

**Making *milpa*,
making life in La Mera Selva:**

A testimony of how Tzeltal peasants perform maize
cultivation practices in the Lacandon Jungle, Mexico

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Making *milpa*,
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Tania Carolina Camacho Villa

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As a peasant apprentice I learned how
With one hand you cultivate maize
And with the other you cultivate life

Jokol lagual



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CHAPTER 1

INTRODUCTION

This PhD thesis is a testimony of how Tzeltal peasants make *milpa* in the heart of the Lacandon Jungle, Chiapas, Mexico. Dear reader, before you commit your eyes, mind and imagination to this thesis, I want to delve into the topic and main argument this study aims to make. I will make it my task to point out the importance of dedicating some of your time to this reading and I will explain the different elements that make up this research. You will learn more about ‘performance’ as the main concept of this thesis and how I arrived at a tailor-made, three-tiered definition of this concept. Finally, I will present other elements that distinguish this document, the various chapters that jointly constitute this thesis, and the questions that I intend to answer with this testimony. Once you have all this information, you may decide between giving up the reading or immerse yourself in the story and join me in the experience of making *milpa* and making life in the heart of the Lacandon Jungle.

1.1 MAKING *MILPA*, MAKING LIFE

This study is about maize, *milpa* and the lives of indigenous peasants. It aims to show how Tzeltal peasants make *milpa* by integrating maize cultivation practices into their everyday activities in the heart of the Lacandon Jungle. This trans-disciplinary, life-witnessing, action-focused research interweaves the study of maize cultivation practices with the study of the everyday lives of people who carry them out. It is based on the learning that I, the author, acquired by sharing a very rich life experience with Don Chebo, Juan and other Tzeltal peasants from September 2006 to December 2007. In fact, these people were the ones who on several occasions reminded me of this learning and made the topic and argument of this thesis evident.

One of those occasions was in December of 2007, while I was harvesting with Don Chebo in my *milpa*, as a cultivated maize field is commonly called in Mexico. I had a maize cob in my hand when he told me, “Now that you are harvesting the *ixim* of the *k’altik* that we made together, you know what it is like to live as a Tzeltal peasant of La Mera Selva”. As I listened to him, more memories about the moments of life that we shared in that period rushed to my mind, more than just those related to the cultivation of *ixim*, as they call maize. These intense moments made me tightly squeeze the cob to be sure that I really had it in my hand. I sighed and replied that now I knew what life was in the jungle. “After all that we went through together” he told me

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“we were finally able to harvest.” We ended up exchanging a smile as a sign of our new camaraderie resulting from sharing the life experience that implied making the *k’altik*, as these farmers call their *milpa*.

Another occasion was during a later visit on a warm day of May in 2008. Talking with Don Eusebio, Juan’s neighbor, I asked him about the different agroecological innovations I had suggested to them during the previous year. He replied that none of them gave positive results. Completely frustrated, I told him that my initial intention had been to contribute to the improvement of their farming practices but that apparently none of them, from the maize participatory plant breeding to the fodder bank, had worked out. I added that as part of my PhD study I had the intention to write a thesis about my experience with them and that with these negative results of my intervention I was not sure any more about the topic of the thesis. “In that case, your thesis must be about how you made *k’altik* with us in San Martín, because that is what you learned”.

Learning how to make a *k’altik* with Don Chebo on his farm, Rancho Salvador Allende, and with Juan on his, Rancho San Martín, involved several things. In the first place, I learned to carry out the diverse maize cultivation practices from land preparation, sowing, weeding, bending¹ to harvesting during the rainy season of 2007. The peculiarities and intricacies of how we performed these practices ended up engaging me in other activities of Don Chebo, Juan and other participants during this season, as they were part of their responses to situations that arose in their everyday life. In turn, these everyday life situations ended up affecting how we executed the maize cultivation practices, since the latter had become responses/reactions to specific life events or episodes. In this sense, the particularities and intricacies of how we practiced maize cultivation allowed me to familiarize myself not only with how they grow maize but also with how they live. This is the idea captured in the making of *milpa*. Making *milpa* with all its affected practices therefore stands for making life.

In this PhD thesis, I thus describe my experiences of making two *k’altetik* (plural form of *k’altik*) together with Don Chebo, Juan and other Tzeltal peasants during the rainy season of 2007. The intention of this description – which I write in testimonial form - is to show how, while we were making the *k’altetik* in the heart of the Lacandon Jungle, we were interweaving maize cultivation practices with everyday life activities as if, together, they were a sort of juggling performance.

¹ Bending is the English translation of the Spanish *dobla*. It refers to a practice that consists in bending maize plants when they are mature (in relation to cob and grain) to protect them against rain, pests and disease. Details about this practice are described in chapter five.

1.2 MAIZE, *MILPA* AND TZELTAL PEASANTS

I see it as my task now to convince you of the importance of reading this study about maize, a crop that accompanies human beings, about the relevance for the indigenous Tzeltal peasants from the Lacandon Jungle of making *milpa*, and ultimately about the place these topics have in Mexican national debates.

1.2.1 Maize, a companion of human beings

Maize, known scientifically as *Zea mays*, has developed a close relationship with human beings which started 9000 years ago (Matsuoka *et al.*, 2002). This relationship continues today, as maize fields are found all around the five continents.² Thus its biological qualities of impressive environmental adaptability³ and outstanding efficiency⁴ have made maize a cosmopolitan crop. It is important to realize that maize cannot survive without cultivation by man, because the grains on the cob are enclosed in husk leaves, which prevent the grains from germinating and producing a new crop in the following season. (Wallace and Brown, 1956: 29). Thus, maize is a human product, since it depends on man to propagate. Man has also developed many uses for maize: as human and animal food, biofuel, biodegradable plastic and a component of cosmetics, medicaments and explosives.⁵ Since maize is cosmopolitan and versatile, it is used as a global commodity, a model organism⁶ in basic research and a companion in social processes such as African slavery, colonialism and the Green Revolution (Warman, 1995; Marglin, 1996; MacCann, 2005). Maize and its cultivation thus provide a window through which we can see how human beings live.

This is certainly true in Mexico, the place of maize's origin, where it was domesticated and diversified. Maize has in turn been Mexicans' main staple crop for many, many centuries. The relationship between Mexicans and

² FAOSTAT reports that in 200,7 163 countries all around the world cultivated in total 161,016,542 ha of maize. The distribution of maize surface was: in the Americas (39.82%), in Asia (32.40%), in Africa (18.10%), in Europe (9.61%) and in Oceania (0.06%).

³ Morris (2001:26) reports that maize "is cultivated at latitudes ranging from the equator to approximately 50 North and South, at altitudes ranging from sea level to more than 3,000 m elevation. It is grown in extremely cool, moderate and very hot climates, under moisture regimes ranging from extremely wet to semiarid, on flat terrain as well as precipitously steep hillsides, in many different types of soil, and using a profusion of production technologies."

⁴ Andrade *et al.* (1996:2) claim that from a seed weighing around 300 mg one plant of more than two meters in height and 70 dm² in biomass is obtained in three months. This represents 1000 times the seed's weight.

⁵ See Corn Refiners Association webpage. <http://www.corn.org/>

⁶ Model organisms are used in research "to gain insight into the general principles that underlie various disciplines" especially in biological fields such as "genetics, development and evolution" (Hedges, 2002). They are found among prokaryotes, protists, fungi, plants and animals. Other plants used as model organisms are wheat, rice, soybean, beans and potato.

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maize is so close that, according to Bonfil, when they cultivate maize, they also cultivate themselves (cited in Esteva, 2007a:11). In recent decades, maize and Mexico have also had a globally relevant and unique relationship. During the Green Revolution, Mexico has played an important role in the development of the hybrid maize varieties (Matchett, 2002) and it currently occupies a prominent place in the debate around genetically modified maize and its potential risks *versus* benefits (Verschoor, 2009a).

Maize in Mexico comes in many types, and it is grown in a variety of methods that reflect the contrasting ways in which those who grow it make their lives. These types of maize and methods of cultivation are the result of the wide variety of ecological zones⁷ in the country. They are also an expression of the different processes that have shaped the history of Mexico.⁸ Similarly, the different landraces that are currently cultivated in the tropical, temperate and semi-arid areas are the product of the creation of various maize races during different historical processes (Wellhausen *et al.*, 1952). There are maize races from pre-Columbian origin, *mestizo* races created after the Spanish Conquest, modern races developed when Mexico became independent and improved varieties or hybrids developed during the Green Revolution.⁹ Moreover, there are areas in Mexico where entrepreneurs produce maize with cutting-edge technologies and others where maize is still being cultivated by indigenous peasants in the traditional *milpa* (Vega and Ramírez, 2004). All these different types of maize and diverse ways of cultivation are polychromatic pieces of the complex mosaic that represents how people live and cultivate maize in Mexico.

1.2.2 *The milpa of indigenous people*

Let us take a closer look at one of these polychromatic pieces: the *milpa* and the indigenous peasants who make it. In Mexico, *milpa* is commonly known as a field where maize is cultivated, although the indigenous origin of the *Náhuatl* term refers to any cultivated field. For scholars this term implies

⁷ Toledo and Ordóñez (1998) divide Mexico into different ecological zones that are: tropical hot and humid, tropical hot and sub-humid, temperate humid, temperate sub-humid, arid, semiarid, wetland and transition between sea and land.

⁸ These historical processes started since the flourishing of different Mesoamerican Civilizations (such as the famous Mayan and Aztec), the conquest-colonialism of European Civilization for 300 years and the 200 years shaping and reshaping the Mexican nation interacting with global processes such as the Modernization, Industrialization and recently Globalization.

⁹ There are some examples of each one. The *Nal tel* landrace is a Precolombian race from the Mayan Culture and the *Tuxpeño* is a Mestizo race covering the tropical humid areas of Mexico (Wellhausen *et al.*:1952). *Celaya* is a modern landrace that was cultivated in the productive area of *El Bajío* before the arrival of hybrids and improved varieties (ibid). The H-515 is a quite known hybrid from the tropics developed by Mexican National Research Centre (Morris, 2001). Finally transgenic varieties with BT1 gene have been found in farmers' fields although their cultivation is restrictive to research and testing purposes (Quist and Chapela, 2001).

more. Natural scientists consider that the *milpa* is a very diverse and complex traditional agroecosystem¹⁰ where maize is cultivated, associated and intercropped with other plants like beans (*Phaseolus spp.*), pumpkins (*Cucurbita spp.*) and chili (*Capsicum spp.*) (Aguilar *et al.*, 2007:84). For social scientists, making *milpa* has been an everyday resistance strategy¹¹ of indigenous peasants to maintain the link with their ancestors of the Mesoamerican civilization, after 500 years of imposition of European and Western civilizations (Bonfil, 2005:190-200). With the *milpa* the current indigenous peasants continue maintaining a traditional agroecosystem and a way of life that distinguishes them from others living in Mexico.

Indigenous people, who represent 9.5% of Mexico's population, have the lowest human development index¹² of the country (PNUD, 2010:14-15). The majority of them reside in highly marginalized small rural localities and cultivate their land as peasants (Warman, 2003:135). Their difficult situation, as several scholars have affirmed, is the result of an historical process of exploitation and discrimination that started with the Spanish Conquest in the sixteenth century (Bonfil, 2005 and Montemayor, 2009). Since then, there have been indigenous rebellions in different areas of Mexico, the most recent one being the uprising of the *Ejército Zapatista de Liberación Nacional (EZLN)*.¹³ Although at the beginning, *EZLN's* claims were around land, social security and women's rights, over time they became an indigenous movement that brought the debate around the situation of indigenous people into the national arena (Warman, 2003:7-8).

The making of *milpa* continues to be the millenary bond between maize and indigenous people (Florescano, 2000:25), from Pre-Columbian times through our days. The way of making *milpa* has been changing throughout the centuries due to events such as the introduction of European agricultural techniques during the Colonial period and the use of pesticides and improved

¹⁰ Gliessman (2007:23) defines agroecosystem as "a site or integrated region of agricultural production – a farm, for example – understood as a system". It is a concept that has been applied to study the *milpa* by crop scientists and agroecologist like Hernández-Xolocotzi (1977), Hernández-Xolocotzi *et al.* (1995).

¹¹ This approach has been used by social scientists like Warman (1985)

¹² The United Nations Program of Development uses the human development index as a measurement tool to rate human welfare (PNUD, 2010:14).

¹³ The Zapatista Army of National Liberation (*EZLN*) is an insurgent social movement against Mexican Government that became public in 1994. Most of its members are indigenous living in the Southern State of Chiapas Mexico and got involved as a way to fight against their living conditions (Montemayor, 2009). Several authors explained that this movement appeared of the union between leftist political groups of the *Fuerzas de Liberación Nacional* and several indigenous peasant organizations (in the Lacandon Jungle it was the ARIC UU) (Legorreta, 1998:159-255; Harvey, 1998; Vos, de., 2004:325-358). For the Tzeltal Peasants of La Mera Selva, the *EZLN* is a sister organization that appeared from the division of the ARIC UU when the former became public in 1994. Nowadays it is considered a social movement that proposes alternative ways of government based on Indigenous Autonomy.

varieties during the Green Revolution of the twentieth century (Aguilar *et al.*, 2007:90-91). Moreover, we cannot really talk about one way of practicing the making of *milpa* because there is a myriad of variants depending on the specific situation of each farmer, indigenous group or ecological region (Boege, 2008:170). For instance, *milpas* are different in the temperate Zoque and Mazateco zones, the semiarid and arid Cora and Tarahumara regions, the subhumid tropical Maya and Zapoteco zones and the humid tropical Totonaca and Tzeltal regions (Aguilar *et al.*, 2007:120-122).

In several of these and other indigenous territories, *milpa* fields are found in rain-fed and areas with steep slopes, and maize landraces are cultivated in them by slash-and-burn for self-consumption purposes (Boege, 2008:164; Mapes, 2009:26). These areas are part of the 86% of maize area in Mexico that is in hands of small-scale farmers (Aguilar *et al.*, 2007:106) who continue cultivating maize although the government asserts that their agriculture is in crisis (Barkin, 2007:158). The government's claim that smallholder farming is unproductive is countered by the opinion of other sectors of Mexican society like peasant organizations, NGOs, scholars and civil society. They say that free market and government agricultural policies created the agricultural crisis, which especially affects maize production. Since 2007, the proponents of this last view created a national Campaign named "Sin maíz no hay país" ¹⁴ (Without maize there is no country), through which they become participating actors in a national debate around the role of maize in Mexican agriculture.

Both the *EZLN* movement and the *Sin maíz no hay país* campaign are sympathetic to *milpa* agriculture and the indigenous peasants who practice it. In fact, they highlight the value of the *milpa* and indigenous people and propose them as a foundation to create another country (Esteva 2007b: 285-322; Bartra, 2010a). They react against those who consider the *milpa* to be an archaic and uncompetitive system of agriculture and the indigenous peasants to be ignorant and traditional people, as well as against those who seek to bring them development. These two positions have polarized the public opinion and turned the polychromatic complex realities of indigenous peasants into a black and white picture. In the meantime, indigenous peasants themselves continue making *milpa* season after season, evidencing what it all means in their everyday reality. Like in the case of the Tzeltal peasants with whom I made *k'áltik*. They therefore occupy a central place in these debates.

¹⁴ This campaign arises out of the concern about the situation of Mexican agriculture and use maize as a rallying point. Its origins go back to an exposition in 2003, some programs and a book about maize, and focused mainly on indigenous and peasants who are making *milpa* (Esteva, 2007a:12). Later it became a political campaign in defense of food sovereignty and Mexican agriculture, mainly its small-scale variant. For more information check <http://www.sinmaiznohaypais.org/>

1.2.3 The Tzeltal peasants of La Mera Selva

There are several reasons why those who call themselves Tzeltal peasants are key actors in the national debates about maize and indigenous people. These reasons interlock the history of these peasants with that of the Lacandon Jungle. Thus, after a brief introduction of each of them, I will narrate the history they have in common.

For the *Comisión Nacional para el Desarrollo de los Pueblos Indígenas* (CDI),¹⁵ the Tzeltal as indigenous group belong to the great Mayan family (Gómez, 2004:5) that goes back to the Pre-Columbian Mayan civilization.¹⁶ The group consists of more than 300,000 people who represent 6.18% of Mexican indigenous people (INEGI, 2005). They live mainly in the southern state of Chiapas and are the major ethnic group in this state, where 1 out of 3 people are indigenous (CDI, 2005). They are currently concentrated in mainly two areas of the state, the Highlands and the Lowlands. Tzeltal people like Don Chebo and Juan live in the Lowlands, specifically the Lacandon Jungle.

The Lacandon Jungle is located in the northeastern and eastern part of the state of Chiapas, in the Mexican southeast (Muench, 1978: 38). This Lacandon Jungle of tropical, subtropical and temperate forests is the richest in biological diversity in Mexico,¹⁷ with its heterogeneous landscapes of mountains, glens, valleys, plateaus, hills and plains. It is also an important watershed, energy source and green lung of the country (INE, 2000). The name of this jungle comes from the original bellicose *Lacandon* group who settled on an island in the middle of the Lacan-tun Lake (which is nowadays known as Miramar Lake) at the time the Spanish arrived in the 16th century. A century later, this group was exterminated by the colonial authority (Vos, de, 1980).

The history of this group constitutes one of the many historical processes that made the Lacandon Jungle not only an area of biological diversity but also of complex social diversity. Humans have been living in this Jungle for millennia, as Pre-hispanic cities like Palenque witness, which is considered a UNESCO World Heritage site.¹⁸ Today this area is a rich, diverse and complex mosaic of ethnic and socio-cultural populations (Vos, de., 2004:21) that range from local indigenous people like Tzeltales, Tojolabales, Choles, Tzoltiles, contemporary Lacandonones¹⁹ and Zoques to immigrants from other

¹⁵ CDI is the National Commission for the Development of Indigenous People, a government institution that tends to indigenous people's affairs.

¹⁶ This civilization inhabited several areas of southern Mexico centuries ago.

¹⁷ It contains the greater quantity of the tropical trees of the country as well as 33% of the diversity in reptiles, 80% of that of butterflies and 32% of birds of Mexico (INE, 2000:12).

¹⁸ <http://whc.unesco.org/en/list/411>

¹⁹ I call them contemporary *Lacandonones* to distinguishing them from the original Lacandonones. As several researchers have shown the indigenous group currently called Lacandonones are not

states of Mexico and Guatemala. This great mosaic was first divided into 5 regions²⁰, each one representing a different reality of the Lacandon Jungle (see map in Appendix 1.1.).

The area of study of this PhD thesis is the region of Las Cañadas divided as well in micro-regions²¹ (see map in Appendix 1.2.). More specifically, the Micro-region Amador Hernández, named after its most populated settlement, the *Ejido*²² Amador Hernández. However, its inhabitants, the Tzeltales, often call it La Mera Selva to distinguish it from other areas of Las Cañadas, as it is the only place still maintaining patches of tropical rainforest or *Montaña*.²³ Emulating the Tzeltal peasants, I will call this area La Mera Selva henceforth in this document.

Although scholars like Vos, de, (2004) indicate that Tzeltal peasants' history starts when they colonized the Lacandon Jungle during the 20th century, in fact it goes back several centuries earlier. As becomes evident from Don Chebo's testimony on the first page of Chapter 3, their history began when the Spanish conquerors arrived in this Jungle and convinced their ancestors with Bible and sword in hand to abandon their dwellings. They abandoned them to become, between the 16th and the mid-20th centuries, landless servants and later laborers in the estates of the Ocosingo Valley. At first, these estates were property of the Dominican friars who had come from Europe, and subsequently of the regional elite descending from European immigrants (Vos, de, 1980; Legorreta, 2008).

Even living outside and working as laborers, Tzeltal people visited their old land and homes in the Lacandon Jungle several times during those five centuries. In the 16th and 17th centuries, there were military expeditions to the Jungle to suppress fearsome native groups (like the original Lacandons) in which they participated as carriers and low rank soldiers (Vos, de.,

the descendants from the lacandon group that inhabited the Jungle in the sixteenth and seventeenth century (Vos, de., 1980:31-32). They call themselves *hach winik* and they are identified by other indigenous groups as *Caribes* related to their origin in the Mexican Caribbean.

²⁰ Márquez (1996:130) divide the Lacandon Jungle in five regions that are Cañadas de Margaritas, Cañadas de Ocosingo-Altamirano, Zona Norte, Comunidad Lacandona and Marqués de Comillas.

²¹ Based on a subdivision used by the ARIC UU ID, Márquez (1988) proposed to divide the region of las Cañadas in 7 micro-regions. This subdivision has been used by others like Muench (2008) to regionalize this area based on criteria such as: continuity and similarity of environmental conditions, existence of intercommunity relationships, origin and culture of the local population, ways of social organization, integration by roads and communication services and level of marginalization and poverty.

²² *Ejido* is a land tenure type in Mexico in which land is communal. This means that each *ejidatario* can make use of his/her land and with the approval of all the other *ejidatarios* of the same *Ejido* he or she or can also sell it.

²³ *Montaña* is a local term commonly used in Chiapas to refer to an area of close vegetation of trees of 35 meters in height (Vos, de., 1996:28)

1980:115). During the 19th century, the hands of these Tzeltal laborers were the ones that cut the mahogany and cedar trees in this Jungle for the large timber exploitations (Vos, de, 1996:194; Leyva and Ascencio, 2002:131). There were also friendlier moments when they visited the area as “pacified Indians” and made their *milpas* while living on the border of Ocosingo Valley (Vos, de, 1980:124). It was, however, not until the mid-20th century (Vos, de 2004:137-180) that they returned to the dwelling place of their ancestors, not as laborers but as free men.

