. Thanks to God, we pretty much stopped (the introduction of transgénico maize). And now...yes, there is some (transgénico) seed (in the community), but the people don't have interest in it. What the people want is to have their own seeds and not lose them. Because the seed—which comes from before and which we are still growing—is a strong seed. It is not so delicate, and it doesn't easily get disease/pests. It's resistant. But the transgénico is a híbrida seed. It's more delicate and we don't get much livestock fodder from it because it's a seed that produces short maize stalks. On the other hand, our maize is tall. We get livestock fodder from it and so we can save the fodder..."

Los Limones

31.

"Que tiene una desventaja, seno. Hay que comprarlo cada ano. Y aquí, yo ya sembré un pedazo aquí. Pero un ano es bueno y otro ano no da. Y ahorita ya no mucho viene este maíz aquí porque la gente no lo quiere, creo. Cuando muy salió, yo sembraba y eso es muy bueno para sembrar elotes de riego. No se dana. En cambio, nuestro maíz que ves allí, eso se dana. Cuando se siembra en el invierno, se dana. Porque se dana? Porque, no se porque, se pudre por el agua y lo pica mucho el animal. En cambio, así como esta en su tiempo, no pasa nada. Esa semilla (hibrida) no siembre aquí porque no nos gusta. Es muy tiesa la hoja para los animales. Muy tiesa, muy gruesa la pata. No es grande. Es chaparrito, así, ve. Entonces no pega pues. Hay que comprarla cada ano. Y nosotros no tenemos la costumbre..." Los Limones

"Ustedes nunca han tenido interés en sembrar maíz transgénico o hibrido?" "No, porque no nos gusta eso de estar comprando semilla cada ano." Los Limones

"¿Tienen interés en los híbridos, los transgénicos?"

"No, aquí no. Solo lo que más trabajamos es lo que es nativo de aquí. Unos nos han dicho algunas veces que perdemos esta semilla...pero no...Porque esas semillas que vienen solo nos vienen a dar una cosecha. Hay que seguir comprando anualmente. Y esto (semilla criolla) no lo tenemos, lo cortamos, lo guardamos. No estamos para ir a comprar semillas del mercado si ya las tenemos aquí..."

Los Limones

32.

"La papa mejorada vinieron aquí antes del maíz transgénico?"

"Antes! Esa tendrá unos 20 años que la papa mejorada vino, aumentando poco a poco hasta que se desaparecieron las criollas...Los químicos empezaron a aparecer desde las 70. Pero la gente tampoco consumía mucho. Aquí, al inicio, no. Pero donde más empezó a consumir era la semilla de la papa. Decían, 'Fíjense, esta semilla (mejorada) es buena y toda! Solo que tiene que agregar su químico.' 'Bueno,' decían la gente y como la producción era buena producción, 'Ah, hay que seguir con más químico y más de las semillas (mejoradas). Y a las nativas, se fueron descuidando. Estas (nativas) que daba en poca cantidad pero buena papa. En ese caso, sí, era una semilla mejor (de las papas mejoradas)—más para la producción. Pero fue para un tiempo, solo para corto plazo. Ahorita ya las semillas (mejoradas) todavía producen bastantes pero hay que aplicarle bastante químico, todo bien controlado. Las fumigaciones hay que hacerlas diario...Aparte, hay unas hormonas que le meten cuando la papa ya empiece a producir...para que la papa crezca más grande. Buena papa pero puro químico...Por eso mismo, se ha venido viendo (cómo) se logra rescatar parte de las plantas...Con la papa es bastante difícil porque se ha perdido las semillas (criollas). A lo mejor se logra a rescatar un día pero no tanto se tiene esperanza porque todo se perdió"