Between the 1940s and the 1980s, Tzeltales started living in Las Cañadas again (Legorreta, 2008:251-291). They populated it slowly until they arrived at its heart, La Mera Selva. Through the years, they made it their home by making their *milpa* and their lives. However, their efforts have not been without difficulties, which range from isolation and confinement of the area to presidential decrees that make their homeland a contentious territory.

A decree that was published in 1972 (DOF, 1972:10-13) made the property of La Mera Selva a contentious matter. The decree, commonly known as La Brecha Lacandona, awarded 614,321 hectares of the Lacandon Jungle to 66 Lacandon families that had arrived from Campeche and settled in the Jungle in the 18th century (Vos, de, 1980:228). This left 5,000 Choles and Tzeltales who earlier had established 30 colonies in that area without shelter (Vos, de., 2004:101). In 1978, the decree of the Biosphere Reserve of Montes Azules (RIBMA) (DOF, 1978:6-8) declared 331,200 hectares as natural protected area, overlapping by 80% with the territory assigned to the Comunidad Zona Lacandona²⁴ (Vos, de, 2004:33-35). When the RIBMA came into being, there were several human settlements in the buffer and core zones. This decree therefore added to the landownership dispute, a conflict that was related to the management and utilization of natural resources. Both decrees affected Tzeltal peasants living in La Mera Selva and they had to fight to stay there. As Don Eusebio told me, “government came to tell us that we had 30 days to leave our homes but we have been fighting and have managed to stay here for 30 years already with the support of our organizations and movements.”

One of these organizations, the one Don Chebo, Juan and other peasants from Las Cañadas are members of, is the *Asociación Rural de Interés Colectivo Unión de Uniones Independiente y Democrática (ARIC UU ID)*. This organization has its origin in the *Quiptic Ta Lecubtesel*,²⁵ an

²⁴ Initially the Comunidad Zona Lacandona was constituted by those 66 Lacandon families. Later, however, other ethnicities were added which accepted to be relocated and concentrated in Frontera Corozal (475 Chole families) and Nueva Palestina (822 Tzeltal families) (Ascencio, 2008:37).

²⁵ *Quiptic Ta Lecubtesel* (United for our Progress in Tzeltal) was born in 1975 as a peasant and indigenous organization against La Brecha Lacandona (Legorreta, 1998:69-88). It was promoted by the work in Liberation Theology of the San Cristobal Bishop and Maoist influences from

emblematic organization fighting against *la Brecha Lacandona* (Legorreta 1998), just like the *EZLN* movement of Don Eusebio, which earlier was the movement that most Tzeltal peasants living in the jungle belonged to. With its emergence in 1994, the *EZLN* movement made the indigenous people and the Lacandon Jungle conflict priority topics on the national agenda. They made La Mera Selva the bastion of *ARIC UU ID* and one of the *EZLN* headquarters. These organizations and movements have been fighting not only for land but also for food, health, education and indigenous rights recognition (Vos, de, 2004), in other words, their whole life situation.

For these and other reasons that the reader will discern while going through this thesis, Tzeltal peasants of La Mera Selva play a central role in national debates around indigenous farmers and maize. Thus, this thesis aims to contribute to those debates by describing the indigenous peasants' life situation as it relates to maize by describing the making of *milpa*.

1.3 ABOUT WHAT CHARACTERIZES THIS THESIS

A vast amount of literature is available on maize, *milpa* and indigenous peasants' life, ranging from works that study each specific topic from a particular disciplinary perspective to those that research the three concepts together using several disciplines. This PhD thesis however differs from all of the above because of the specific academic, scientific and methodological approaches applied to mold this research process into a trans-disciplinary, life-witnessing and action-focused study of the making of *milpa* as different sorts of 'performances'. Let me tell you more about those approaches and about 'performance', the main concept in this study.

1.3.1 The trans-disciplinary academic approach of RDS and TAD

The academic approach of this thesis falls in line with the approaches of two research groups from the Department of Social Sciences of Wageningen University in the Netherlands. The research groups I joined to develop my PhD thesis are Rural Development Sociology (RDS) and Technology and Agrarian Development (TAD). They focus on conducting studies that investigate the complex relation between nature, humans and technology,

leftish movements (Vos, de, 2004:256). In its active and conflictive history the *Quiptic* joined other organizations for establishing a union in 1980 (Union de Uniones Ejidales y Grupos Campesinos Solidarios de Chiapas) (Legorreta, 1998:134). Later, in 1988 this union receives the legal status of an "Asociación Rural de Interés Colectivo" becoming the ARIC Unión de Uniones (Vos, de, 2004:267). However, very soon internal crises divided the ARIC UU making it the mother of organizations such as the ARIC UU Independiente y Democrática (ID), the ARIC UU Oficial (Official), the *EZLN*, the ARIC UU Histórica (Historic), the *ARIC UU ID* COSISEL and the *Quiptic Ta Lecubsetel* COAO (Vos, de., 2004 and fieldwork notes).

integrating different disciplines and concentrating on everyday life activities (Visser, 2003; Richards, 2000; Richards, 2010).

This thesis fits the various fields of study: I undertake a trans-disciplinary²⁶ approach in which old assumptions based on my previous acquired knowledge of crop growth and development (through the study of Crop Science) are confronted by my newly acquired knowledge of everyday social actions (through the study of Sociology and Anthropology). This thesis addresses the everyday realities of Tzeltal peasants in their *milpa* and life by studying the performance of maize cultivation from a critical position around general assumptions. This critical position also characterizes the two academic groups I referred to, as they have been questioning simplified assumptions about complex relationships between dichotomies such as traditional *versus* developed (Long, 1977) and indigenous *versus* modern (Richards, 1985). These and other publications by members of those chair groups (Almekinders, 2011; Haar, van der, 2001; Jansen and Vellema, 2011; Verschoor, 1997) inspired me to question the simplicity of the positions taken by other authors who idealized maize, *milpa* and indigenous peasants' life. For instance, several studies about maize genetic diversity managed by indigenous peasants in the traditional *milpa* agroecosystem (Altieri and Merrick, 1987) highlight the benefits of these traditional agroecosystems for maize and on farm conservation without pointing out the complex problematic context in which *milpa* is made.

I moved from starting my research based on general assumptions from dominant theories in natural sciences about maize in *milpa* to considering that those assumptions and those theories are only general and abstract accounts (Schatzki, 2001:3). Those accounts are intertwined with methods, results, discussions and conclusions. They are reflected in methodologies and scientific positions, concerns and styles. Theories did not become the dominant meta-narrative of this document; they rather became specific accounts that facilitated describing particular moments of this experience in a more accurate way. Moreover, together with other references, they unite my local and particular learning with a broader body of human knowledge.

1.3.2 The life-witnessing scientific approach

Based on the foregoing, it is obvious that this thesis is an expression of my experience as a science apprentice. It therefore reflects the position I am

²⁶ Visser (2004:27) considers “trans-disciplinarity as the concerted interaction between social and natural sciences, in which epistemological differences and conceptual incongruence become transparent in order to be overcome”. She also speaks about the paradox of transdisciplinarity, meaning that one should really master one’s disciplinary basis because “trans-disciplinary research challenges disciplinary assumptions and concepts, and triggers new disciplinary questions”.

taking on science. Two considerations about science are key elements to understand my position and the account I chose to present in this thesis. First, as Stengers asserts (1997), I experience scientific work as a life experience in which rational logic is integrated into other forms of acquiring knowledge, such as feelings and intuition. This author illustrates her points by referring to Barbara McClintock,²⁷ the maize cytology scientist. When McClintock talks about her discoveries in maize genetics, she asserts that “doing science is to develop a feeling for what we study and to listen to what it tells us,” and science “is knowing every detail intimately” (Keller and MacClintock, 1983:192). This happened to me. I developed a feeling for my subjects of study (from maize to *milpa* to Tzeltal peasants) by focusing on the details, and I ended up listening to what they were telling me with their words and actions.

Second, I argue that the role of scientists is that of a reflexive witness of the reality (s)he studies. I was a witness observing, testifying in public and being vulnerable to my own visions and representations, as proposed by Haraway (1997:267). I became reflexive in the sense that the sociologist Bourdieu defines (2004:88-94) as being engaged in a dialogue between practice and theory within a continuous process of individual and collective academic reflection.

1.3.3 The action-focused methodological approach

In this study, I applied social science methodologies that focus on action, practices and actors. This is different from other works on maize, *milpa* and indigenous peasants, like those of agroecosystems that use a space unit of study or those about livelihood studying the household. In this study, instead, my point of departure is maize cultivation practices.

My research strategy took into account elements from two action methodologies, Action Research (AR) and Actor Network Theory (ANT). AR appeared as an alternative method that takes into account the active role of researchers in the investigation (Greenwood and Levin, 2007). ANT purports to study action as a network of different types of actors (Latour, 2005).

The element I took from AR was the general assumption that in order to understand action, the researcher must be actively involved in it (Greenwood and Levin, 2007). This general assumption about researchers' involvement

²⁷ Barbara McClintock's (1902-1992) contribution to science (cytogenetics) was, among others, the discovery of trasposons or jumping genes, which was the reason, first, for ostracism from her scientific community. Ironically, this finding was later acknowledged with the Nobel Prize. Keller and MacClintock's book “A feeling for the organism: The Life and Work of Barbara McClintock“ narrates her personal journey, interwoven with her professional development and the situation of genetics and scientists in the times of her scientific findings.

has been implemented, experienced and reflected on diverse ways by AR practitioners (Beukema, 2009:200). My implementation of it started with the establishment of two trials on maize diversity with the help of two Tzeltal peasants, Don Chebo, living in Salvador Allende, and Juan, from San Martín. However, as we were taking management decisions together about the cultivation practices, these trials became tools to experience what it is like to make a *k'altik*. Tzeltal people pointed this out to me all the time by specifically calling them my *k'altitetik* and never referring to them as experiments. When reflection time arrived, I made the decision to write about the life experience that involved performing maize cultivation [practices] with Juan and Don Chebo, rather than describing the trials and how we carried them out. During these 'performances', I not only observed these practices, but together with Don Chebo and Juan, I also decided on how to carry them out.

I borrowed several elements from ANT. They fit in the following three statements: For studying the action, the researcher must let herself/himself "be affected"²⁸ (Latour, 2004) by the actors and by their own terms, concepts and explanations (Latour, 2005:52-58). (S)he should "follow the actor's own way" and begin the research journey "by the traces left behind by their activity" (Latour, 2005:29). Later (s)he should elaborate their accounts based on "those unexpected actions that occurred during the investigation" (Latour, 2005:129) and focus on the "intricacies of the history" that led to these specific unexpected actions (Mol, 1999:76). Thus, I let myself be affected by Tzeltal peasants, maize and other actors who participated in our performance of cultivation practices. I followed them and the traces that these performances left behind. This thesis is my detailed account on the intricacies of the unexpected actions we undertook, describing them as much as possible with the terms, concepts and explanations that I heard them use.

I joined all these elements together and applied them as my methodological approach to the two cases that I studied. The first case involved the different 'performances' that implied making a *k'altik* with Don Chebo in Rancho Salvador Allende. The second case study was on similar 'performances' with Juan in Rancho San Martín. Both experiences functioned like networks leaving traces that I followed bringing me to more actions and actors, from activities linked with maize cultivation and other persons living in this area (like Don Eusebio and others) to other unexpected actions (like violent evictions) and participants (like Lady Wind). From this point of view, my two case studies work as entry point to meet and talk about Tzeltal peasants' farming and living in La Mera Selva through the concept of 'performance'.

²⁸ For Latour (2004) someone "is affected" when (s)he resonates with others in such a way that (s)he registers new entities in new and unexpected ways.

1.3.4 The performance of *milpa* and life

Performance is a main concept in this thesis because it gives expression to the academic, scientific and methodological approaches that make this document a trans-disciplinary, life-witnessing and action-focused study. Performance is normally used in arts as “the art of (and the art of valuing) the now” (Thrift, 2000:233) but it is also common in other disciplines and areas of knowledge. For example, plant performance is applied in crop sciences to describe the productive and/or adaptive capacity of plants. Understanding performance as an expression of capacity is one of the ways in which this concept is commonly implemented in technological issues.

In social sciences, performance has been utilized in different senses to study various aspects of social action. In microsociology, it is understood as the conscious action that a person carries out as part of the role that (s)he represents socially (Carlson, 2004:4-5). Erwin Goffman (1959) uses the metaphor of theatrical performance to address social interactions as front stage and back stage actions in which the self is negotiated. In cultural anthropology, this term has been conceptualized as the process of group and individual transformation (Kapchan, 1995). That is the way Victor Turner considers performance, using the representation of rituals as reference for social transformation processes which involve phases of disorganization and reconfiguration (Turner, 1988). In gender studies, gender identity is constituted in and through people’s performances (Butler, 1988). This idea inspired ANT researchers to discuss the performance of objects or ‘enactment’ (Mol, 2002: 41) and the performativity of texts to produce realities (Law, 2006:162). Other authors have understood this term as an action in which the person who undertakes it demonstrates her/his abilities, skills, experience, art or knowledge (Carlson, 2004: 5) for achieving particular results. All these meanings of performance are useful for delving into the complexities of the hows and whys of performed actions such as maize cultivation practices.

In fact Richards, in his article “Cultivation as Performance” (1993:72), considers that agriculture “as a component within the broader field of social action, is an expert performance of lay actors that is part of the wider performance of social life”. He highlights his interest in understanding “how farmers cope with difficulty and do well” rather than “the more usual dualism - technical correctness *versus* social expressiveness” (Richards, 1993:63). Performance does so by focusing on the improvisational capacities needed to carry out agricultural practices as it happens with musical performances. For these performances, musicians are required to practice and to plan in advance. However, during performance it is “the capacity to keep going, and to avoid complete breakdown, which is an important musical skill” (Richards, 1993:69) and which makes a good musician.

Richards is not the only one that uses musical performances as a reference to social life. Long (2001:11) considers “musical performances as varied and unpredictable and performers as constantly involved in journeys of discovery that only later, after they are over, can they adequately define”. He uses them to illustrate how “a detailed analysis of processes by which social practices and meanings are constituted, re-invented or transformed” (encounters) achieves a better understanding of “the framing and organizational dynamics of social life” (Long, 2001:12). Both authors coincide in studying the intricacies that come together to create performance as a particular action in a specific situation. Their coincidence is the point of departure for the definition of performance that I use in this thesis.

The concept of performance was shaped and reshaped during my PhD research process (see Section 2.4.3). Although since the beginning of my research I was acquainted with Richards’ 1993 article, I did not make use of it as a pre-defined working term during my fieldwork. On the contrary, it was mainly during the stage of writing and rewriting the different drafts that I came up with a tailor-made meaning of performance. It was as if each draft was an opportunity for tailoring the concept of performance to fit the body of experiences of making *milpa* in La Mera Selva. When I finished the drafts, I ended up with a three-tiered definition of this concept.

With the first tier, I define performance as a situated and particularized action. This directs our attention to actions, situations and details. To actions in the sense that performance looks for what people make or do, meaning concrete activities. To situations because in performance, action does not occur anywhere or everywhere; rather, it happens in a certain place and at a certain time, thus in a specific situation. This situation appears from the contexts, circumstances, events and meanings that affect the concrete everyday life action. Finally, performance pays attention to the coming together of particularities that make the situated action happen in a peculiar way. This means that performance searches for the how and why of a concrete action. These three elements are in line with what I previously recognized as my academic influences and my methodological considerations. However this tier leaves the concept of performance too wide and may be read as a cliché –in the sense that performance becomes any action. Thus another tier is required to delimit this concept.

The second layer demarcates this concept by adding new characteristics to its definition. These attributes recognize the influences of the two methodologies that I applied. I defined performance as a situated and particularized action in which performers create unexpected associations. In such cases, I understand “unexpected associations” as the confrontation between the performer’s *a priori* assumptions about an action *versus* the performer’s *a posteriori* new learning from it. With this addition, performance explicitly targets to identify elements that bring us to new

insights about a situated and particularized action as Latour (2005:129) suggested for ANT. In that way, I apply this concept to the maize cultivation practices of land preparation, sowing, weeding, bending and harvesting. Framing these practices as performances I challenge, in the line of reflexivity proposed by action research (Valkenburg et al., 2009:19), my old expectations as crop scientist who isolates such cultivation practices from daily life. As I performed the maize cultivation practices with Don Chebo, Juan and other Tzeltal peasants, I learned how they are interwoven with their everyday life. These “unexpected associations” were therefore the link by which farming was connected with living, turning cultivation practices into not only agronomic activities but also political, social and cultural actions.

The third level of performance makes its definition performative. In contrast to an ostensive one that remains there permanently, the performative character vanishes when it is no longer performed (Latour, 2005:37). In other words, performance seeks to capture the distinctiveness that appears when cultivation practices are carried out in real life, and not in a rehearsal (Richards, 1993:67). As farmers and cultivators know, even though these practices are repeated in all farming cycles, they end up being performed differently each time around. The difference is the product of the particular farming and living situation of that particular moment and season, and of the performers’ response to this situation [using cultivation practices]. Thus, the performance concept privileges the intricacies and particularities that make each practice a distinctive life experience in lieu of only searching for its commonalities and generalities. These intricacies and particularities are agronomical and biological as well as social, cultural and political.

I use this three-tiered definition of performance to describe my life experience of making *milpa* during the summer season of 2007. I will show the unfolding of four different facets of this performance, where each facet relates the practices of making *milpa* to the everyday life of Don Chebo, Juan and other Tzeltal peasants in a special way. Because of these relations, the facets show the details of the practices of making *milpa* and are at the same time windows through which one sees the intricacies of the life of my Tzeltal companions. In Section 2.4.3 of Chapter 2, I will explain more about these facets and about how they appertain to “unexpected associations” in the performance of their life.

1.4 ABOUT OTHER ELEMENTS THAT DISTINGUISH THIS THESIS

Two other elements distinguish this thesis from other scientific works. The first one is about the inclusion of life episodes into the text that illustrate the daily concerns of Tzeltal peasants. The second element is the effort to

make this thesis accessible to a broader audience by use of a testimonial narrative style. These elements, together with the ones related to the academic, scientific and methodological approaches molded the different chapters that ended up constituting this PhD thesis. But let me first tell you more about these two other elements: the daily life concerns I referred to above and the style I have chosen to use.

1.4.1 Definition of shared concerns

Evidently, this thesis is the fruit of daily life episodes that I shared during my fieldwork. These shared experiences remind me of a great variety of flavors. I remember the sweet flavors created by the happy occasions we experienced together. I also recall the bitter flavors of the sad moments that were a consequence of conflicting life situations and daily worries.

The latter moments especially affected me. How could they not! You, the reader, will see how those daily worries dramatically threaten the continuation and survival of the Tzeltal peasants' life. The sad and heartbreaking disintegration of Don Chebo's community, Salvador Allende, in January of 2009, illustrates this. By sharing these conflicting moments of life with me, Don Chebo's and others' concerns also became mine. Those are the moments that make them say they are "screwed," though others may call it living in the highest rate of marginalization,²⁹ being vulnerable and suffering from injustice.

These situations of marginalization and injustice are also the concern of social scientists, as Bourdieu (2004) indicates, and of any person who wants to contribute to making the world a better place. In this thesis, I narrate both sweet and bitter experiences I encountered while doing fieldwork. I discuss the difficult events that illustrate local daily concerns, which became mine as well, because I think that by making them public, the situations that currently form daily reality need not become their destiny (cf. Law, 2008:637).

²⁹ The Consejo Nacional de Población (CONAPO) use the index of marginalization as a summary measurement that distinguishes different localities of the country based on the global impact on the lack of access to education, lack of assets and inadequate housing conditions (Anzaldo and Prado, 2007:9). The Secretaría de Desarrollo Social uses this index to identify the localities with the highest level of marginalization. See <http://cat.microrregiones.gob.mx/catloc/default.aspx?tipo=clave&campo=loc&valor=07059&varent=07&varmun=059>. Most of the localities (Amador Hernández, Pichualco and Candelaria, Salvador Allende and San Gabriel) from La Mera Selva are considered to be in this highest index of marginalization.

1.4.2 Style of creative effort

This thesis is the product of a creative effort. My aim was to write a thesis that can be read not only by scholars but also by the protagonists of this story and everyone who wishes to do so. That is why I have written it with the use of everyday speech and concepts in a testimonial³⁰ style and in first person where, in my capacity as a witness, I narrated our performances of maize cultivation.

Since this was a joint performance, the voices of others appear, like Don Chebo, Juan and others who the reader will meet in the next chapters. To a lesser extent and more discreetly, the voices of other scholars come in to strengthen the narrative. The same happened with theoretical approaches and concepts that inspired me to write the account of each chapter and became the fine darning in shaping my subsequent chapters. You, the reader, are also present in the following chapters since I frequently invite you in and share my reflections with you, imagining your reactions.

I have several justifications for writing in an accessible style. One of them is my concern for Tzeltal peasants and their conflictive situation in life. I believe that the eventual resolution of their situation needs the involvement of scholars and many more people – so the more the thesis is read, the better. Another reason is my view that researchers must make their work accessible to society, and I find that a descriptive narrative is a good way to achieve this. Yet another reason is that scientific texts, especially those of scientific popularization, which use literary and poetic tools, are pleasant and entertaining to read (Jacob, 2005).

All these concerns and considerations together with academic, scientific and methodological approaches molded and shaped this thesis. They created the conditions for me to become a scientist of everyday life, a reflexive witness of a reality in which I participated and which ended up affecting me. It is a reality I have come to know through the Tzeltal peasants, for whom I developed a feeling. Above all, I learned to listen to and share their daily concerns. All these aspects together make this thesis a testimony to be read by anyone who wants to know about the different performances of making *milpa* and all else that can be seen through the windows of those performances.

³⁰ Testimony as a term has been associated with works from postcolonial and subaltern approaches. I did not take the theoretical assumptions underlying these approaches. I am using this term because the definition of testimony is a “book or a book-length pamphlet written in first person, where the narrator is the protagonist or witness of the events s(h)e recounts (Beverley, 2004:30-31). This is the case of this document.

1.4.3 The chapters of this thesis

Each chapter presents a facet of the maize cultivation performance and offers an opportunity to explore the Tzeltal life situation. In Chapter 2, I present you the details and intricacies of the research process like a path through a life experience to evidence the context and methodologies in which this thesis was elaborated.

Chapter 3 presents the first facet of performance: land preparation. In this facet, Tzeltal peasants respond to their agronomic and political contexts. These contexts explain how and why performers choose between two variants of land preparation, slash-and-burn *versus* slash and mulch. It becomes clear that their selection depends primarily on the peculiarities of the plot they cultivate and the intricacies of their land property and land management conflict. Thus, land preparation practices open a window to learn more about this conflict and their concern to be violently evicted from their land. Both agronomic and political contexts affect the performance of land preparation.

In Chapter 4, the second facet of performance describes how we arrived at the sowing date. In this facet, sowing is considered a situated and particularized action in which sowers negotiate with the circumstances of their *milpa*, as well as of their life. These circumstances are categorized as environmental, technological and social, and the negotiation is particularized as coinciding, adjusting and agreeing. The description of the performance shows in detail how Tzeltal peasants negotiate the sowing date by making it coincide with their environmental circumstance, by adjusting it to their technological circumstance and by making it agree with their social circumstance. The performance of this negotiation, in which several circumstances are in play, resembles juggling, where several balls are thrown into the air alternately.

In Chapter 5, the practices of weeding and bending become opportunities to present another facet of performance as a situated and particularized action. This facet shows, by means of a chronological monthly narration, how Tzeltal peasants postpone or delegate these practices because of the intricacies of other life events that occur parallel to the maize cultivation practices. The performances of weeding and bending thereby become windows through which it is possible to see how farmers deal with problems that are part of their everyday life. The performers' delegation or postponement of weeding and bending appear as juggling tricks (holding onto or passing on the juggling balls) they use as strategies to be able to continue facing their everyday life problems.

In Chapter 6, the reader can delve into the last facet of performance and explore the different dimensions of harvesting. In this facet, performance is a situated and particularized action that reflects and evokes the meaning that

Tzeltal peasants convey onto *ixim* in their lives. This chapter starts with a description of the physical dimension of harvesting. Through the practices of harvesting, we enter into a second dimension that is conformed of several reflections around maize yields, production, consumption and daily problems. Which brings us to the third dimension of harvesting, the evocative dimension in which the reader will realize that maize is not only a crop but also food and a life companion. The performance of harvesting has these three dimensions and shows the reader how performers juggle with the dilemma of the sense *versus* the senselessness of making *milpa* in this area.

The four facets make up the definition of the performance concept that I use in this thesis. They are joined together by the metaphor of juggling. The use of this metaphor facilitates the invocation of our making *milpa* in that summer of 2007. Some people consider juggling a technique and others a skill, but I find it helpful to illustrate how living is actually a multi-tasking art. The metaphor appeared when I was writing Section 4.6 of Chapter 4 and I remembered those occasions in my life in which I also had had to manage several issues at the same time. In those moments, I had felt like a juggler throwing balls up into the air trying to interplay them in synchrony. Later, I integrated the metaphor into the other chapters, as I felt it could very well capture performances as situated and particularized actions in which Tzeltal peasants juggle with the intricacies of their everyday life situation.

The concept of performance and the metaphor of juggling appear throughout the different sections of this thesis, from this Introduction to the Conclusion. Especially in the concluding Chapter they are extensively used to answer the three questions I finally ask in this initial presentation. The first question focus on how farming is interwoven with life through many sorts of juggling performances, and is the following: how do Tzeltal peasants make *milpa* while making their lives in la Mera Selva? The second one reflects on the life situation of *Tzeltal* peasants and their *milpa*, and asks: what do these performances show about the life situation of Tzeltal peasants? The third question is about the concept of performance and the metaphor of juggling: what do performance concept and juggling metaphor seek to capture to make this testimony different from other documents that talk about maize, *milpa* and indigenous peasants' life? The answers to these questions will come to the reader while (s)he immerses her/himself in the subsequent chapters and joins me in the experience of making *milpa* and making life in the heart of the Lacandon Jungle.

CHAPTER 2

THE JOURNEY OF A RESEARCH PROCESS

2.1 YOU MAKE YOUR WAY AS YOU GO

To walk the paths of La Mera Selva is to make way as you go, as Antonio Machado wrote (1991:102). The reason is that its winding paths covered by green canopies and blue skies have been traced and erased through time by people, animals and loads that traverse them every day. However, despite the clear trails made by countless footsteps, one often ends up deviating from them. One may have to go around the mud created by night rains, jump over recently fallen tree trunks blocking the path, evade the thorny lianas that tear one's clothes and skin and avert the slippery muck left by the footsteps of those who walked there before. Moreover, one may either enjoy the contrasting beauty of the walk, the company and the scenery, or suffer by it. One may experience the journey one way, and later think about it and evoke it in a different way...so different that one could actually write two contrasting stories about the same journey.

Like the paths of this region, the life experience this thesis is based on was created along the way. It was a doctoral research process that was traced, one step at a time, through the particularities and intricacies of its own journey and not as a result of natural laws (Mol, 1999:75). To invite you, reader, to walk it with me while I go about reconstructing it implies acquainting you with the questions and reasons that led me to write precisely this document, and not a different one (Law, 2008). They describe the negotiations I took up with different actors, with various theoretical approaches and methodology tools, with life events and with feelings, reflections and invocations. All of these constituted the context and methodology that in the end defined this PhD thesis. So let us start on our journey, as we have a long way to go.

2.2 STARTING TO WALK THE PATH

A journey can be started many ways. Yet I think the best way is by learning a little about your travel companions. In this section, I will expose how I met my companions and under which terms our relationships were created. At the same time, I will address the social circumstances of my region of study and of academia, which both defined the way I prepared to go down this path.

2.2.1 “It’s a matter of getting to know each other”

They say that one of the best ways to get to know someone well is to travel with them, as daily interaction allows you to learn more about them in different settings. That was the case with all my travel companions in this doctoral research process. I got to know them progressively better during our journey and their participation greatly defined this process.

About maize

My oldest travel companion is maize (*Zea mays*). Although my first encounter with it could take me back to the day I was born in a country named Mexico³¹, I would rather go back to the first time I cultivated it while I was going to university to pursue a degree in Crop Science. In those days of 1994, when I was learning about generalities of agronomic techniques, maize was my Guinea pig. At the end of my degree program, I chose the diversity of cultivated plants to be my research topic since it contemplated the traditional *milpa* and the different varieties of maize cultivated on it.

During the years I worked professionally on said topic, I started to regard maize in different ways. I first experienced it as plant genetic resources³² conserved *ex situ* in the form of seeds inside of the cold chambers of the Maize Seed Bank of the International Maize and Wheat Improvement Center (CIMMYT). Later I perceived it as maize diversity from the Yucatan Peninsula that was characterized and evaluated for on-farm conservation purposes (Camacho *et al.*, 2004). Subsequently, I thought about maize traditional varieties as landraces that need to be defined based on certain criteria (Camacho *et al.*, 2005). Finally, I practiced maize as the agrodiversity³³ that peasants maintain through interaction of their practices with their abiotic and biotic environment.

All these experiences got me interested not only in the various types of maize but also in the people who grow them. On those occasions, I interacted with peasants like Don Esteban Cuxim (Mayan peasant from southeast Mexico) who, growing the largest variety of maize in his community carried out a host of activities of different nature. Such great diversity and so many activities that I went on to believe that the relationship between Don Esteban (peasant) and the plants he cultivated (genetic diversity) until he died must have been of a virtuous nature. It was virtuous in the sense that they both had managed to coexist symbiotically.

³¹ As I commented in Section 1.2.1, maize has a very important role in Mexico.

³² Plant genetic resource is defined as “any genetic material of plant origin of actual or potential value for food and agriculture” (FAO, 2002).

³³ Agrodiversity is the “variation resulting from interaction between plant genetic resources, the abiotic and the biotic environment and management practices” (Almekinders *et al.*, 1995).

Virtuous and therefore relevant to study and to find out what my role was going to be if I wanted to maintain this relationship.

This question was so important and its answer of such great relevance to me that I thought it was pertinent to answer it by way of a PhD research. Thus, the answer would not only allow me to delve deeper into said relationship but also to define the future path of my research topic. I could achieve all of the above if I invited my old travel companion in, the Mexican maize. I recognized, however, that the two of us could not walk this path by ourselves and that I needed to invite other companions in.

Wageningen University

First I invited Conny Almekinders and Gerard Verschoor to become my supervisors. They are scholars who work at the Department of Social Sciences at Wageningen University in the Netherlands.

My first acquaintance with Conny was through a book she wrote, in which she built bridges between scientists and farmers to collaborate in farmers' seed production (Almekinders and Louwaars, 1999). I met her in person during a three-month visit to Wageningen in the autumn of 2004. A woman of slim and firm build, Conny schooled me in participatory techniques. Due to her rational but perceptive, blunt but sincere way of thinking, we were discouraged about the achievement of the ultimate goals of crop diversity conservation. The generous freedom she offered me also motivated me to introduce myself to the various communities and personalities that constitute the Social Sciences department in Wageningen. Through this introduction, I became acquainted with experiences of PhD students that I wished to emulate. These students had professional technical-biological backgrounds and pursued interdisciplinary doctorates through research seeking to integrate biological and social elements, research and development. Finally, thanks to Conny I met Gerard.

Gerard introduced me to the Rural Development Sociology group of Wageningen. He welcomed the idea of participating in my research project. As for myself, I felt comfortable to have his involvement in my research, not only because of his solid education in social sciences but also because of his Mexican heart, shaped by a life in Mexico City during his childhood and adolescence.

At the end of my stay in Wageningen, I drafted a research proposal. The main idea here was to study the relationship between traditional knowledge and crop genetic diversity working together with peasants through participatory plant breeding. The goal was to contribute to the understanding of the evolution of crops and to the development of peasants who cultivate them.

Thus, it was time to invite other travel companions in, the peasants.

Ángel and CETAMEX

Before contacting the peasants directly, I decided to involve another travel companion, a non-governmental organization. My reasons were several. The first one was that I had learned from previous professional experience that in order to start “working with peasants” it was easier to connect with a well-established and organized peasant group that already had a working relationship with a non-governmental organization (NGO). The second reason was related to the limited nature of my work experience with NGOs and my interest in expanding it by getting involved in development and intervention activities. The third reason was my interest in learning more about the business of NGOs as another potential work opportunity.

In early 2005, I contacted Ángel Roldán Parrodi, director of *Centro de Tecnologías Apropriadas a México (CETAMEX - Center for Appropriate Technologies, Mexico)*. *CETAMEX* is an NGO dedicated intermittently since 1980 to providing agroecological innovations to peasants. The first time I spoke with Ángel was on the telephone, where I laid out to him my intention to work with participatory plant breeding issues. He replied that at that moment *CETAMEX* was conducting a project with a peasant organization in the Lacandon Jungle of Chiapas, which did not involve my area of interest. In addition, he thought it would be very complicated for me to work there due to the remoteness, isolation and conflict in that region. Nonetheless, he left the door open to talk about my PhD proposal.

When I presented my proposal to him, he played a video about his work in the Lacandon Jungle. The video featured peasant testimonials of how, by applying various agroecological innovations, they had improved their ways of making *milpa*, managing their pastures and producing vegetables. I gained a positive impression from the work *CETAMEX* was doing with the peasant organization. So was my impression of Ángel, a man in his seventies with a long white beard and a priestly appearance. His conversation was laden with intelligent remarks and anecdotes that made me believe he was able and willing to teach me.

Although *CETAMEX* was a small NGO consisting of Ángel, director, Lulú, secretary, and temporary fieldworkers, Ángel was considered a pioneer in the world of Agroecology NGOs in Mexico. Moreover, talking to him in more detail I discerned not only knowledge but also warmth, patience, trust and empathy between us. Thus, we began to work on applying for financing from the Mexican federal government for development projects. It took until July of 2005 for something to materialize. I received a call from him inviting me to conduct a workshop on participatory plant breeding for Tzeltal peasants of the Lacandon Jungle. This topic happened to be the new interest of

government agencies and *CETAMEX* had integrated it into its portfolio of agroecological innovations. Thus, Ángel and *CETAMEX* not only became travel companions in my PhD research process, but I became their companion in the intervention process the NGO was conducting in the Lacandon Jungle.

Juan and Don Chebo of La Mera Selva

I visited La Mera Selva for the first time when I taught that workshop on participatory plant breeding. My first impression was that it resembled a natural paradise in which indigenous people lived in harmony with nature. There, I finally met the two Tzeltal peasants who in the end turned out to be my main companions and my case studies in this thesis: Juan and Don Chebo. They were promoters³⁴ in the field of Agroecology of the Candelaria Region in the *Asociación Rural de Interés Colectivo Unión de Uniones Independiente y Democrática (ARIC UU ID* - Collective Interest Rural Association, Union of Unions, Independent and Democratic). They came from one of the six regions within the *ARIC UU ID*, the peasant and indigenous organization they belong to, and they participated in Agroecology, one of the seven subjects the organization worked on.

The workshop took place in Rancho San Martín, where Juan lives with his wife, Pancha, and their young daughter, Elisabet. During the four days of the workshop, we visited some of the *milpas*, bean, coffee and sugarcane plantations, pastures, creeks, caves, the *Montaña* and the water mill that constitute 30 hectares of what, from the beginning, seemed to me an idyllic Rancho San Martín. Juan was our guide, a man in his thirties of slender and strong body and tanned skin due to all the physical activity under the sun. His wife, Pancha, a tanned, chunky woman with a big smile and a few years younger than Juan, was busy the entire time preparing five meals a day for all nine of us workshop participants. Little Elisabet sometimes helped her mother in the kitchen, and sometimes joined us in various workshop activities.

Juan's participation in the workshop was brief, expeditious and discreet. Don Chebo, instead, was the most outspoken, demanding and challenging in the group. A middle-aged man (hence the use of "Don" before his name) of small square body build and impulsive speech, complained that I spoke too much and demonstrated too little. On account of his curious and adventurous spirit, pronounced by his thick eyebrows, he was the one who showed most interest in implementing the plant breeding techniques I had proposed, and he offered a piece of land in his Rancho Salvador Allende for

³⁴ Promoters are peasants selected by their community to attend workshops on different subjects (like agroecology, cattle management, human rights, health, etc.) provided by outside actors such as NGOs, the government and other institutions.

which reason I was immediately interested in working with him.

I concluded the workshop with several impressions that, as time went by, I discovered had not been accurate. The first one was that there had been a good understanding between the promoters and me regarding my teachings (theory and practice of maize plant breeding). So good, I thought they had understood in four days what had taken me a Bachelor's and a Master's degree to learn. The second impression was that relationships between the promoters themselves and *CETAMEX* were well grounded and consolidated within a cordial and congenial setting. They had shown great respect and openness to negotiate any issue. The third impression was that they had shown interest in the subject matter I had presented to them. So much so, that we agreed on dedicating a plot to cross-pollinating two of their local varieties of maize.

As the reader will learn in the following paragraphs, these impressions were inaccurate. They were based on assumptions and expectations rather than evidence. Over time, I realized the only true evidence was their response to my invitation to participate in my PhD process. At the conclusion of my workshop, after having presented them with my doctoral project, Manuel Clara, coordinator of promoters, said "*Ingeniera*,³⁵ it's a matter of getting to know each other since this is your first visit with us here in La Mera Selva." Thus Manuel was making me aware that it was going to be a long process to get to know Don Chebo and Juan, and also Ángel-*CETAMEX*, Conny, Gerard, maize itself, myself, and all the other companions that joined me in my journey.

2.2.2 We learn from our mistakes

In September 2005, I officially started my PhD program in Wageningen University. During that first year, I had the opportunity to interact further with my travel companions. In the case of Ángel-*CETAMEX*, Don Chebo and Juan, it was through a five-day follow up visit to some of the communities of the Candelaria Region of *ARIC UU ID*. Thanks to this visit, I was able to reflect upon the implications of carrying out the fieldwork phase.

At the same time, I lingered in the academic worlds of Conny and Gerard for almost a year, immersing myself in different theories, approaches and methodologies, writing and rewriting my doctoral project. I will expand some more on each one of these experiences below.

³⁵ In rural Mexico, people address external actors who arrive to make different agricultural interventions, like fieldworkers, with this title.

Highs and lows of a follow-up visit to La Mera Selva

In January 2006, I made a follow-up visit to the Candelaria Region of *ARIC UU ID*. Unlike my first visit, Ángel did not come with me on this occasion. He could not travel because he had started to work as director of a network of rural development NGOs (of which *CETAMEX* was part) to confront *CETAMEX* with the fact that they were running out of funds. Nevertheless, he facilitated my visit to the extent of his possibilities. This was an indication of the role Ángel-*CETAMEX* was going to play: facilitating things to the extent of his possibilities and opportunities, but not getting too involved.

The purpose of this visit was to learn more about the region, and while I was there, I also got to know Don Chebo and Juan a little better. I landed in a small aircraft on the airstrip of Rancho Salvador Allende, where Don Chebo and Manuel Clara were waiting for me. We walked across the large community pasture and arrived at the area of this 300-hectare farm where ten families had their homes. During my two-day visit, Don Chebo showed me his different management areas (see Section 3.4). He took me to the cross-pollination plot to show me it had not worked out, because the sowers did not cover the seeds during the sowing. He showed me his *milpa* and with a mocking smile, which I saw on many more occasions, said, “You see, on my *k’altik* I have already been crossing the different types of *ixim*.” Finally, he showed me the velvet bean plants (*Mucuna pruriens*) and the fodder bank on his *k’altik*, all *CETAMEX* innovations he had implemented in Salvador Allende.

From there I started walking with Manuel, the coordinator, to San Martín. It took us three hours to get there, which, walking through the mud seemed to me like an eternity. San Martín was on our way to *Ejido* Amador Hernández, the largest in that area, and *Ejido* Guanal, the oldest. In fact, the strategic location of Rancho San Martín as a crossroad was one of the reasons I ended up working with Juan. The other reason was that, being such a hard worker, he was implementing in his own way the innovations *CETAMEX* had proposed to him.

When we arrived in San Martín, we found him installing an electric fence that Ángel had provided him for the sustainable management of his pasture. He showed me his cross-pollination plot and then began to cut the tassels of some plants to show me he was following my recommendations. I told him it did not make sense to cut them since the tassels had already released the pollen, and cutting them would not control the open pollination anymore at that point. He stared at me in surprise, and I realized I had not expressed myself as clearly as I thought during the workshop.

On that trip, I had the opportunity to visit the two additional communities named above, *Ejido* Amador Hernández and *Ejido* El Guanal, which entailed walking through muck, rivers and over shaky bridges. Manuel

Clara and Héctor, promoters of those communities, had not implemented my technical recommendations and frankly did not seem interested in working with me. Unlike Don Chebo and Juan, they actually did not show me how they were applying the innovations proposed by *CETAMEX*, but like the former two, they made positive and enthusiastic comments about the new techniques. So positive and enthusiastic that I thought this demeanor was perhaps due to the fact I was going on behalf of Ángel and his NGO. Thus, I had learned a little more about La Mera Selva. In fact, with the information I gathered, I reflected upon the implications of implementing my fieldwork phase here.

Reflections based on a follow-up visit

When I went back to Wageningen, I shared my thoughts with Conny and Gerard. I focused on the characteristics of the region and the advantages and disadvantages in implementing my fieldwork phase there.

The first characteristic is the biological-ecological and social-historical importance of the region. It is located in one of the biologically and ecologically most important areas in Mexico, for which reason in 1978 it was declared *Reserva Integral de la Biósfera Montes Azules (RIBMA - Montes Azules Biosphere Reserve - DOF, 1978)*. As if this were not enough, it is a socially and historically relevant area. Located in the region where the ancient Maya Civilization flourished, it is also the cradle and stronghold of the *Ejército Zapatista de Liberación Nacional (EZLN³⁶ - Zapatista National Liberation Army)*, a significant social movement in Mexico's recent history. These aspects make the region an important, but at the same time complex place to study.