"Did the papa mejorada arrive to the community before the maíz transgénico?" "Before! It's been some 20 years since papa mejorada came, increasing little by little until the (papas) criollas disappeared...The chemical (inputs) started to appear since the 70s. But people didn't use them much. Here, at that start, they didn't. But where it began to be used more was the papa seed. People say, 'Look, this mejorada seed is good and everything! It's just that you have to give it its químico.' 'Alright,' said the people and, as the production was good, 'Ah, we have to continue with more chemical (inputs) and more of the mejorada seed.' And they went neglecting the (papas) nativas. These (nativas) that gave in small quantities but a good papa. In that way, (the papa mejorada) was a better seed—better for production. But it was only for a time, only for the short term. Now the mejorada seed still produces a lot but one has to apply lots of químico, everything well-controlled. One has to do the fumigations daily...Apart, there are horomones that are applied to the papa when it's starting to produce...so that the papa grows bigger. Good papa but pure chemical...For this reason, we have been trying to see how to be able to revive some of the plants...With the papa it's very difficult because the (criolla) seeds have been lost. At best we might accomplish rescuing them one day but there isn't much hope since all have been lost." Unión Reforma

"Antes la agricultura era puro orgánica. Pero después fue apareciendo el producto químico ...Apareció unas semillas mejoradas, supuestamente mejorado, ¿verdad? Y fueron desapareciendo todas las semillas criollas. Desaparecieron, por ejemplo, en la papa, más en la papa...Las mejoradas, cuando vinieron, ¡del principio un buen producto! Bastante rendimiento con pocas enfermedades. Ahora no. Esas semillas mejoradas son bastantes frágiles para enfermedades. Hay que estar aplicando fungicida. Por ejemplo, en la papa, mucha fungicida! Puro químico para combatir las enfermedades. Entonces ha cambiado bastante. ¡Y ya las semillas criollas antiguas ya no hay! Por ejemplo, aquí se había una semilla que así le decía criolla, una papita roja. Crecía...casi ni abono... De esas misma iba a producir otra vez. Pero ahorita de esa ya no hay. Estaban las otras. Hay uno que se llama Colima, lo otra se llama Canela, la Cuarentena, un montón de papitas, ¿verdad? Pero buenas papas. Pero ya se perdieron todas. Ahorita solo mejoradas. Las cuales mejoradas ahorita, pues, ya cuesta producir porque hay que aplicarle bastante fertilizante. Y más para las enfermedades que las atacan muy fuerte...Y ahora se quiere rescatar nuevamente la producción orgánica pero ya cuesta bastante, el rendimiento bastante bajo."

"Before, the agriculture was purely organic. But afterward, chemical products started appearing...Some mejorada seed—supposedly improved, right?—appeared. And all the criolla seeds started disappearing. They appeared, for example, in the papa, especially in the papa. The mejoradas, when they came, at the beginning a good product! Lots of yields with little disease. Not anymore. Those mejorada seeds are too fragile in the face of disease. You have to be applying fungicide. For example, in the papa, lots of fungicide! Pure chemical to combat the diseases. Thus, it has changed a lot. And there are no longer the ancient criolla seeds! For example, there used to be a seed that was called criolla, a little red potato. It grew...almost without any fertilizer/manure...From these same (papas), they could grow again. But now there aren't any more of these. There used to be others. There is one called Colima, another called Canela, the Cuarentena, lots of kinds of papas, right? But good potatoes. But now they're all lost. Now only mejoradas. These same (papas) mejoradas are hard to produce because one has to apply lots of fertilizer. And more, for the diseases that attack them heavily...And now we want to revive the organic production, but it's very difficult, the yields very low." Unión Reforma

"...Me han venido a proponer (maíz) transgénico. Pero no se aceptaron. (¿Por qué?) Por las mismas experiencias de la papa. Verdad que son buenas (las semillas transgénicas/mejoradas), en el principio buenas, pero después de eso, no. Con las semillas transgénicas, cada año hay que estar comprando las semillas. Compra y compra. Y puede que después vuelva lo mismo que la papa—poca producción. Así que todavía unas semillas criollas (queremos)."

"...They have come to me to propose transgénico maize. But they weren't accepted. (Why?) Due to the same experiences with the papa. True, (the transgénica/mejorada seeds) are good, in the beginning good, but after that, not anymore. With the transgénico seeds, every year you have to be buying the seeds. Buying and buying. And it could be that afterward, it goes back to the same as with the papa—little production. Thus, we still (want) some criollo seeds." Unión Reforma