The second characteristic is its isolation due to the lack of tarmac roads or dirt roads. Besides having to travel one thousand kilometers, almost fifteen hours, to get from Mexico City to towns such as Comitán de Domínguez or Ocosingo, it is difficult to travel the last kilometers from these towns to other communities of La Mera Selva. In fact, they are the entrance gates to the whole region, and Ocosingo is the municipal seat. There are two types of transportation to travel from those cities to the communities. The expensive option is taking a 30-minute flight in a small airplane that costs 2,500 Pesos (around 200 Euros) to any of the various communities of the region (see Section 5.2.9). The inexpensive option entails traveling in a stake-bed truck for six hours from Ocosingo/Comitán to San Quintín and from there walking several kilometers on paths often blocked by various obstacles. For a novice like me, those paths that connect the different communities are difficult to walk on. All of the above are reasons why few people are inspired to visit the

³⁶ For more information see footnote 13 in Chapter 1.

area.³⁷ This, in turn, leads to the fact that little is known about the region.

The third characteristic is related to political dynamics in the communities. During this follow-up visit, the imminent split of the Candelaria Region of *ARIC UU ID* was a repetitive topic in everyone's conversation. Besides the internal problems of this peasant organization, there were those with and pertaining to other organizations and movements in this region. When I arrived at *Ejido* Guanal, for instance, I simply could not sit down and wait for Héctor in his house because the Zapatistas were holding an assembly in the house across from his, and they were afraid I was a spy. This made me perceive the region as a politically volatile place, to the extent that ongoing political events could explode in front of my face at any given moment. That did worry me because of the possible impact it could have on my work. At the same time, I was reassured that with this dynamic it was going to be very hard not to address the social issues, in spite of my education in crop science and genetics.

This high explosiveness touched on the fourth characteristic that had to do more with my research project. Under such circumstances, how viable was it to think about research that simultaneously sought to conduct development activities? On the one hand, it could be said that the conditions for stability and harmony were not there, but on the other, people's life situations and their readiness were an invitation to do something. Furthermore, how viable was it to do anything with *CETAMEX* dynamics consisting of only a few months of work per year, therefore hindering any long-term effort? On top of this, it became evident during this visit that there were internal tensions between the promoters. I got the impression that they expected something different from agroecological innovations in their work with *CETAMEX*. All this provided an uncertain scenario for conducting research and development activities alongside each other. However, it was the only way to proceed.

This last item (working with *CETAMEX*) had to do with my access to the region. It was through Ángel-*CETAMEX* that my access and interaction with the peasants of that region had been made possible. Since *CETAMEX* worked with the *ARIC UU ID* and not with the *EZLN*, I was not going to have access to the latter. Moreover, I was not going to have access to every single person within the *ARIC* organization either. I noticed, for instance, that in Amador Hernández only some of the members, the promoters, worked with *CETAMEX*, and I knew that those were the only ones there who would work with me. Aside from that, our interaction was going to be subject to the roles both *CETAMEX* and promoters had already adopted towards those organizations some time ago.

³⁷ The case of Leyva and Ascencio (2002), who write about *Ejido* Guanal, is an exception.

When I shared these thoughts with my supervisors, they said I myself was the best person to make the decision whether or not to carry out my fieldwork phase there. They were not familiar with the work of *CETAMEX*, nor had they worked in that area. Thus, this became the first of many times I had to make a decision on how to proceed, and they supported it. My decision consisted in interpreting these advantages/disadvantages as part of the challenges any research project has to face.

The worlds of Wageningen

I lived for almost a year in the academic world of Wageningen. During that time, I participated in various activities such as classes, seminars, workshops, lectures, discussions and meetings with the research groups they belong to. Through these activities, I was exposed to different authors and scholars who managed different concepts, carried out critiques on other works and developed different methodological approaches. All of this started to mold my way of thinking about social sciences research and scientific work. First, Gerard provided me with a chart that identified the different currents in social sciences research with which I was starting to be acquainted and associated. Second, he gave me material that would refine my critical position concerning scientific work as an objective, neutral, and apolitical activity, and strengthen my aspiration to approach the peasants in a different way.

The philosophical and methodological works that Gerard pointed out to me on this chart were useful to identify the two research groups with which I ended up associating. These two research groups are Technology and Agrarian Development group (TAD), of which Conny is a member, and Rural Development Sociology group (RDS), to which Gerard belongs. From a micro-level perspective, much of the work of both groups focuses on the changes that come with intervention, and highlights the conflict resulting from the confrontation of different types of knowledge. However, each group approaches its topics of study in a particular way. TAD, headed by Paul Richards, follows the Durkheimian tradition of seeking the mechanisms that explain social facts and therewith establishes its interest in focusing on causal relationships through methods such as Critical Realism, tools like technography³⁸ and models like Context-Mechanism and Outcome. RDS, on the other hand, was constituted under Norman Long around the Actor Oriented approach as a methodological tool that highlights the agency of actors and the relational and confrontational character of social

³⁸ Jansen and Velema (2011) consider technography as “an interdisciplinary methodology for the detailed study of the use of skills, tools, knowledge and techniques in everyday life”. They also indicate that it is useful “for the integrative study of social-technical configurations” because it “focuses on how teams or networks of farmers, technicians and engineers, amongst other actors, solve problems”.

interactions. Unlike TAD, they do not attempt to identify causalities and they do not acknowledge the idea that (social) mechanisms exist. All these were important influences on my scientific thinking about the relationship diversity-peasant. Yet they were not the only ones.

Gerard supported my questioning of scientific work as an objective and neutral activity, which was generated after I read “There is a Scientific Method: History and Reality” by Ruy Tamayo (1998). Gerard himself is involved in questioning this neutrality and objectivity and is in favor of carrying out this scientific work differently (Verschoor, 2009b). His recommendation to read authors like Keller and MacClintock (1983), Latour (1988) and Stengers (1997) made me perceive scientific work in a different way, in which it is the result of negotiation processes with the different elements involved. These negotiation processes are affected by intuition, sensibility, emotions, *jouissance*³⁹ and political interest. Moreover, those readings offered elements to think about scientific work as a negotiated learning process in which the person who is seeking to learn has to be affected by, or develop a feeling for what (s)he wants to learn. In doing so, s(he) affects or generates a feeling for what is learned. This way of thinking about research was a novelty for me, as I was overly used to accepting the assumption of an objective and neutral kind of science.

The doctoral project

The original title of my doctoral project was “We Learn From Our Mistakes: Learning about the diversity of crops cultivated by Tzeltal peasants of the Candelaria Region of the Municipality of Ocosingo, Mexico, through joined experimentation.” “We learn from our mistakes” is a saying used in Mexico to underline that mistakes are important in the process of learning. Gerard suggested I use it since it captured the main idea of my research: to implement experiments with Tzeltal peasants around the different crops they cultivate with the idea of learning together, in spite of the risk of making mistakes.

In my proposal, I interpreted joined experimentation as a process in which the researcher learns by being affected while at the same time s(he) is developing a feeling. This means that in order to learn, it is necessary to affect but also to be affected (Latour, 2004) and to develop a feeling (Keller and MacClintock, 1983).

In my research project, I stated that this approach would allow me to study the relationship between crop diversity and peasant practices in a novel way. Unlike other studies, my research would consider the contingent,

³⁹ Stengers (1997:114.6) cites Kuhn who compares scientists’ *jouissance* with that of a puzzle solver who devotes her/himself to the research solution like a puzzle addict.

complex, dynamic, multiple, contextual and holistic nature of this relationship. To accomplish that, I needed methodological tools that would allow me to implement that research. In that sense, both my supervisors played an important role in my selection.

My selection consisted of the actor-network theory (ANT) applied by Gerard in his PhD thesis (Verschoor, 1997) and the action-research (AR) addressed by Conny in her recent works (Almekinders *et al.*, 2009). I justified that selection for my research project in the following terms: “Action research will consist in applying a tool that generates information where peasants and researcher will experiment, that is negotiate, plan, implement and reflect with peasants’ portfolios of crop diversity. At the same time, the actor-network theory will be the tool to help describe the way in which different actors (peasants, as well as plants and researcher) interact during experimentation and the reasons why they interact in such way” (Camacho, unpublished). With this, I was aiming at favoring the peasants’ voice over literature that talked about them in relation to diversity.

In my final project, I integrated yet another concept in an overly intuitive way. This was the concept of ‘performance’ that Richards (1993) proposes for studying agriculture, especially the contingent character of agricultural practice. Performance later became the main concept of this thesis. Having developed the research project, everything pointed at the next step: traveling to the research site to begin my fieldwork.

2.3 WALKING THE PATHS OF LA MERA SELVA

I visited the region several times from August 2005 to May 2009. However, my most intense interaction with the Tzeltal peasants took place during the period of September 2006 to December 2007, when I went there on a monthly basis. These monthly visits consisted in living in several of their communities for around 20 days per month, and during the remaining 10 days, taking care of various matters in Ocosingo, San Cristóbal or even Mexico City. During this period, several events were crucial in defining the direction of the research process. Below I will narrate each one of them.

2.3.1 “Maize was infected with AIDS”⁴⁰

This was the welcoming statement I got from Don Chebo when I arrived in Salvador Allende in mid-September 2006 to start the fieldwork phase of my PhD program. Although I remembered that the crops on the cross-pollination plot had failed to grow, I was worried that unsupervised crosses could have been the cause of this.

⁴⁰ Acronym for Acquired Immune Deficiency Syndrome

While we were inspecting the maize plot that had “AIDS” with the other promoters of the New Candelaria Region,⁴¹ Don Chebo brought this up again. However, this time he elaborated saying that, following my recommendations, he had pollinated his maize plants manually and these had contracted “AIDS or gonorrhoea.” He said he did not know the *gringa*⁴² who had infected them. Besides, he had not been able to harvest any maize at all because of the disease. The rest of the promoters laughed. For me as a researcher, the correct way to react to that was to inquire, investigate, diagnose and arrive at a plausible explanation.

As the months went by and I made more visits to the different communities, I found out the disease had only affected the maize plants of Don Chebo and his Salvador Allende community. I also discovered that the so-called “AIDS” in Salvador Allende was a fungal disease complex⁴³ also known as *uch* in *Tzeltal*. Besides this disease, maize seeds had been affected by a massive rat attack after they were sowed. I learned that these attacks were common in other communities, but specifically during certain years with special climatic conditions. Being aware of the above, I tried to find the agronomic solutions to such problems, but stumbled on two hurdles. The first one was that they had already been implementing the technical solutions I encountered that encouraged preventive practices such as the use of resistant materials, crop rotation or residue burning. The second barrier, to my surprise, was the little interest people of Salvador Allende and Don Chebo himself showed in the subject. As they let me know, they had problems around *ixim* that were more urgent, such as the shortage in supply needed to meet their yearly maize consumption.

I learned about this problem during the first community meeting I attended, after four months of periodic visits. I already knew the 67 people who lived there a little better. Sebastián, Don Chebo’s oldest son, pointed out the problem to me with all the politeness, straightforwardness and intelligence that suited his 40-year-old, tanned, small body. In the name of the entire community, he urged Ángel-*CETAMEX* to look for financial help or a loan that would allow them to buy the amount of maize they had a shortage of. As for me, I promised him I would tell Ángel about this as soon as I spoke with him. Even though I could only be their messenger, I looked for organizations and institutions that would offer them support. Aside from being curious about this problem, the fact that I was living with them on a

⁴¹ By that time, the number of communities constituting the Candelaria Region had been reduced. This will be discussed in more detail in the following story.

⁴² A word used in this region and in many parts of Mexico to refer to someone who is from outside of the region or Mexico, in other words, a foreigner. Some Mexicans use it when they talk about USA citizens.

⁴³ Caused by Northern Corn Leaf Blight (*Helminthosporium turcicum*) and Grey Leaf Spot (*Cercospora zeae-maydis*), that were identified based on CIMMYT (2004:17,34)

daily basis eating their maize developed a feeling in me that forced me to get involved in trying to find a solution to their shortage problem.

Therefore, I moved away from the particular genetic and general agronomic issues of maize and engaged in the search for help with their maize supply. As far as Ángel, he did not get involved in this. He told me *CETAMEX* had no funds, and if they had them, they would not allot them to that type of needs that were not considered functions of this agroecological NGO. I started a procession between state government agencies, lending institutions and NGOs, until I arrived at the Ocosingo Parish. The people from Salvador Allende ultimately accepted help from the latter because they deemed it politically convenient. I must admit that my search got their attention and they started giving me a more fraternal treatment.

That experience was the first proof of what it meant to develop a feeling for the people of Salvador Allende and to let myself be affected by their problems. It meant that my research topic would not only be limited to participatory plant breeding and maize diversity but was now expanding to other maize problems like diseases and shortage. The foregoing translated into ultimately not only talking about diversity or participatory plant breeding in this thesis but addressing *ixim* interwoven with *milpa* and life of the indigenous peasants. Yet sometimes it is not just a matter of letting ourselves be affected; there are events that affect us even though we do not have a say in them, as the following event will illustrate.

2.3.2 The Meeting at El Chorro

On March 25 and 26, 2007, the *ARIC UU ID* meeting took place in *Ejido El Chorro* – better known as the ‘Meeting of el Chorro.’ A few days prior to that, Don Chebo got ready and read the bylaws that sometime in the past had served to establish *Quiptic Ta Lecubtesel* (the organization *ARIC UU ID* originally came from). Many people of the Candelaria Region and from all over the Lacandon Jungle left their business pending to attend the meeting, in which the new directives were going to be defined.

Mariano (Don Chebo’s nephew and the elementary school teacher in Salvador Allende), a man of slender body with a calm face, told me what happened in the meeting with a precision typical of someone who teaches children. As it stood, two groups confronted each other, and each of the groups ended up choosing their own directives. I was already aware of these two groups. They were the same ones that caused the Candelaria Region - which I first saw in 2005 - to split in two regions (Candelaria and Amador) when I first started my fieldwork phase in September 2006. Months later, the conflict had fragmented the organization that these regions were part of into what they called *ARIC*

UU ID COCISEL and *ARIC UU ID COAO*.⁴⁴ This was just one more on the list of breakups suffered since *Quiptic* was founded in 1975, creating several “sister organizations” like *ARIC UU Oficial* (Official), *ARIC UU Histórica* (Historic) and the Zapatista National Liberation Army (*EZLN*),⁴⁵ as Mariano, who had lived through them all, said.

Several people told me the reasons for the conflict. According to Mariano, the division was caused by the close ties one of the groups (the opponent of the Salvador Allende group) had to the government.⁴⁶ He actually told me about the selected leaders who held government positions and only defended their personal and the government’s interests. Furthermore, he mentioned the intention of those leaders to become candidates to positions representing the people, like local legislative representatives or municipal presidents. However, others indicated that this division also had to do with the relationship to movements opposing the government (of which *EZLN* was the most evident); the political tendencies of the two coalitions they belonged to (*COCISEL* and *COAO*); the interference of *ENLACE*⁴⁷ consultants (the other NGO working in the area) and the upcoming state and municipal elections.

I did not know which explanation was the most plausible, and even though I started my PhD fieldwork phase working with one region of one peasant organization, in the end I was interacting with two regions of two different peasant organizations. Interaction was not easy, and it became even more difficult with the position Ángel-*CETAMEX* adopted in the face of such breakup. In spite of both regions’ explicit requests for *CETAMEX* to choose only one of them to work with, Ángel insisted on continuing to work with both. He argued that unlike *ENLACE* (who decided to work only with the

⁴⁴ Those were the names the two new organizations were given. The foregoing refers to the coalitions of organizations they linked themselves to. The first one is the *Coalición de Organizaciones Campesinas Independientes de la Selva Lacandona* (Coalition of Independent Peasant Organizations of the Lacandon Jungle – *COCISEL*). The second is the *Coalición de Organizaciones Agrícolas de Ocosingo* (Coalition of Agricultural Organizations of Ocosingo – *COAO*). The *ARIC UU ID COAO* became known later as *Quiptic Ta Lecubtesel COAO*.

⁴⁵ Legorreta (1998) addresses the history of this organization in great detail, from its beginnings as *Quiptic Ta Lecubtesel*, its alliances and divisions, to 1995, after the *EZLN* uprising. Other authors like Vos, de (2004:247-285) include it with those social actors which have molded life in the Lacandon Jungle.

⁴⁶ This term appears several times in this text. Peasants refer to it as an actor that represents decisions and actions taken by municipal, state and federal authorities in all three Powers (Executive, Legislative and Judicial).

⁴⁷ *Enlace y Comunicación A.C.* is a non-governmental organization that started to work with communities in the region in 2001. Among its founders is Javier Vargas (a key actor in spreading the Theology of Liberation in the Lacandon Jungle). Currently this NGO acts as consultant to *ARIC-ID* in matters of production, health and politics. For the above, it receives funding from the Basque Government and from philanthropic ecclesiastical organizations like Brot für die Welt.

Candelaria Region) *CETAMEX* was an NGO that promoted agroecological innovations that were beneficial to all peasants (disregarding which organization they belonged to). Thus, the technological aspect of our interventions supposedly made them apolitical in the face of internal battles between regions and organizations.

Aside from that, Ángel was convinced that the breakup weakened both Regions as far as dealing with a shared set of problems and that we were going to be able to unite them. The NGO's position was taken in with mixed feelings. That is to say, they accepted to continue working with *CETAMEX*, but in reality, they put obstacles in the way of specific activities. This meant that in the end I worked with people or communities that chose to accept me, rather than with promoter groups. This is what apparently happened in Salvador Allende. According to Mariano, it was Lázaro, also Don Chebo's son, a man of explosive personality with a political mind, who said, "The *Ingeniera* looks like a good person and I think the community can work with her." This was also the case in San Martín, where Juan, Pancha and their little daughter Elisabet opened their home to me.

Hence, our "neutral" position played out its consequences on our relationship with the two regions and the two organizations. As far as Ángel-*CETAMEX*, it proved our role in these regions was complementary rather than strategic.⁴⁸ It was easily shoved aside and it only resurfaced when resources of some sort were needed (like grants for promoters, seeds, etc.). I had headaches trying to justify *CETAMEX* neutrality before the claims of people from both regions. In the end, it were not my justifications but rather my acts, which positioned me politically. Since I interacted more and more with Juan, Don Chebo and the other people that constituted the community of Salvador Allende, I ended up working closer with the Candelaria Region of *ARIC UU ID-COCISEL*. I was actually aiming at developing personal rather than institutional relationships. This also had its implications, as will be seen in the next story.

2.3.3 "So how did you manage to get to La Mera Selva if you live so far away?"

This was what Juan asked me while walking with him and Don Chebo a few blocks away from my house in Mexico City, in April 2007. We had left from the fieldwork site two days earlier at dawn, and after walking several hours, traveling on a stake-bed truck and two buses, we had arrived in Mexico's

⁴⁸ Unlike *CETAMEX*, *ENLACE* played a strategic role for the Candelaria Region and the *ARIC UU ID COCISEL* in political and financial aspects. The same happened with the municipal, state and federal governments for the Amador Region and the *ARIC UU COAO* (later called *Quiptic Ta Lecubtesel COAO*).

capital, my city.

When we got to my house, my mother had a delicious breakfast waiting for us. We slept and ate there for four days. The official purpose of the trip, for which we got financing, was to take the promoters of Agroecology of the Candelaria Region to visit agricultural education and research institutions in order to exchange experiences with researchers and scholars. The visit had been my idea and I had organized it with Ángel's support. The reason why only Juan and Don Chebo decided to go on the trip was that there were problems regarding *CETAMEX*' neutral position.

I did not dislike the fact it turned out this way. Don Chebo as well as Juan had been the ones most open to working with me during the seven months I had been with them. Therefore, I wanted them to know my world, that is to say, my family and home, my university and professors and the place where I had worked with many types of *ixim* (CIMMYT Maize Gene Bank). The desire to show them my world was mutual. It had originated from our daily interaction, as they had also shared their everyday lives with me.

The day-to-day life they had been sharing with me consisted in the activities that make up their living. This life not only addressed agriculture, livestock breeding and forestry practices that were somehow related to crop diversity. It was also associated with the use of that diversity applied to food, feeding their animals, earning money, building their houses, etc. Certain issues were addressed from the very moment one got up to the roosters' cock-a-doodle-doo at dawn through the evening, when one was lulled to sleep by the sounds of the Jungle. Other daily activities included, for instance, eating *tortillas* several times a day, removing kernels from maize cobs at noon, bathing and washing clothes in the river in the afternoon and chatting while removing lice from the children's hair in the evening. Then there were those activities that were not carried out on a daily basis but were frequent nevertheless, like setting up meetings to discuss or organize any kind of issue, or religious services on Sundays or holidays.

Beyond these, other activities struck me for their commonness such as the difficult mobility between communities and the outside world (due to the absence of roads), and the high cost of goods and services because of a lack of electricity and means of transportation. Other persisting problems were low quality education and health services, shortage of opportunities for the youth and their consequential migration, low cost local products, drug trafficking, political tensions, and the widespread fear that the government would seize their land. All these elements gave way to events that I labeled as "painfully common," because to me, having lived my childhood and youth in a different Mexican reality (a much kinder and prosperous one) they seemed totally surreal. The day-to-day life I shared with Don Chebo and Juan during those few days they visited Mexico City, was that of a Mexican

middle-class city woman. It began with the chirping of birds in a cage and ended with the noise of ambulance and patrol sirens at nightfall. It was a life in which one ate refrigerated *tortillas*, showered in the mornings with warm water coming out of a pipe, traveled all day by car on streets packed with vehicles, wasted electricity lighting up an entire house and leaving the TV set on all night. Beyond the contrast between city and countryside, Don Chebo and Juan were amazed by the abundance of phones everywhere, by all the schools and hospitals they encountered on their way and by the street lighting at night. On several occasions, I heard them shriek in astonishment when they saw an obese person or at the low cost of some appliances. Moreover, they rated my parents' home as a luxurious place. This visit proved the precarious situation in which they live as compared to other Mexicans like me.

The fact that we acquainted ourselves with each other's different worlds molded our relationship in a unique way. On the one hand, it made it possible for me to cultivate *ixim* with them. When we came back from that trip, each one of them lent me a piece of land on their farms where I made a *k'altik* during the *temporal* of 2007. Both the Salvador Allende and the San Martín *k'altetik* became windows through which I peeked to become acquainted with the region.

On the other hand, that visit diluted the thin line in my mind between researched and researcher, to the point where only our proper name was left, only our person. Thus, Don Chebo, Juan and the other peasants with whom I established relationships are not only the subjects of my research, but also companions with whom I shared an important life experience. A life experience in which the bubbles that separate such markedly different worlds are burst making the prejudices that kept them apart become evident. As a result, more questions than answers, more disagreements than agreements, and more expectations are created. That is how, although they were my friends, they ended up asking for loans and favors, and I ended up "helping" them out with money, errands and development projects.

2.3.4 "The helicopters came down in San Manuel and evicted Jacinta"

This is what a terrified Doña Mica told us when we arrived in Salvador Allende on the evening of August 19, 2007. I was returning with Don Chebo and Juan from a regional meeting in Candelaria to answer questions in regards to the work *CETAMEX* was doing in the region. Before leaving to Candelaria in the morning, we heard and saw two helicopters flying over the communities. It was the first time I heard or saw them flying so low, but people told me it was a well-known fact that *RIBMA* personnel flew over the Region. I did not understand. Why, then, had the helicopters landed in San Manuel? Slowly, as Don Chebo prepared to go to San Manuel and people

arrived to tell what had happened there, I started to understand. The government police who had come in those helicopters had evicted everyone living in San Manuel, among them Jacinta, Don Chebo's daughter!

Suddenly, I remembered Salvador Allende was a community with conflictive land tenure, prone to eviction. Although tenure in San Martín was also informal, the latter was less at risk of being evicted. In fact, both properties were affected by two decrees. The first one was the *Brecha Lacandona*⁴⁹ (Lacandon Passage) decree, which dictated that they were property of the *Comunidad Zona Lacandona*.⁵⁰ The second one was the *RIBMA*⁵¹ decree, which defined them to be in a priority conservation area under management restrictions of the *Comisión Nacional de Áreas Naturales Protegidas* (CONANP – National Commission for the Protection of Natural Areas) of the *Secretaría de Medio Ambiente y Recursos Naturales* (SEMARNAT – Department of the Environment and Natural Resources). However, the location and history of each farm determined its own fate differently.

Salvador Allende is located on the western part of the *RIBMA* core zone where human management is restricted and settlements are prohibited (see map in Appendix 2.1.). It was founded in the early eighties by Don Chebo as part of the authorities'⁵² land replacement policy. The farm was baptized with the name Salvador Allende by an agrarian bureaucrat who thought Don Chebo was going to have to struggle a lot for the formalization of his land. He was not mistaken. To date, the property has not been formalized yet in spite of its replacement record and the long process of negotiations that Don Chebo and the *ARIC UU* have conducted with various federal and state governments.

As far as Rancho San Martín, it is located southwest from Salvador Allende in the buffer zone of *RIBMA* (see map in Appendix 2.1.). As well as Salvador Allende, it is surrounded by formalized *Ejidors* like Pichucalco and Amador Hernández. The farm was founded in 1972 by Juan's father, Don Martín, and was named after him. He bought 30 hectares that were part of Rancho San Gabriel, which is owned by Don Eusebio. Don Martín died in 2000.

Don Eusebio, a slim and short middle-aged man, founded *Ejido* Amador Hernández. Responsible for the formalization process of the *Ejido*, he found out that he could individually apply for land as private property. Alert and

⁴⁹ See more details in Section 1.2.3 of Chapter 1.

⁵⁰ See footnote 24 of Chapter 1.

⁵¹ See more details in Section 1.2.3 of Chapter 1.

⁵² Don Chebo tells that the "authorities" (sometimes he refers to the Agrarian Reform, sometimes to the *ARIC UU ID* authorities) were the ones that took him to the place that is now Salvador Allende. They told him that was his replacement since the land owned by his father had been destined to extend *Ejido* Pamalá, which was located on one of the other micro-regions of Las Cañadas.

active as he still is today, he requested and received the land, but did not finalize the formalization procedure. This small detail did not stop him from selling parts of his land to Don Martín and other peasants who were looking for land. Thus, as far as the agrarian authorities, Rancho San Martín is part of Rancho San Gabriel. As for Don Eusebio, he has never been interested in finalizing the formalization process because, according to him, he has never received anything from the bad government and, being a member of the *EZLN*, he disavows the government's authority. He once said to me, "Why do I need the government to tell me this land is mine? I live and make my *k'altik* here. That is enough to make it my land." He also mentioned that, precisely because Don Chebo has been negotiating the formalization of his land with the government, Salvador Allende runs the risk of being evicted.

Before fully getting into the topic of the eviction in San Manuel, may the reader be informed that the relationship between people from Salvador Allende, among them Don Chebo, and people from San Manuel, among them Jacinta, is a familial one. San Manuel, officially known as Nuevo (New) Salvador Allende, was established in the year 2000 by Feliciano and his wife, Jacinta (daughter of Don Chebo and Doña Mica). Don Chebo told me they used to live in Salvador Allende, but he ultimately had to chase Feliciano out after he impregnated his daughter Rufina, Jacinta's sister, for the third time. Don Chebo got tired of forgiving Feliciano and took away the house and the land he had given him. Left without land, Feliciano negotiated with people of Nueva Palestina (community that belongs to the *Comunidad Zona Lacandona*) to allow him to live in what later became San Manuel, inside of the core zone of the *RIBMA*. In August, seven years after that incident, Jacinta and her children were evicted from San Manuel. Feliciano was not caught because he was in Nueva Palestina at the time.

Experiencing the ordeal of the eviction in San Manuel has been one of the most poignant episodes in my life. It consisted of different stages that I will narrate in more detail in Section 3.5.2 but will describe here generally. The first stage was filled with confusion and dismay in a Salvador Allende that was already fearful of being evicted. The second stage, going to Ocosingo with Lázaro and Juan to find out Jacinta's and the other displaced people's lot, was charged with disbelief and rage. The third stage was overcome with sadness when, with Juan and Sebastián, I visited Jacinta and the other displaced women and children who were being held at a party venue.

The relevance of the eviction at that moment prompted me to contact everyone who had been an important life companion of mine to inform them about this event. Their reactions varied. Ángel responded passively, saying little could be done for the displaced people and against the risk of further potential evictions. Only Jenneke, a young Dutch woman who visited the area and got to know its people as part of a Master's program in Wageningen, took action and sent out letters of complaint against the

Mexican government.

The rest of the reactions were rather suggestions as to how to proceed in the wake of this incident. One of them was that I needed to see this eviction against the greater backdrop of misfortunes that occur in the world (like the earthquake in Peru that month of August 2007) and consider it a lesser evil. Another suggestion was to regard it as a governmental act to conserve the jungle, which provided the displaced people the possibility of a better life. My supervisors' recommendation was to be cautious not to let my political actions affect my research and link them with the University for which they worked. As far as the Mexican scholars with whom I was in contact, their opinions were divided. Some told me to abandon my research and join the fight for liberation, while others recommended I quickly finish gathering data and use the weapons of the scholar, being pen and paper.

I have to admit, though, that rather than heeding these recommendations, I did what Sebastián and Juan did. As soon as the situation of the displaced people was more or less cleared,⁵³ they went back to their places with their families and returned to their *k'altetik*. So did I; I went back to the communities to see my *k'altetik*.

With this event, however, I began to wonder whether the work that *CETAMEX* and I were doing was of any use. In 2003, *CETAMEX* had initiated working in the region, along with the promoters of agroecology, in response to an invitation from *ARIC UU ID* to create technical arguments with agroecological innovations to stop the evictions. One of these technical arguments was the use of slash and mulch (SM) in lieu of slash-and-burn (SB), addressed in the next chapter. When I began to work there, I thought that my other innovations could also help them stay in their communities. After the evictions, and based on everything I observed in the dynamics of negotiation, I was convinced that the displacements originated from decisions that went beyond technical arguments. In fact, I started thinking that the decision whether the communities in conflict for their formalization stay or do not stay came from a realm of political interests that were larger than the conservation of the *RIBMA* and the development of the indigenous community. Nevertheless, Don Chebo continued thinking that *CETAMEX* and my work were still meaningful, even after the evictions.

⁵³ It was agreed with the government that Jacinta and the other detainees and prisoners would be freed. The government also agreed to establish a roundtable of negotiations with them to see about the possibility of being indemnified, with the condition that they not go back to San Manuel. Finally the government compromised not to conduct any more violent evictions without notice.

2.3.5 The *ixim* festivities and the ritual of the visit to the springs

There were several festivities and rituals I participated in. Yet I must admit that the festivities and rituals I attended after the eviction incidents had a different effect on me. Not only did I like them, but I started to search for and find a meaning in them. Two of those are worth mentioning in this thesis. They are the *ixim* festivities and the ritual of the visit to the springs.

Ixim festivities

We held the *ixim* festivities to celebrate the harvest of San Martín in mid November 2007 and of Salvador Allende in early December of that year. They took place at the end of the *ixim* growing cycle and, as the reader will learn in Chapter 6, gave meaning to *ixim* as well as the life of Tzeltal peasants who cultivate it cycle after cycle. Although the festivities in both communities were quite similar, there was one major difference between the two: the atmosphere during the parties.

In San Martín the mood was festive and the attendees were happy; they chatted, laughed, joked and enjoyed themselves. A cycle had ended with negative as well as positive experiences, and they were already preparing for the following cultivation cycle. Instead, the people of Salvador Allende, the only ones to attend their own party, were quieter, more withdrawn, and the atmosphere was more tense and somber. Although the growing cycle had concluded with a good harvest, the eviction of San Manuel was still hanging closely over their lives, as evidenced by the presence of Jacinta, Feliciano and their family.

After a frustrated attempt to negotiate with the government, Jacinta and Feliciano went back to Salvador Allende in November. They returned with their ten children and had no home, no livestock, no maize, no land, and no indemnification. All those years they had lived in San Manuel were lost. The people in Salvador Allende not only witnessed Feliciano and Jacinta's misfortune; they also saw what could happen with their own future. That future, some of them believed, was more likely to be upon them soon. They interpreted that the political winds⁵⁴ of the moment were blowing against them and they had two options: to accept an indemnification from the government for their land and abandon Salvador Allende or, if they refused

⁵⁴ With these political winds, they considered the situation of political actors who could define the direction between formalization, indemnification or eviction. The following were among those political actors. The first one was the *ARIC UU ID*, which at that moment was weakened by its breakup. The second one was the *EZLN*, which had lost regional coverage (due to people's defection) and had weakened on a national level. Activities linked with drug trafficking in the region, which could justified evictions involved the third one that was drug dealers. There was also the confrontational politics of the federal and state governments of Felipe Calderón and Juan Sabines involving the four and last actor, the current authorities.

the latter, to suffer a violent eviction, like Jacinta.

Yet others maintained that the future consisted in continuing to fight for Salvador Allende's formalization. Don Chebo was the one to insist most, pointing out that they had been negotiating the formalization of their land with the government for over thirty years. Therefore, the latter ought not to evict them just like that. The confrontation between strategies to follow plus the fear caused by the eviction of San Manuel was the reason why the atmosphere during the *ixim* festivities in Salvador Allende was tense and uncertain. The uncertainty, tension and confrontation did not disappear as the days or months went by. Actually, with the passage of time and other events, they led to hopelessness and disintegration of the community. However, this became more evident during the ritual of the visit to the springs.

The ritual of the visit to the springs

During 2008, I made several short visits to the fieldwork site. In May, I participated in the ritual of the visit to the springs in Salvador Allende. They practice this ritual every year on May 3rd, when all the people in the community go to the springs that provide them with water. They conduct an offering and a prayer at each spring so that water may return to them during the following rainy season. That year, all the people of Salvador Allende got together to participate in the ritual. However, on our way to one of the springs I heard Hil, a thin and small man who is one of Don Chebo's younger sons, say that practicing the ritual and making the *k'altik* did not make sense anymore, that Salvador Allende had no future and it was better get out of there. The rest of the people did not say anything, whether they agreed or not. In addition, frictions between what had now become two factions within the community had increased since the discovery of an extramarital relationship involving two brothers who had previously migrated to the United States. Two months later, during another short visit, I found out that the largest faction (seven out of ten families in the community) had approached the government to negotiate for indemnification since they were going to abandon their land in Salvador Allende. The remaining three families dismissed this action and decided to stay and fight for their land. I heard both sides' explanations.

Lázaro was among those who were seeking indemnification. In his opinion, after all the things that had happened, the community was not the same anymore and nothing was going to be resolved. As for Mariano, he had realized after San Manuel's eviction that no one was really going to help them if they were displaced, and they were alone. With the money he was expecting to receive from the government, Antonio, Don Chebo's son-in-law, was hoping to buy a piece of land that would finally be his own. These

families ultimately received their indemnification and abandoned Salvador Allende in November 2009.

Contrary to the others, Sebastián and Chebito, Don Chebo's youngest son, decided to continue living in Salvador Allende in spite of eviction threats and governmental marginalization because, for them, leaving meant forfeiting not only their land but also their culture and traditions. Besides, they thought their wives and children would never get accustomed to the change.

In that regard, Don Chebo has always had a firm standing: "They may all leave, but I am definitely going to die here in Salvador Allende." This is the way it is because Salvador Allende represents his reason to fight. During those late afternoons when he told me about all the procedures, talks, meetings, rallies, and other activities he went through to arrive, stay and try to formalize his landownership in Salvador Allende, he would say, "Because what else am I to do? Without land, there is no life! I am old already, but all these little ones – referring to his grandchildren – how are they going to have a life without land? That's why I keep on fighting: because as you know, *Chulita*,⁵⁵ in Salvador Allende the land is good for making *milpa* and life." It is Don Chebo with his wife Doña Mica and the two families of Sebastián and Chebito who continue to make their lives in Salvador Allende today.

I must recognize that these signs of internal disagreement in Salvador Allende made me ask myself: What did I learn from this life experience? It was actually Don Chebo and Don Eusebio who gave me the answer to this question. They told me that my learning consisted in making the *k'altik* with them and, in doing that, I had learned about their life situation.

2.4 COVERING THE FINAL STRETCH OF A RESEARCH PROCESS

After fifteen months of fieldwork, it took me four long years to cover the final stretch of my research process. During this period, I dedicated myself to writing a thesis which, on one side, had to comply with the academic requirements to be considered a PhD thesis, and on the other, I hoped would fulfill my expectations about my fieldwork experience. These expectations are captured in the following question: How do I produce a document that reflects the richness of this life experience and at the same time does justice to the events I shared with Don Chebo, Juan and other Tzeltal peasants who were my travel companions? The above-mentioned requirements and this question-expectation were the reasons why it took me over four years to write about a life experience that lasted less than two years. However, I

⁵⁵ A word made of Spanish expression "chula," meaning small pretty woman.

would be overly simplifying a time in an academic setting of meetings with supervisors, seminars with research groups, and conversations with colleagues that are worth mentioning, as they will illustrate how that experience ultimately led me to write this thesis and not a different one.

2.4.1 Pondering over experiences on Dutch dikes

In early 2008, I moved to Wageningen to begin my writing. However, the first months were characterized by the hardship my fingers went through to adapt to the use of a keyboard instead of the *machete*, and for my mind to express my experiences through words. Slowly, systemizing the information I had collected during the entire fieldwork period helped me to establish some sort of daily routine. Through this structure, I realized that even though I had collected quantitative data, most were of a qualitative kind. In other words, they were an ethnographic account of everyday life. This meant I had to apply different analytical tools than the ones I was used to with my agronomic-genetic background.

At the same time, as I proceeded to group information into subjects, it became evident that aside from data on crop diversity, I had information about a myriad of topics. Thus, instead of delving deeper into the topic of diversity, I developed a broad and relational view of this and other topics. Starting with that first reflection, I then defined a preliminary structure for the thesis that was very general and covered history, organization, intervention and culture. It was approved by my two supervisors and based on that draft I started writing.

I started two chapters, which went down as failed attempts. I had been interrupted to write an article and to prepare two presentations that, in hindsight, were useful in defining some attributes of this thesis. In the article titled “*Tzeltal* stories about maize in the Amador Hernández Region of Montes Azules, Chiapas” (Camacho *et al.*, 2009) I aimed at relating agronomic issues to socio-cultural ones in an account with narrative format. I do the same in this thesis, where agronomic situations concur with political ones; environmental circumstances coincide with technological and social ones; life events in agricultural and cultivation practices fuse with stories, traditions, festivities and rituals. At the time I prepared my first presentation, I had done some thinking about the role of the researcher in rural reality, which helped me get used to writing in first person and consequently think about scientific work as a life experience. In fact, that reflection went on to constitute the first draft of this chapter. My second presentation, which dealt with the situation of *Tzeltal* peasants in La Mera Selva, became the topic of my concern and set off a long thinking process about similar concepts like marginalization, vulnerability and injustice.

All this helped me chew on my half-digested experience a second time. During that phase, I redefined the structure of the thesis based on the premise that I had acted as a peasant apprentice while we made the *k'altik*. Therefore, after thinking for a long time about a script that would adequately represent this learning experience, and thanks to a little push from Conny, I arrived at the proposition of linking chapters with maize cultivation practices. The foregoing went in line with the methodologies I had used during data collection (research action and actor-network theory) that focused on practices as actions.

During the summer months of 2009, I wrote about my research experience, about the performance of land preparation, sowing, weeding, bending and harvesting. As I relived these experiences, I immersed myself in academic readings that would help me produce and frame my own work. Rather than defining the structure and content of my writing, these readings helped me in the creation of each chapter and in bringing out the life lessons obtained from my fieldwork experience.

I helped myself with academic works that were sometimes theoretical approaches and sometimes individual experiences. I used them as invisible stitching to tailor the suit of my writing to the body of my experience. In other words, I embraced the experience I shared with the Tzeltal peasants instead of compromising with a specific theoretical approach. This was because I started to think of theories as abstract and general accounts (Schatzki, 2001:3) and I decided they would help me echo and reflect on a lived experience. I registered daily life experiences in a diary in which I wrote about the activities, events, and conversations that I had during my fieldwork. Some were so impressive that they became a vivid part of my own oral history, so I present them in this thesis as spoken texts.

Due to the political nature of the events I experienced, I looked into political ecology works such as those of Dove (1983) and O'Brien (2002) that helped me rethink assumptions about two variants of land preparation, slash-and-burn (SB) *versus* slash and mulch (SM). This approach inspired me to write Chapter 3 in which I link these variants with the conflictive land tenure situation expressed as violent evictions. Carrying out the *ixim* cultivation as part of a larger life picture made me lean on Richards' book about agriculture in Sierra Leone (1986) and his article on agriculture as performance (1993). Reading those works influenced my writing of Chapter 4 on sowing. At the same time, the experience of unrelated events affecting the practice of agriculture due to outside actors took me back to works that addressed intervention in rural development such as those of Long (2001b) and Mosse (2005). These works were useful as references for writing Chapter 5 on weeding and bending. The inspiration that ensued to write Chapter 6 on harvesting was my own. Evoking the memories of the last two months of my stay, I wrote this chapter in an artistic fashion like a *bricoleur*

(Levi-Strauss, 1970), who creatively uses the information in an alternative way to develop a new project.

When the Dutch winter arrived in 2009, I already had a first draft of the chapters that would constitute the main body of this thesis. This draft was written in testimonial style, based more on the generic idea of what is understood as testimony than on the type of literature called testimonial, associated with Beverley (1987) and other subaltern and postcolonial authors. I also wrote the summary, in which I pointed out the interlocking of three stories. The first was the account of my PhD research process, as a protagonist, and how this was a process that had been negotiated with actors, with methodological and interpretational approaches, with events and feelings. The second story described, as a participant, the practices that make up *ixim* cultivation from a perspective that considered them not only agricultural, but also political, social and cultural practices. In the third story, I documented, as a witness, the difficult situation in which Tzeltal peasants live. This entire draft was a text that I had to ponder about in a subsequent phase.

2.4.2 The selection of a particular thesis

My supervisors commented on this first draft, which attempted to reflect the richness of my life experience with Don Chebo, Juan and other Tzeltal peasants. Both were of the opinion that the narratives resulting from the empirical material and the few cited explanatory theories were still too incoherent and did not show a clear purpose. Chapters were missing a theme that gave it direction and the whole text lacked an argument to give it a skeleton. In addition to those missing elements, which are a serious shortcoming in any type of writing, was the fact that the draft, even if written in testimonial style, had to be the product of academic work.

For all these reasons, Gerard told me I had to ‘domesticate’ the document. As I was a crop scientist with a Master’s degree in Plant Genetic Resources, I was alarmed by that remark. I knew that the domestication of many cultivated plants was a very long process that has involved several generations of people. Looking back at that stage, however, what I did was select one particular thesis over many other potential ones. That is to say, from the many books that could be written about a life experience, many were eliminated as decisions and selections were made. Here I must clarify that by selection, I am thinking of the plant breeding technique in which those materials that are chosen based on specific criteria and during several cycles generate a new variety. In that sense, selecting not only implies choosing but also creating.

It took me several months in 2010 and 2011 to select the present format of the thesis. It entailed writing an introduction that academically justified the non-anecdotal, testimonial and reflexive style of my writing. I developed this justification invoking scholars like Law (2006; 2008), Haraway (1997) and Bourdieu (2004), and wrapping this work in the tradition of Mexican social academicians who recognize both social compromise and literary aspiration (Bartra, 2010b:303-310). However, as peers indicated in a seminar where I presented previews of my research, it was necessary to choose one out of the three stories I spoke about in my summary to be the central story in this thesis. This first story is dealt with extensively in this chapter to illustrate how the research process was a life experience and how the narrative of this experience was molded along the way.

Choosing between the other two stories was a more tortuous task. Even though the document was structured according to the different agricultural practices that constitute growing *ixim*, the text meant to reflect the difficult situation of Tzeltal peasants of La Mera Selva. The people themselves rated this situation as 'being screwed,' and I tried labeling it with other concepts such as vulnerability or injustice. Several months went by in the spring of 2010 while I searched and reviewed these concepts. I submerged myself in the different definitions stemming from different theoretical approaches. At the same time, I started to identify the reasons why they are criticized and the restrictions in applying these concepts to my fieldwork experience.

Vulnerability, which for Chambers (2006:33) is the exposure to risk or contingency and to the difficulty to endure them, has been interpreted as a characteristic attributed to people rather than a circumstance or conditions of their lives (Cardona, 2004:46). As for justice, definitions range from universal (Rawls, 1973), where injustice is understood as impartiality, to critical definitions, where three justice scales are identified which consider distribution of resources and goods, acknowledgement of rights, and political representativeness (Fraser, 2008:16-18). These definitions are the starting point of a discussion on injustice that assumes there ought to be parity of participation (*ibidem*). In other words, unjust situations are identified based on what ought to be and is not, and not the other way around, describing a situation and then reflecting on how and why it is the way it is. Even though said concepts did capture some of the situations I narrated, they did not reflect the particularities of their contradicting complexity. Furthermore, I realized that if I used these concepts and their reference frameworks, not only would I end up writing another thesis, but I would also have to live the experience of another research process. And that was due to what the concepts assumed (which I did not take into consideration when I started my research) and the assumptions I accepted *a priori* when implementing my methodology tools.

As the reader may recall, the methodologies I selected in my research project were action research and actor-network theory. Despite my assumption that I was only going to use these tools for data collection and that other tools, of a more explanatory kind, were going to be needed to write my final document, I subsequently realized I was mistaken. The type of data I collected, defined by the way in which I collected them, largely determined the kind of thesis I could write. Thus, I took into account that authors like Winter *et al.* (1989), and Fisher and Phelps (2006) insist on the need to write the results of action research in an innovative and often unorthodox way. As for Latour (2005), he also points out the importance of describing over explaining, even though he asserts the actor-network theory is a tool for gathering data and not for interpreting or explaining it. This implies taking actors, their terms, concepts and explanations seriously.

That is what I finally did. I decided not to replace the term ‘being screwed’ that Tzeltal peasants use to refer to their life situation with terms that were alien to that concept. It is a term I frequently heard from them – when they talked about their life situation and especially when they were immersed in any of their everyday problems. Beyond that, as I assert in Section 7.2, this term unveiled elements that remained covered up by more academic concepts like vulnerability or injustice. Moreover, this decision and my recent inclusion into social sciences made me feel insecure about making this third story the central story of this thesis.

It was through a process of elimination, or negative selection, that the second story turned into the main story in this thesis. It describes, from the participant’s point of view, how maize cultivation practices are conducted. Unlike what many crop science manuals and books dictate, this description is not limited to the general characteristics and explanations of said practices in themselves. It highlights the particularities that affected them during the 2007 *temporal* cycle. In other words, their performance prevails.

Performance is not a static concept. I conducted various selection cycles that led to the creation of the subsequent drafts of the thesis with an in-progress definition of this concept. Many times the selection consisted in major changes. That is how in the second draft I rewrote the chapter on weeding and bending, relying on peasant studies from Warman (1985) and Scott (2009). Similarly, I rewrote the chapter on harvesting, taking into account works that discuss the role of maize for Mexican peasants and indigenous people (Barkin, 2007; Florescano, 2001).

Rewriting the subsequent drafts included incorporating supervisors’ comments and peers’ feedback from seminars and corridor talks. It also implied channeling the entire narrative into a performance concept that fits my methodological and theoretical preferences. Finally, it also consisted in interweaving throughout the text the argument that performance of the

different farming practices can ultimately be compared to a juggling act with which one can make *milpa* and life.

2.4.3 Polishing this thesis with the performance concept and the juggling metaphor

Through those selection cycles, performance became central in this thesis. It was not a pre-defined concept that I merely applied as a formula. Its definition was slowly negotiated while the different drafts were being written. Until I finally arrived at a tailor-made definition of performance consisting of three tiers and a metaphor alluding to a juggling act that brought them all together.

As I mentioned earlier, the point of departure for my definition was the article on agriculture as performance by Richards (1993) which served as initial source of inspiration to think of maize cultivation practices in a different way. Differently, the juggling act metaphor originated while I was writing the conclusion of the second draft of Chapter 4. As mentioned in the Introduction, I had used this metaphor earlier to evoke different moments of my life. I subordinated both concept and metaphor to the richness of my fieldwork experience and to the approach of this PhD thesis.

The narrative of the rich life episodes in the first draft of my thesis turned out to be a dominant voice which was difficult to eliminate or relegate, not only because the situations described in them had affected my thoughts and feelings, but also because I decided to commit to them by making them public. This forced me to conceptualize performance in a way that would allow me to interweave into agricultural practices those life situations that reflect everyday problems. This is how the idea of the different facets of a performance came to life. Each of these facets became a different window through which the reader can peek and see people's life experiences. Only in the last draft all these facets were intertwined in the different moments and experiences which for the performers reflect their life situation.

When I talk about the academic position of this thesis, I am referring to the link this concept builds to other disciplines and schools of thought. It was difficult to define, because writing this experience combined my previous crop scientist background with the performance concept's own pedigree and with the position of the social sciences research groups that I ascribed to in the Netherlands. Nevertheless, I acknowledge that the link is important, as it defines the placement of this thesis within the great universal library of scientific knowledge and its contribution to it.

From the beginning, my intention was that this thesis about maize, *milpa*, peasant and indigenous life be placed on the shelf with those works that address the interface between nature and human beings and bring different

disciplines together. After two years of writing in an environment that surrounded me with sociologists and anthropologists, there came a moment when I considered focusing on the troublesome life of Tzeltal peasants and using the aspect of maize cultivation on a *milpa* as a metaphor. However, several reasons led me to brush this thought aside: from limitations of my previous experience and narrative, to the insecurity of creating a thesis choosing disciplines I had only just started to acquaint myself with, to situations that reminded me of my past experience in crop diversity.

All these reasons were arguments that made me think of my research process as a “transdisciplinary excursion.” An excursion where, at the end of the journey I came back to the start line changed, as I had acquired new knowledge from confrontations with what I had earlier assumed to be true (Visser, 2004:16). Even though this would seem what every scientific journey is in every discipline, it is different because the newly acquired knowledge stems from other disciplines and points out the contradictions and ambiguities in ours (ibid). This is in fact illustrated by Richards (1993:67) when applying the performance concept to agriculture using ethnography. The association of crops in agro-ecosystems, studied by ecology and crop science researchers from a combinatory logic standpoint, is seen from an ethnographic perspective as the farmers’ sequential adjustment to unpredictable conditions.

I developed a performance concept from this perspective of the transdisciplinary journey and applied it in the different chapters of this thesis. That is to say, the performance we carried out during the *temporal* cycle of 2007 ended up differing from my expectations that were based on general knowledge of the agronomy of maize, which is what I call “unexpected association” in my Introduction. This makes the performance concept contestable and that is why it needs to have this knowledge as reference.

In the following chapters, the reader will see how these general crop science references are confronted with the performances we carried out on the *k’altik* in San Martín and Salvador Allende. The hows and the whys of such performances find their answers in the particularities of agricultural practices as well as in the particularities of issues that are labeled ‘political,’ ‘social’ or ‘cultural.’ Issues that consider the different performances of cultivation practices political, social and cultural actions – in other words, life actions.

Talking about actions, let us address another aspect of the definition of performance. This aspect places it amongst the different social action currents and theories, and explains why I use this concept instead of other similar ones such as ‘practice,’ ‘enactment’ or ‘assemblage.’ Although ‘practice’ has been understood and applied by several social approaches (Schatzki, 2001), those that see it as a habitual, routine, normative action (Knorr Cetina, 2001:175) are predominant. So much so that they are

compatible with the agronomic idea of ‘cultivation practices’ as standard activities described in general agriculture manuals. Performance, instead, emphasizes the situatedness, complexity and particularity of the action, that is to say, the messiness of life experiences (Law, 2006:2).

The performance concept shares this with enactment – a concept that originates from actor-network theory. In fact Mol (2002:33-44) relies on the idea of performance to assert that identities as well as objects are not given, but come into existence when they are performed or enacted. Beyond considering the crafting of objects, identities and realities, enactment highlights the contradictions of its multiplicity as a result of its various performances (Law, 2006:45-67). This is where my definition of performance strays from enactment, as performance does not focus on the multiplicities but rather the particularities of actions.

The case is similar with the use of the term ‘assemblage’ by different actors, which Latour (2005) uses to refer to action. Even though in Chapter 4 the performance concept comes very close to that of assemblage, when the relationality of dissimilar elements is addressed, the assemblage concept does not fully coincide with performance for two reasons. The first one is that performance, defining itself as a situated action, assumes the separation between action and context-situation. This separation does exist in the case of assemblage. The second reason has to do with the fact that, even though action is thought of as the association of diverse actors, performance favors the perspective of performers, like sowers and harvesters over that of other actors. It is from the perspective of one of the performers (the researcher) that I ultimately evoked this experience as an act of juggling when I wrote the last draft of this thesis.

2.5 A JOURNEY THAT TURNED INTO JUGGLING PERFORMANCE TO MAKE *MILPA*

The intention of narrating this journey in such detail was to acquaint the reader with all the vicissitudes that ultimately molded the scientific life experience resulting in the creation of this thesis. The details and vicissitudes constitute the context, theoretical approaches and methodological tools with which I wrote this PhD thesis.

The decision to write the section that normally corresponds to the theoretical, methodological and contextual frame of a research project in this fashion had the purpose of demonstrating how and why these are as rigid as they are flexible. Just like one may be when initially tracing a path to walk on and then encountering a series of obstacles when actually walking on it. That is where rigidity-flexibility comes in. Will we decide to stay on the projected path, eliminating obstacles and bypassing the

unforeseen? Or do we prefer to let all those incidentals that join us while we walk affect us? Will we deviate from the projected path and contemplate those unforeseen events? These questions are answered *a priori* but reviewed after each step taken along the way. With every step I took, I was rigid in the sense that I was being consistent with my initial approach of letting myself be affected. Events like the maize that had “AIDS” or Jacinta’s eviction turned into key incidents in the understanding of this thesis. Furthermore, I was pervious to different theoretical approaches, but strict in defending my life experience and thinking process. All of the above constitute the defects as much as the virtues of this research process, like this journey through the paths of La Mera Selva, which ended in a narrative of the performance of the Tzeltal peasants.

CHAPTER 3

THE PREPARATION OF LAND THREATENED BY EVICTIONS

“Chulita, the original Lacandon⁵⁶ people, owners of the Lacandon Jungle, used to cultivate their ixim under the big trees that grow on the Montaña. Back then, they slashed, cut and burned and the Montaña was beautiful. However, this was lost when the Spaniards came and killed almost all the Lacandon people. The few that survived, our ancestors, were expelled from the Jungle and taken to the Ocosingo Valleys where they became farm laborers and worked for the owners of large estates. There they were taught that burning destroys trees. That’s how we learned from our forefathers, who had to put up with their lords’ abuse, as they didn’t have land of their own. That changed, though. Sometime later, our forefathers found out that they could free themselves from those landowners and become proprietors of their own land if they went deeper into the Jungle, into La Mera Selva. That’s how they returned to what had been the land of their ancestors, the Lacandons. Little by little, through our parents, we became owners of our land again, by making our k’altik here, by making our lives here. Now that we are settled here the government says all that doesn’t count, and the only thing they want to do is expel us from our land, they want to evict us. They say that we are not the owners but the Caribes⁵⁷ are. Those Caribes try to pass as Lacandons, and that’s what they are called, but they are not Lacandons. Even though they wear long white robes and grow their hair long, they are not descendants of the original Lacandons. They came from Campeche, they are Caribes.

Besides, Government says that the Montaña is a very important Reserve and that we don’t know how to take care of it, since we burn the land. But that’s not true, because we’ve already decided not to burn broza anymore and we are now doing the slash-and-mulch. We are getting our ixim used to growing in the midst of the broza that we are not burning. Because we want the government to see that we know how to take care of the Montaña, we want them to acknowledge that we are the owners of our land and we want to make them stop evicting us”. (Don Chebo, interview on May 30, 2009).

⁵⁶ When he talks about the original Lacandons, Don Chebo is referring to the indigenous group that lived in the Lacandon Jungle during the seventeenth and eighteenth centuries and gave this jungle its name. This group was victim of several genocides until it disappeared completely (Vos, de, 1980). Don Chebo, like other Tzeltales, makes a difference between the original Lacandons and the contemporary Lacandons currently living there who he calls *Caribes*.

⁵⁷ For Don Chebo and other indigenous peasants of the Lacandon Jungle the *Caribes* are an indigenous group known as contemporary Lacandons.

3.1 INTRODUCTION

Don Chebo's narration basically summarizes this chapter, which depicts how Tzeltal peasants prepare the land for ixim cultivation through two variants: slash-and-burn (SB), and slash-and-mulch (SM). We notice that in this quote, Don Chebo goes beyond agronomic considerations to address a political context in which the threat of evictions prevails. Thus, he introduces us to the first facet of performance as a situated and particularized action through which Tzeltal peasants respond to their agronomic and political contexts. At the same time, we can see that one of these contexts is precisely the eviction threat created by the historic landownership and management conflict. It is a threat that associates the burning in SB with a destructive activity that justifies evictions, and SM with a political strategy that prevents them.

How have SB and SM, two variants in preparing land for cultivation, become a justification for and a strategy against evictions, respectively? In order to find the answer, one must get into the intricacies and particularities of the contexts in which land preparation is performed in this region. Firstly, we will know the intricacies of the historic landownership and management conflict that define the political context. Secondly, we will get involved into the particularities of soil and vegetation that conform the agronomic context. These particularities will drive us to reflect about how Tzeltal peasants choose between these two variants and to arrive to the conclusion that one of the criteria is the fear of being evicted. To better understand it, we will live the experience of an eviction through the testimony of Jacinta. Having this eviction in mind we will enter again into the choice between these two variants and how this choice is framed in agronomic and in political terms. All this together serves to come to our own conclusion, which is in line with that of the Tzeltal peasants themselves, that it is sometimes better to practice an agronomically inefficient, but politically acceptable SM to be able to continue living in this region.

3.2 THE CONFLICT IN LA MERA SELVA

The threat posed by evictions in this area is like *tortilla*⁵⁸. It is a daily topic of conversation, concern and work during breakfast, lunch, and supper. People from communities that are in a land ownership conflict (Salvador Allende) as well as those who have papers that entitle them to their land (legal *Ejidotes*) have been reminded of this threat for many, many years now – ever since this land ownership conflict first surfaced.

⁵⁸ *Tortilla* is the daily bread of most Mexican and Central American persons. More information about it is found in Section 6.4.1.

3.2.1 Times of emergence of the land ownership conflict

Some authors, like Vos, de (2004:33) and Ascencio (2008:11), situate the emergence of the land conflict in 1972. In that year, a Presidential Decree (DOF, 1972:10-13) was published in which 614,321 hectares of the Lacandon Jungle were granted and titled to 66 Lacandon families or *Caribes*, as Don Chebo calls them, which is now formally known as the *Comunidad Zona Lacandona (CZL - Lacandon Community Zone)*. This decree was disputed and discredited by many because, at the same time, it disowned 22 legally recognized agricultural cores, 47 settlements that had submitted agricultural applications before the decree, and 71 groups with informal ownership (Ascencio, 2008:11). Since then, pressure has been building up on both sides either to evict these communities, or to fight for staying on the land by joining forces in organizations, social and peasant movements like the *Quiptic Ta Lecubtesel*. Because of the conflict, in 1982, 1988 and 2007 the federal government was forced to make modifications to the extension of area covering the *CZL* (Diaz, 2009), which has not completely solved the agrarian problem.

Another decree that contributed to turning this conflict into a more complex one was published in 1978, and it has been used by the environmental sector to justify evictions. This decree of the *Reserva Integral de la Biósfera Montes Azules (RIBMA - Montes Azules Biosphere Reserve)* was one of the first Mexican conservation efforts within the UNESCO's Man and the Biosphere program, protecting an area of 331,200 hectares of tropical forest (DOF, 1978:7). Eighty percent of this area is in *CZL* territory (Vos, de, 2004:34), and it includes the communities of La Mera Selva. In it, the environmental authorities have the right to prohibit activities such as SB, labeling them as environmental damage or crime (DOF, 1978:7) and veto decisions related to landownership in the Reserve. The foregoing directly draws the Lacandons or *Caribes* and the agrarian and environmental authorities into the conflict.

Other authors like Legorreta (2008), however, state that this conflict dates back to when Juan and Don Chebo's ancestors were landless farm laborers on the large estates of the Ocosingo Valleys during the first half of the twentieth century. Back in those days, estate lords held close relationships with the regional and state oligarchies of Ocosingo and Chiapas, even though the Mexican Revolution had just ended a few years earlier and had brought new things about. For example, a new constitution that prohibited feudal relationships, and a *Reforma Agraria (Agrarian Reform)*, which parceled out the land of the large estates and distributed it among their landless workers. At any rate, this did not apply to the Ocosingo Valleys due to the fraternal ties the regional oligarchy in Ocosingo had to the state oligarchy governing the state of Chiapas at that moment (ibid). Nevertheless, they did encourage the laborers to look for land and a new life by migrating to the Lacandon Jungle, where they arrived with the illusion that they would own the land

they cultivated as free men. This dream disintegrated with the presidential decrees that affected their land ownership and management.

Nevertheless, the story Don Chebo told us at the beginning of this chapter makes reference to another historic event that took place during the sixteenth century, namely, the arrival of the Spanish in Mesoamerica. This gave way to “the permanent confrontation between those who aim to direct the project of western civilization and those who resist it being rooted in lifestyles of Mesoamerican descent” (Bonfil, 2005:10). Bonfil (2005:102) places the former within “the social groups that have wielded the power (political, economic, and ideological) from the European invasion until today”. Those social groups are constituted by descendants of Europeans born in Mexico (called *criollos*), and the children of the *mestizaje*, of mixed races. The latter, like Don Chebo and Juan, were labeled as Indians or indigenous people, a characterization that they have been stuck with to date. The latter are “representatives of a world view and life organization that have their origins in the Mesoamerican civilization” (Bonfil, 2005:21) and “in the millenary practice of maize cultivation” (Bonfil, 2005:24). It has been their fate to live their lives displaced, exploited, dominated, marginalized, excluded and ignored in a historically asymmetric relationship (Basave, 2002:147-152). It is from the more than 500-year-old confrontation between those two civilizations (Montemayor, 2009) that the aforementioned land ownership conflict was born.

Added to this conflict and its resurgence at different times are the complexities brought about by a history of struggles through the *ARIC UU ID*, a peasant organization empowered by currents of the *Teología de la Liberación de la Iglesia Católica* (Theology of Liberation of the Catholic Church) and Maoist movements of the Mexican left (Vos, de, 2004:247-285). As if these complexities were not enough, those created by the presence of the *Ejército Zapatista de Liberación Nacional (EZLN - Zapatista Army of National Liberation)*, which for some time was a guerrilla but has slowly turned into a social movement are added to the conflict that affects the way Tzeltal peasants prepare their land.

3.3 SLASHING, CUTTING AND MULCHING

It was not until April that I had the certainty that I was going to do the *k'altetik* with Don Chebo and Juan. So, the first step to materialize this experience of cultivating *ixim* was to prepare the selected pieces of land for such purpose. This consisted in removing all small plants, shrubs, lianas and trees on these fields.

To make my *k'altik* in his Rancho San Martín, Juan selected a piece of land where he had sown beans a few months earlier. He said the fallow was to be slashed a few days before sowing *ixim*, “so we don't have to weed the

*acahual*⁵⁹ soon after”. He explained that the more time went by between slashing and sowing, all the more weeds would grow and hamper the growth of *ixim*. Therefore, “it is advisable to slash one or two days before sowing”.

Two days before the agreed sowing date I went there with the intention to slash, but Juan had already done it. I got a little disappointed and as he noticed this, he said, “Slashing a *wank’altik* (a fallow less than a year old) is not a big deal at all, it is like weeding. Martín and I did it by ourselves in one day”. I said that I would like to go anyhow to see how it looks and he agreed.

We left his house, crossed the small pasture surrounding it, went over one of the creeks that divide the pasture, and arrived at the area of San Martín where Juan has the largest part of two hectares of land where he makes his *k’altik*. There it was, a piece of land newly prepared, surrounded by recently abandoned *acahuales*. All the vegetation that had made up the *acahual* earlier had been slashed flush with the ground and lay there drying as *broza* or *yak be na t’el a tik* (words in Spanish and Tzeltal that refer to the removed vegetation which is left to mulch). “So you see, with the *broza* slashed, the field is ready to be sown,” said Juan. I replied, “The only thing we still have to do is clearly mark the area where we are going to sow the day after tomorrow”. That is what we did and that is how the quarter-hectare *k’altik* of San Martín was prepared.

In Salvador Allende, the situation was different. Early January, Don Chebo showed me the land that was going to be my *k’altik*. We were on our way to cut banana leaves when he stopped at a certain point to look at an area of vegetation that, in my unknowing eyes, looked like a vivid sample of primary tropical forest. He got closer to the ground and picked up a fistful of mulch that was in the process of decomposing. Playing with it in his hands, he said he had let this *acahual* rest enough time and it was fine now to turn it into a *k’altik*. He said, “Five years ago I made my *k’altik* here and the plants grew very big ears of maize. If we do it this year I am sure it’s going to give us a good yield again”. So at the time we talked about making my *k’altik*, he had thought of this land. In order to get there, we first had to cross the wide community pasture and then some of the *acahuales* that were part of the 30 cultivated hectares of Salvador Allende. It was a one-kilometer walk from the homes, which turned into our daily walk for several months.

Like in San Martín, we did not do the traditional SB here either, but the SM. The latter consists in slashing (*sc’altayel*) and cutting (*stseseel*) all the vegetation until it has the makeup of *broza*. But instead of burning the *broza*, it is chopped finely so it can decompose faster and easier. We started with the different activities of SM on our *k’altik* in Salvador Allende in April,

⁵⁹ In Mexico, *acahual* stands for what scientists call secondary vegetation. In English, the translation would be fallow.

and in May we finished preparing this quarter-hectare, five-year-old *acahual*. It kept us busy for several days.

Thus on April 11, very early in the morning, Don Chebo and I went to slash, cut and chop the land. Migue (Mariano's son and Don Chebo's nephew) and Muro (Sebastian's son and Don Chebo's grandson) both teenagers, came with us; the former was very talkative and the latter quiet as a mouse. They had both just returned to Salvador Allende after they attended school for several years. With the SM chores, we removed "almost" all plants, shrubs, lianas and trees on a "small" part of the land that we had previously marked off to make the *k'altik*. And I say almost all because even though at the beginning Don Chebo said we had to eliminate all of them, he cautioned me when he noticed that I had cut several small palm plants. He said, "The *ch'ib* plants (*Chamaedorea spp.*) should not be cut because their flowers are edible and, besides, they don't cast shade on the *ixim*". I had set out to remove them as they were the only ones that were easy to cut with the dull *machete* Don Chebo had lent me. As far as the numerous trunks of the *Heliocarpus donnell-smithii* trees, after a failed attempt I decided to respect them and leave them alone. When it came to the shrub stalks, they were not any different: cutting them flush with the ground entailed keeping one's back and knees bent while the right hand fanned the *machete*. Though I thought I had understood the movement of that activity correctly, doing it right was difficult as the stalks were tough and dry and the position was very uncomfortable. Soon Don Chebo cautioned me again saying, "Rather than looking like they have been slashed, they look like they were bitten off by a donkey. You have to bend down lower to cut the shrubs flush with the ground. Don't you see it's dangerous to leave so many tips (stalks) on the ground? People can trip over them, fall and hurt themselves".

I finally limited my participation in the SM activities and intensified my observation of Migue and Muro's work. Thus, I watched how the two young men cut the different plants that made up the *acahual* vegetation. To cut the shrubs, they first had to find the main stalk, which was the first to be cut flush with the ground. When it came to the young trees, they took them by their skinny stem with one hand and with cut them with the other. That way, when the small trees were removed, they were able to control where they fell. On the other hand, the way to fell the bigger trees was by making an incision on one side of the trunk and another on the opposite side. Subsequently, before going back to cutting further in the first incision, which would topple the tree, they looked around to make sure nobody was in the spot where they calculated the tree would land. Each time after slashing shrubs and cutting trees they chopped what had been their fronds. "It is a very cumbersome activity," a sweaty and exhausted Migue very fittingly expressed during one of the many breaks to sharpen his *machete*. "It is the most difficult activity in making the *k'altik*. The rest are easier" he added. I

agreed with him. We all looked very tired and it was late, and we had only finished a small piece of the land marked off to be the *k'altik*.

The following day, Felish (Mariano's son) and Don Jacinto (Don Chebo's cousin) helped me with the SM. Felish was a cheerful, joking, lighthearted young fellow who did not want to go back to school anymore and stayed there working the *k'altik*. Don Jacinto was a mature man of slim build and a toothless smile who had been working on the *k'altik* since his childhood. For many years already, he had been the flutist of the festival at Amador Hernandez, where he lived. To begin with, they complained that the work of the previous day had been poorly done. They said first everything had to be slashed, then the trees had to be felled and in the end, the resulting *broza* had to be chopped finely. Unlike what they had done the day before, when they had slashed and felled at the same time and had not always chopped afterwards. Then everyone took their own piece of land and, with incredible swiftness, slashed all the herbaceous plants and shrubs that were there. Next, they felled the trees. Don Jacinto explained, "Each tree has a side on which it must drop, which can be found by looking at the curvature of the trunk". Each time a tree came down it was accompanied by a shriek of the person who had cut it. The shrieks sounded like cries of solidarity that quieted down once they had finished cutting trees and started chopping all the *broza*. It was early afternoon and the heat was so intense that it had quickly dried the leaves of the vegetation that had just been cut. We were also dehydrated to the extent that all our water supplies had been used up and we were thirsty. Thus, when each of us had finished chopping our area, they said the work for that day was finished. Since I was so thirsty, I agreed with them even though I knew the field was not completely laid out. There was a piece of *acahual* left in the middle that had not been slashed.

We needed another day in early May to lay out the field. On that occasion, Sebastián and Mariano helped me, both quite experienced in making the *k'altik*. They also criticized the SM of the first day, about which they had several complaints. The first was about a tree that had been dropped in the wrong direction, which hampered slashing the part of the *acahual* that was consequently left undone. The second complaint was about the sloppiness in slashing and cutting, not caring where trunks and *broza* landed. This created many areas with a lot of *broza* where the *ixim* plants would not be able to grow. It also resulted in areas that were covered with fallen trunks, and the only place one could walk was on top of them. The last complaint was that SM had been performed at such a late time. They explained to me that it should have been carried out between December, January and February, as plants are usually not so dry during those months and they are easier to cut. Besides, according to Mariano, "*Broza* decomposes much faster when it has several months to dry thoroughly". At any rate, the land was laid out that day and it was ready. Thus, with all their help (including their

reprimands and complaints) the Salvador Allende *k'altik* was prepared.

3.4 REFLEXIONS ABOUT THE SLASH-AND-MULCH IN SALVADOR ALLENDE

More than two years later, I had the opportunity to talk with Don Chebo and Juan about the SM in both *k'altetik*. I related to them that, according to some agronomic considerations on the SM, I had come to the conclusion they would have been better off performing SB in Salvador Allende, as opposed to SM, based on the following reflections.

The first reflection focused on the time invested in the SM of a quarter hectare. According to the narration above, Juan and Martín needed one day for SM on the field in San Martín. In Salvador Allende, however, it took seven people (not counting myself, as my work was minimal) three days to carry it out. The reason for this was the type of vegetation on each piece of land (see Table 3.1.). The land in San Martín was a *wank'altik*⁶⁰ with annuals, biennials and young shrubs that were easy to slash and chop. But the land in Salvador Allende was a *pek'el wank'altik*, where at first all the shrubs, lianas, young trees and some palms were slashed. Then five-year-old trees with trunks thicker than thirty centimeters were cut. In the end, the *broza* generated by slashing and cutting was chopped. In San Martín, they only slashed and chopped, whereas in Salvador Allende they had to slash, cut and chop. This not only took up more time and labor, but also a bigger effort. Much of this could be explained by the particularities of chopping in Salvador Allende. Said particularities become more evident in Tzeltal, where there is an array of words that refer to the chopping. Chopping is an activity that consists in cutting newly slashed and cut vegetation (*broza*) lying on the ground with a *machete*, which is done in SM as well as in SB. In SM, the Tzeltal word for chopping is *sesenel*, which means chopping *broza* more finely to promote its decomposition. Instead, *Slamel* (or chopping) in SB does not have to be so fine since the *broza* gets burnt later. This means that in SM, more time has to be invested in chopping *broza*, and even more when the *broza* is woody or too dry, as was the case in the Salvador Allende *k'altik*.

The second reflection was that this major effort was not translated when it came time to harvest. The management history of each of the two fields was different (see Table 3.1.). The land in San Martín had been cultivated yearly for four years, while the land in Salvador Allende had been resting for five years. Thus, based on literature such as Mariaca *et al.* (1995:339-368), one

⁶⁰ Based on vegetation, there are five types of land: *toyem quinal* (primary forest), *toyem wank'altic* (*acahual alto* or secondary vegetation with tall trees), *pek'el wank'altic* (*acahual bajo* or secondary vegetation with low trees) and *wank'altic* (*acahual anual/bianual* or semi-permanent plots).

would expect that those five years of rest had made the land more fertile in Salvador Allende, and that it would therefore produce a better yield. Green and robust plants, of which we harvested big and heavy cobs,⁶¹ did in fact grow on Salvador Allende's fertile soil. Nonetheless, when we tabulated the total number and weight of cobs harvested in both plots, I found out they were higher in San Martín. Upon mentioning this to them, Don Chebo retorted, "But *Chulita*, there was a lot of *broza* in Salvador Allende".

Table 3.1 Characteristics of the fields in Rancho San Martín and Rancho Salvador Allende

CHARACTERISTICS	SAN MARTIN	SALVADOR ALLENDE
Type of land	Wank'altik	Pek'el wank'altik
Plants present	Annual and biennial plants, herbaceous and woody	Palms, shrubs, lianas, young trees and trees
Management history	<i>Achual</i> cultivated already for four consecutive years	<i>Achual</i> with a five year rest period
Type of <i>broza</i> (residues of slashed weeds)	Plants that are easily chopped and decompose quickly	Plants that take a long time to decompose

Source: Fieldwork notes

He was right, and the third reflection turned around that point. "The *broza*," continued Don Chebo "did not let the *ixim* plants grow". I agreed with him and told him that when I counted the plants that emerged a month after sowing, I found very few of them had been able to grow underneath the many patches of *broza*. Therefore, I had decided to take some data about the *broza* in both places. These reflected there was no presence of *broza* in San Martín, while 51% of the land in Salvador Allende was covered with it. The data later helped me analyze the effect of *broza* on yield, addressed in Section 6.3.2 of Chapter 6. The results coincided with Don Chebo's allegation and indicated that the higher the amount of *broza*, the smaller the number of plants that grew, which in turn produced fewer cobs. That is to say, the presence of *broza* had affected the yield in Salvador Allende.

This led me to the fourth reflection, which revolved around two aspects of *broza*. One of them is that the time it took *broza* to decompose was different in both places (see Table 3.1). In San Martín, it decomposed in less than a month after the *k'altik* was slashed and sowed. In Salvador Allende, however, most of the *broza* was present during the whole cultivation cycle. In the patches where there was *broza*, the *ixim* plants either did not grow or developed into meager crops (compared to those that did not have to the *broza* effect). The other aspect is that *broza* made subsequent chores and the whole cultivation management in general more difficult. Juan interrupted

⁶¹ In a comparison of means analysis related to length and weight of cobs per unit, I found that the values achieved by first class cobs in Salvador Allende were higher than the ones obtained in San Martín. Also, as will be seen in Section 6.3.2, the relationship between *molcate* and first class cobs was almost the same as opposed to Salvador Allende, where we harvested more first class cobs.

me at this point arguing, “That’s why many farmers prefer burning the *broza*, because if they don’t, all the work they invest goes to waste”.

His comment allowed me to address the fifth and last reflection. This reflection revolved around the particularities not only of the land but also of the SM timing in Salvador Allende. To that effect, I let them know that Mariano and Sebastián had criticized the late start of the activity. I said, “According to them, we should have done SM back in December and January so that the *broza* would have more time to dry and rot. Since we did not carry it out at that time and instead did it in April and May, we should have burnt the *broza* so it would not affect the yield”. Upon hearing this, Don Chebo opened his eyes wide, and with a serious, fearful look on his face, he retorted, “*Chulita*, you can’t burn in La Mera Selva!” Juan added, “If you had burned, you and Don Chebo would have been evicted. Remember Jacinta’s eviction”. We all went quiet and fell into a deep silence.

They were right. Selecting SM *versus* SB is not only subject to agronomic considerations. Tzeltal peasants also take political implications into account that tie these practices to events like Jacinta’s eviction. The occurrence of such a calamity was a window through which I painfully discerned the tangled ball that represents the conflict Tzeltal peasants live with every day. That experience largely defined that this book be a testimony, and it forced me to rethink several issues. A very important one among them was the issue of land preparation through its two variants, SB and SM. That is why I would like to give my testimony of the eviction so the reader may bear it in mind when he is introduced to the choice between SB and SM.

3.5. JACINTA’S EVICTION

Jacinta was evicted on August 18, 2007. It was the first eviction since the *CZL* Decree was issued in 1972. As I described in Section 2.3.4, Jacinta (Don Chebo’s daughter) and her husband Feliciano had left Salvador Allende due to family problems and had settled down in the community of San Manuel (also known as Nuevo (New) Salvador Allende), which is located within the *RIBMA* and the *CZL* property. They were there for seven years until the day when police forces in helicopters came to evict them. They were not the only ones: several families of San Manuel and the nearby hamlet El Buen Samaritano were evicted the same way. Below I will share my testimony of the incident.

3.5.1 The first 36 hours in Salvador Allende

Immediately after Doña Mica gave us the news about the evictions, Don Chebo set out to San Manuel. It was around nine in the evening. I stayed with her, listening to the account of a man who lived in San Manuel and had

been able to escape the eviction. According to his account, helicopters with government police had landed in San Manuel, and had called the whole community to a meeting. When almost everyone was gathered together, they made them get into the helicopters, beating them with their rifle butts. Then the police destroyed the homes looking for money and guns. The man took advantage of the confusion and went to hide in the *Montaña*. It took him hours to get to Salvador Allende to tell us what had happened.

That August night was one of the most confusing and sad ones in my entire life. After Don Chebo left with some other men to San Manuel and Mariano and others got connected to the short wave radio, the women and small children gathered in Doña Mica's kitchen, and we all cried. For their part, they cried because they did not know the whereabouts of the displaced people and they were afraid of being evicted themselves the following day. As for me, I cried because the only thing I could do was sympathize with them through my tears. Doña Mica sent me to sleep and I obeyed like a robot.

I lay awake all night hearing the women go back and forth waiting for some news. My mind was constantly jumping between ideas, thoughts, desires and feelings. I was terrified at the idea of being evicted with rifle blows. Then my thought was regret, lamenting I was there instead of somewhere else. I also had a strong desire to flee, but then I realized I could not, should not...and did not want to leave them alone. Then I felt shame for being so cowardly. Next, I thought that if I was with them during the eviction I could serve as eyewitness, making sure their individual rights were not violated. Yet I realized they could also violate mine, accuse me of anything and put me in jail. Overcome with sadness, I understood that not only was I in dire straits, but I was also going to get my whole family in trouble if I was jailed.

The next morning was like any other morning. The sun peeked in from behind the mountains covered in a blanket of newly formed clouds that are the reason why the Biosphere Reserve is called Blue Mountains. And yet, something had happened: I did not feel safe anymore in Salvador Allende. And I was not the only one with that feeling; every one there shared it with me. But we did not share the same opinion as far as what to do should the helicopters land that day to evict us. Lázaro and Mariano suggested we all seek cover in the *Montaña* to avoid being captured. In fact, some of the women prepared sacks with food and clothes and sat all day with their children (more than a dozen babies, girls and boys ranging in age from one month to ten years old) at one of the entrances to the *Montaña*, ready to run if the helicopters came down.

Watching them wait the whole day in fear of the potential eviction was really saddening. Don Chebo, who was the community representative in all negotiations with the government, said, "We are no criminals and should not have to escape like that. The government does not have the right to evict us.

I have spent a lot of time and money going to their meetings just so they can not expel us at this point". I thought he was right, and knowing that Sebastián had a copy of the Mexican Constitution in his house, I began to read the first part where the individual human rights were cited. I found several rights had been violated with the eviction in San Manuel and would equally be violated if they evicted us. So my thought was that if the helicopters came down, I would run out holding the Constitution and I would read them our individual human rights. But when I thought about it again, I realized that they would probably beat us even harder for bringing up our human rights, as this was not a matter of legality. Time went by so slowly, and we waited under so much tension that I despaired. Thus, I tried to find shelter in my *k'altik* full of *broza*. But once I was there, I realized it made no sense. They were going to evict us!

Late in the afternoon, after a helicopter flew by, there was a meeting of people from Amador Hernández, Candelaria and Juan from San Martín. More details were given on the evictions of San Manuel and El Buen Samaritano, on how the homes had been destroyed and animals abandoned. We wrote a regional communiqué about the evictions, published a few days later on the internet via Indymedia⁶² (see Appendix 3.1.). In the meeting it was also defined what each of us had to do. They sent me along with Lázaro and Juan to Ocosingo to discuss the situation with different actors (such as the *ARIC UU ID* authorities, the *EZLN*, human rights centers and the Ocosingo Parish) and we coordinated the steps to be followed to find out the whereabouts of the displaced people. We were going to catch up with Sebastián, who had gone ahead of us. Some from Salvador Allende and other communities (like Amador Hernández and Candelaria) were to go to San Manuel and recover what was left from the evicted belongings and animals. And yet others were to remain vigilant and prepare for further evictions. Thus, the following morning I set out to Ocosingo with Juan and Lázaro.

3.5.2 The days in Ocosingo

In Ocosingo, we found out that the *ARIC UU ID* was planning to publish a communiqué against the violent evictions and in favor of negotiations (see Appendix 3.2.). But they were not going to do anything more since San Manuel and El Buen Samaritano were not their members and the organization was not going to put the negotiations of their own communities, like Salvador Allende, at risk. We found out the whereabouts of Jacinta, the other women and the children, who were being held at a party venue in the city of Trinitaria in another municipality of Chiapas, and of the men, who were locked up in the prison of the *Centro de Readaptación Social el Amate*

⁶² http://chiapas.indymedia.org/display.php3?article_id=148827

(Center for Social Rehabilitation “El Amate”).

We did not get together with Sebastián until evening. He and Lázaro began to discuss what must be done. The former proposed to seek support from their organizations, *ARIC UU ID* and *EZLN*, as well as from human rights centers. The latter asserted none of the organizations would get involved and it was better to act on an individual basis. Each one presented his arguments. On one side, Sebastián maintained that thanks to the people in the *Centro de Derechos Humanos Fray Bartolomé de las Casas (FRAYBA)*⁶³ - Human Rights Center Fray Bartolomé de las Casas) they knew where Jacinta was. Besides, he reminded him that on multiple occasions the *ARIC* as well as the *EZLN* had acted to stop evictions. On the other side, Lázaro emphasized the current non-involvement position of the *ARIC UU ID* authorities and reminded him that the *EZLN* did not negotiate with the government. He said with the current political situation,⁶⁴ none of the two would call for action to mobilize and the power of human rights centers was limited. Both men defended their arguments naming past incidents and actors that I had no knowledge about. At a certain point during the heated discussion between these two very different brothers, I felt like a referee between their two strategies, without having the least understanding of anything that was happening. Everything seemed so confusing.

The following day I went with them on two meetings with human rights centers. The first meeting was with an attorney for *FRAYBA*, who thought the best thing to do in the face of an eviction was to escape, because if one was captured the matter was not likely to be resolved in one's favor. He shared with us some other experiences of detainees and told us of all the government's tricks to violate their human rights. They also discussed extensively the fact that Lázaro was the coordinator of *la Otra Campaña de la Región Candelaria* (The Other Campaign of the Candelaria Region) that covered the villages of Salvador Allende, San Martín, Corozal, San Manuel and part of Candelaria.

Months earlier, Sebastián and Migue had declared in the national *La Jornada* newspaper that they were supporters of this movement through which *EZLN* tried to get closer to other social and civil organizations. (Bellinghausen, 2007a; 2007b). So at that point, they drafted a public communiqué with *la*

⁶³ On its website, *FRAYBA* affirms the “*Centro de Derechos Humanos Fray Bartolomé de las Casas (FRAYBA)* is a non-profit civil organization, independent from any government, political ideology or religious belief. Founded in 1989 by the initiative of Samuel Ruiz García, catholic bishop of the San Cristóbal de las Casas Diocese, *FRAYBA* is based on Christian and ecumenical ideas”. http://www.FRAYBA.org.mx/sobre_nosotros.php

⁶⁴ The political circumstance of both organizations was debilitated. On one side, a few months earlier *ARIC* had suffered its latest split, which resulted in its debilitation to negotiate. On the other side, *EZLN* had suffered several political attacks that weakened its position on a national level.

Otra Campaña de la Región Candelaria, which was released on the internet. In that notice, they publicly denounced the evictions and demanded that the “bad government” stop harassing communities with eviction threats and free the detainees and prisoners. Ultimately, the communiqué urged comrades of *la Otra Campaña* to help them through demonstrations, support letters and their presence in the region.

The second meeting was organized by the *Comité de Derechos Humanos Fray Pedro Lorenzo de la Nada*⁶⁵ (Human Rights Committee Fray Pedro Lorenzo de la Nada). In attendance were *Servicios y Asesoría para la Paz (SERAPAZ)*⁶⁶ (Advisory Services for Peace), representatives of the Ocosingo Parish, *ARIC UU ID* regional authorities, members of *ENLACE* and relatives of the bereft. The participants provided more details on how they had found out about the evictions and what they knew about them. They spoke about the displaced people and the need to clarify their legal status, as there were no official statements from competent authorities. They reported they had found out where the detained women were being held through sympathizers of *la Otra Campaña*. Finally, they agreed to create three commissions so that the following day one of them would visit the government delegate in Ocosingo to learn about the legal status of the displaced; the second commission would travel to la Realidad to hold talks with *EZLN* authorities; the third commission, which I joined, was to go to Trinitaria in an effort to visit the detained women and children.

3.5.3 Visit to Trinitaria

Very early the next morning, we left in the direction of Trinitaria. Our commission was constituted by relatives of the displaced (among them Sebastián and Juanita, Jacinta’s siblings), people and authorities of the Candelaria Region (among them Juan), representatives of the Ocosingo

⁶⁵ On its website, the *Comité de Derechos Humanos Fray Pedro Lorenzo de la Nada* indicates it was born in 1994 “founded by a small group of professionals, human rights militants dedicated to this work through their link with the Dominicans since years”. The interest of these people converges with the Ocosingo Parish’ need to create an instrument to defend and promote human dignity in that locality. Given the May 1993 events, when elements of the Mexican Federal Army burst into the community of Nuevo Patathé and arrested eight *Tzeltal* indigenous persons who received support from the Parish, even though they did not have sufficient material and human resources to confront this situation. <http://pedrolorenzo.laneta.apc.org/historia.htm>

⁶⁶ According to its website, *SERAPAZ* “is a Mexican independent, non-profit, civil organization. It serves the peace and seeks to transform social conflict through promotion and unification of civil processes and initiatives, investigation and editorial production, training, advice, incidence and follow-up of processes that contribute to Peace building. *SERAPAZ* emerged to facilitate the administrative and financial management that backs the mediation work of the *Comisión Nacional de Intermediación* (National Mediation Commission) (*CONAD*). At the end of its term, it transferred its different mediation and civil links for the work of Peace to *SERAPAZ*’.” <http://www.SERAPAZ.org.mxp/ginass/quienessomos.html>

Parish, members of Fray Pedro Lorenzo de la Nada and *SERAPAZ*. We arrived in Trinitaria almost two hours later.

Since we did not know whether they were going to let us see them, we first spoke with Max, who had access to the detained and was familiar with their situation. He had learned about them through *FRAYBA*, as he was a supporter of *la Otra Campaña* in Trinitaria. He had been able to justify to the pertinent authority his visits to the displaced by offering to provide clothes and victuals and to help Jacinta's oldest son heal from a deep wound infection. Chatting casually, Max mentioned the detainees had been moved several times and told us about the security measures to visit them.

Based on this conversation, Luis from *SERAPAZ* decided to talk to the government delegate for permission to visit the detainees. After some waiting and some phone calls, we were given authorization and we headed for the place where Jacinta and the rest of the displaced were being held. It was located in the outskirts of the city in a small one-story building that was normally rented out as a party venue. It was surrounded by a large garden and a big fence.

When we arrived there, a police officer who had been informed of our visit opened the fence gate. The women and children stayed on the building's terrace, and we slowly started going up to them. When Jacinta saw her siblings Sebastián and Juanita she started to cry, and when she got close to them she spoke quickly in Tzeltal. All her little daughters and sons surrounded them while Jacinta gave testimony of how they had evicted her.

I also listened to her testimony on subsequent occasions when someone else was translating it to Spanish. In fact, readers interested in seeing and listening to Jacinta may do so on a video⁶⁷ provided by *SIPAZ*⁶⁸, a coalition of religious peace organizations that followed up on the situation of the displaced persons.

3.5.4 Jacinta's testimony

In her testimony Jacinta tells that in the morning, before they had even had breakfast, a helicopter landed in San Manuel. The police officers in it had come to conduct the eviction operations and called all the people to come together in the center of the village. As people started gathering, the police officers began taking data from them regarding organizations they belonged

⁶⁷ Access to the video on *SIPAZ* blog can be obtained at <http://SIPAZ.wordpress.com/2007/08/28/SIPAZ-visita-a-los-desalojados-de-montes-azules/>

⁶⁸ On its website, *SIPAZ* states it is an international observation program born in 1995 following the Zapatista uprising of 1994, to monitor the conflict in Chiapas. It is constituted by a coalition of organizations from the American continent (especially the United States of America) and Europe.

to, their names and the number of children they had. The people of San Manuel responded to the police officers by asking them, "Why are you here? What is it you want? What are you going to do?" But, according to Jacinta, the police officers "were just there and didn't give them any answers, they didn't talk to them, they didn't tell them why they were gathered. They only kept them close together".

Later, when another four helicopters landed, the police officers started yelling at them to get into the helicopters, and they grabbed them by the hair, beat them, pushed them and made them climb in hitting them with their rifle butts. The people asked if they could get their belongings, their clothes and money, but the officers yelled at them to be quiet and to get into the helicopters.

Jacinta had not gone out to the meeting, as she was tending to her son who had a cut on his foot. But she heard the screams. A few agents of the operation entered her house right away without asking for permission. She protested but they pushed her and yelled, "No, we are coming in by force, shut up". They immediately began going through her clothes and breaking her furniture, throwing it all over the house. She still asked them to explain the reason for the police break-in but they replied, "No, right now you're not getting explanations, we came to get you out at once and quickly, don't talk anymore, don't argue". They took everyone out of the house without letting them get anything, neither clothes, nor money nor identifications. They dragged her injured son through the mud, not caring that he was hurt, and they kicked his back.

At the side of the helicopter, Jacinta still asked them for a few days' extension of time so they would not evict her, but the officers merely answered she better get into the helicopter. In one last effort, she asked them why they were evicting them that way, why they could not really tell them whether they could live there, why they did not give them information about that. The only reply she got was to be grabbed by her hair and beaten into the helicopter. Crying, she told that they wanted to resist the eviction but it was not possible because within the operation, there were people who understood Tzeltal (who turned out to be from Palestina, a Tzeltal village of the *Comunidad Zona Lacandona*) and these people translated everything they said to the police officers.

The helicopters took the evicted to a place in the municipality of Trinitaria. From there they were transferred first to an auditorium and then to the party venue where we visited them. The conditions under which they were kept were deplorable. Thirty-three people (7 women and 26 minors) were crowded into one room with air mattresses and some blankets. Outside there was an improvised bathroom. For food, they were given maize flour that was

good for making *tortillas* but could not be used for preparing *pozol*⁶⁹. Besides, they were given food they were not accustomed to (tuna fish from cans) and since they did not like that, they were hungry. Worse still, Jacinta mentioned that after the eviction it became very hard for them to communicate with people around them, as none of them spoke Tzeltal and they only understood some Spanish themselves. In the end, they could not send a message to Sebastián, since no one knew how to read or write.

While she was talking I observed her intently. Her speech was fast but faltering because of the weeping, the pain and the indignation. Seeing her like that, surrounded by her daughters and sons in that room with air mattresses and piled up cans of tuna fish, all of a sudden I realized some things that had not been apparent to me when I first met her in Salvador Allende months earlier. Jacinta had too many children, and she desperately lacked in speaking, writing and reading Spanish. In addition, she was so used to living in her community that other ways of living (such as the one in Trinitaria) were completely foreign to her. All of the above led me to think that location plays an important role in defining the adequacy of people's lives. In Salvador Allende, she just lived her life, and there was not much to question. However, seeing Jacinta in Trinitaria so helpless, so fragile, made me aware how futile and inadequate her past life in the jungle seemed, now she was taken out of it.

3.5.5 The meetings in Ocosingo

In the evening, upon returning to Ocosingo, there was another meeting organized by *Fray Pedro*, in which each commission gave their progress briefing. Our commission was the first, and the ones who had participated gave our impressions about the visit to Trinitaria. Many of those reports turned around the precarious state in which the detainees were kept, under unhealthy conditions, lack of food and medicines. Luis from *SERAPAZ* said he had tried to clarify their legal status with the government delegate from Trinitaria, but the latter told him he did not know anything. Luis had pressured him arguing that, since there was no longer a reason to keep them there, those women and children, being Mexicans, were entitled to leave the party venue freely. The delegate merely said they could not leave and the state government had only requested him to find a temporary space for them to stay at. He complained the state government had assured him they would send resources to support the detainees, but he had not received anything yet.

⁶⁹ Maize dough that is dissolved in water to drink it. It is known in Tzeltal like *matz*. For more details see Section 6.4.1)

The second commission briefed on their visit with the government delegate in the Ocosingo Municipality. The commission provided him with a copy of the document that was sent to the *Comisión Estatal de Derechos Humanos* (State Commission on Human Rights) regarding the rights of the displaced persons. They also requested clarification on the legal status of the six men who had been arrested and the 33 detained women and children. The delegate asked the commission whether they had a relationship with the *COAO* (coalition of peasant organizations, which he belonged to). They told him they were just relatives of the displaced and human rights representatives. As soon as the delegate heard this, he asserted he had not been informed about the eviction (which took place in his municipality) and was unaware of the legal status of the evicted. Yet he promised to investigate with the State Government Secretary and inform the commission of his findings that evening.

Mention of the *COAO* reminded the attendees of the meeting of el Chorro (see Section 2.3.2), when the *ARIC UU ID* broke up as a result of the confrontation between two opposing sides that supported two different peasant coalitions, *COAO* and *COCISEL*. Lázaro participated actively in said confrontation. He was one of the bravest partisans against the supporters of *COAO*, which was the coalition that the Ocosingo delegate and other peasant leaders with political aspirations in that year's state and municipal elections belonged to. Thus, to some of the attendees in the *Fray Pedro* meeting, the evictions were a form of political retaliation against Lázaro for having truncated some of the peasant leaders' political careers. Since the commission that had gone to la Realidad had not come back yet, this meeting concluded with the reconfiguration of commissions so they could continue their activities the following day.

Even though I had signed up with the commission that had the meeting with the government delegate in Ocosingo, I ended up not going with them. I was completely worn out by all these events and I needed to inform Ángel-*CETAMEX*, Conny and Gerard, my family and my friends about the course of events. However, I did attend the meeting in the evening that *Fray Pedro* organized, in which each commission gave briefings of their progress. The commission that had gone once more to visit the detained women and children in Trinitaria insisted on the poor conditions in which they were being kept without enough food, sufficient water in the bathrooms or sufficient medical assistance. They pointed out the federal government's absence in all this and said it was the uninformed, ill-prepared state government who was in charge.

The commission that went to see the Ocosingo government delegate received the same answer they were given the previous day: the delegate did not have any information and decisions had been made at a federal level. At that point, the commission made a list of petitions in which, in addition to

clarifying their legal status, they demanded the displaced people be freed and transferred to Ocosingo and they requested the establishment of a roundtable of dialogue. The delegate solely indicated such petitions had to be submitted in writing.

The commission that had gone to la Realidad to talk with *EZLN* returned that day and informed that the *Junta* had decided to first confirm the Zapatista affiliation of some of the displaced people before deciding anything. Nevertheless, they had filed a public complaint against the violent evictions of indigenous communities in Montes Azules (see Appendix 3.3.).

Lastly, people of Maderas del Pueblo del Sureste,⁷⁰ an NGO that condemns harassment of indigenous communities living in the Lacandon Jungle, also participated in this meeting. Miguel Ángel, who had been director of this NGO in 2002 serving as Porfirio Encino's advisor, knew about the federal government's plans to evict these communities. Yet Porfirio, who at that time was secretary of the *Secretaría de Pueblos Indios del Estado de Chiapas* (*SEPI* - Department of Indigenous Peoples of the State of Chiapas), was able to stop them even though the complaint of dispossession and environmental damage had already been filed. But as Miguel Ángel said, 2002 was a different political time: the *ARIC* was not divided, Porfirio was one of its leaders and secretary of the *SEPI*, and the *EZLN* still had much political clout on a national level. In 2007, the outlook was hopeless. In a desperate measure to demand an answer from the government, we concluded that we had to organize a big demonstration including personalities with moral weight such as Samuel Ruiz and Rosario Ibarra⁷¹ at its front, to demand the prisoners and detainees' liberation. We concluded our meeting with images of a collective march in our minds.

3.5.6 Moving away from the displaced and the meetings

The demonstrations were not needed as governmental bodies began responding to the commissions' demands and petitions.

Both state and federal governments announced that the evictions had

⁷⁰ On its website, Maderas del Pueblo states it is a non-governmental ecological organization (non-partisan but class-conscious) with a social and political vision that supports the indigenous peoples and peasant communities, contributing to their socially fair and sustainable development in harmony with nature.

<http://www.maderasdelpueblo.org.mx/quienes.html>

⁷¹ Samuel Ruiz was archbishop of the San Cristóbal Diocese for several decades. He was considered the main promoter of the Theology of Liberation in Chiapas and was involved as mediator between the *EZLN* and the government. Rosario Ibarra de Piedra started her political career in the seventies, when she demanded to know the whereabouts of her son. At that time, she created a social organization constituted by mothers of missing politicians. She has been a representative and a senator in the Mexican congress and candidate to President of the Republic on several occasions.

occurred “as a follow up to a complaint filed by the *Comunidad Zona Lacandona* (owner by the *Brecha Lacandona* Decree of 1972) against dispossession and environmental damage” (see *CONANP* Press Release in Appendix 3.4.). In addition, they agreed to drop charges, transfer the displaced to Ocosingo and create a negotiation roundtable to compensate them. All of this was presented under the condition that the displaced not return to live in their communities.

I slowly started to move away from the matter but I heard of their progress when I saw Jacinta on two more occasions. The first one was late September in Ocosingo. The large family of ten children lived in a small room and was interviewed for a documentary⁷² about *los Caracoles, Gobiernos Autónomos de EZLN (Los Caracoles, Autonomous Governments of EZLN)*. In said interview, Jacinta again gave her testimony about the evictions and also commented on the progress in negotiations with the government. Out of six evicted families, four that belonged to the *EZLN* did not participate in the negotiation and the *EZLN* relocated them to the land they had recovered in las Cañadas de las Margaritas. Jacinta’s family was one of the two that did agree to negotiate their relocation or compensation with the government.

The authorities had committed themselves to pay their housing and food expenses in Ocosingo while the negotiations went on. Yet as of that moment, there had been no meetings to discuss their relocation or indemnification and they had not received any money either to cover their living expenses in Ocosingo. They deemed these to be very high as they now had to buy everything, and on top of it they had lost everything. Lázaro, her brother, was helping them in the negotiations they had decided to take up independently as a family – without becoming members of any organization like the *ARIC UU ID*.

In the interview for the documentary Lázaro, who had been serving as interpreter and had invited me to it, said something I heard him mention several times. To the question why the evictions had occurred, he replied that the government accused Tzeltal peasants of being the destroyers of the jungle, and as environmental authorities they were allegedly very concerned about nature. But he did not believe them because these same authorities that were supposedly worried about the Rio Negro Basin (where San Manuel was located) of the Lacandon Jungle did not do anything against the bare mountains of Ocosingo Valley and a deforested and contaminated Mexico City. To Lázaro, who was working the *milpa* without burning and who applied other agroecological practices friendly to Mother Earth, the evictions were the result of the Spanish descendants’ and multinational firms’ interests to grab the available richness.

⁷² A transcript of the interview can be found under http://autonomiazapatista.com/Entrevistas/entrevistas_27.html

The second time I saw Jacinta was during the *ixim* festivities in Salvador Allende in December of 2007, where I had the opportunity to chat with her. She told me the government had only covered expenses during the first two months and had not continued with their roundtable of negotiations; therefore she and her family had not been willing to accept the fifty thousand pesos (approximately three thousand Euros) in compensation. So for lack of money to live in Ocosingo, they had gone back to live in Salvador Allende. When I asked her if they were thinking of settling down there, she answered no, because even though everyone in Salvador Allende approved of them living there, she could not “see herself situated” there. She missed her house and life in San Manuel, where water and land were good, where *ixim* had given a good yield that year, even though they had not been able to harvest it. She and her family were suffering because they missed all that. In the end, she confessed to me that she was going to try to return to her house in San Manuel with Feliciano and all their children. I asked her if she was really sure about wanting to do that, as I had just found out that she was pregnant with her eleventh child. She said there was no other option; they had to try to go back. Months later, I found out they did not stay in San Manuel very long, since they had to flee to the *Montaña* when they heard helicopters coming to evict them once more. They never went back to San Manuel or Salvador Allende, and in the end, they accepted the compensation the government gave them under the condition not to go back to the forest..

In due time, I heard different interpretations from various people as to why the evictions had taken place. They ranged from their communities’ refusal to belong to any kind of organization or movement, to the *ARIC UU ID* split in March of 2007, to the weakening of the *EZLN*. The existence of drug trafficking and the change of federal and state authorities, as a result of changes in national and state governments, were also part of the equation. Another explanation was that in 2007, people from San Manuel as well as Rancho El Buen Samaritano had slashed, cut and especially burnt a large part of the *Montaña*. Thus, Tzeltal peasants ended up associating the evictions with SB.

3.6 THE CHOICE BETWEEN SLASH-AND-BURN AND SLASH-AND-MULCH

The issue at hand is the choice between two variants in land preparation that are slash-and-burn (SB) and slash-and-mulch (SM). For Tzeltal peasants the choice between the two depends on the peculiarities of the agronomic and political contexts of the land that is prepared. I will explain these peculiarities and contexts and how they affect the decision of Tzeltal peasants in the following sections.

3.6.1 The agronomic reasons for the choice between variants

During my time in La Mera Selva I perceived that the most evident agronomic element that farmers use to distinguish SB from SM is the burning: if one burns it is SB, if one does not burn it is SM. However, there are other features that differentiate them such as the thick *versus* fine chopping discussed in section 3.4 of this chapter. Moreover, there are differences within each of the variants. SM using canavalia (*Cannavalia ensiformis*) was introduced to this Region by CETAMEX in 2004. Its adoption was problematic as many farmers complained that seed production and thus saving seeds for next year was difficult. Also, canavalia did not grow as well as velvet bean. Velvet bean (*Mucuna pruriens*) is a quite well known green manure. According to Marquéz (pers. comm. 7/12/2006), the Presbyterians were the ones who brought it to Las Cañadas during the eighties, and other institutions and organizations also started working with it after them. Don Juan told me that velvet bean was introduced in his *Ejido* Amador Hernández during the nineties via a program named *PEICASEL*⁷³. Program fieldworkers together with local farmers established plots for several years and some people from this *Ejido* adopted the innovation. That was also the case with his brother Jacinto who currently continues cultivating his *milpa* using this plant. Like him, other peasants from this *Ejido* incorporated it; for them it became the natural plant of their fallows and the principal ingredient of their daily coffee drink (used as coffee substitute). But that was not the situation for all. Don Juan explained to me that he tried velvet bean but that his land never got used to it. Velvet bean and canavalia are not the only plants that Tzeltal peasants consider useful as green manure. Juan has two fields in San Martín where he had cultivated and applied SM for six years. He did not use velvet bean or canavalia because he made use of a dominant plant on the *acahual* named *xchaji* (*Podochaenium eminens*) “*xchaji* grows without me having to sow it and is a better fertilizer than velvet bean”. Juan’s brothers do the same in Corozal. Javier told me that “there are good fields where *xchaji* grows and it is so soft to slash and produces such good fertilizer that we do not need to burn”. In Salvador Allende, Lázaro showed me one of his *k’altetik* covered with *chayote* plants (*Sechium edule*) and said to me, “In Salvador Allende the *ch’umaté* [*chayote*] works better as fertilizer since velvet bean and canavalia don’t grow as well as in Amador that is hotter. In here the former is a better plant for SM”.

⁷³ *Programa de Educación Integral de Campesinos de la Selva Lacandona* (Integral Education Program for the Peasants of the Lacandon Jungle) was a project that was implemented between 1989 and 1998 by the *ARIC UU ID* with the help of René Gómez Orantes and Martha Orantes Gamboa, and supported by the *Secretaría de Educación Pública* (Department of Public Education) (*SEP*) de México and the UNESCO.

I had several opportunities to discuss with Tzeltal peasants about their choice between SB or SM. They explained their choices in terms of advantages *versus* disadvantages of one variant vis-à-vis the other. These advantages and disadvantages have been discussed widely in literature on research that attempts to understand the agronomic logic behind SB in *milpa* agroecosystem (Pool and Hernández, 1993) and the alternatives for SB intensification⁷⁴ (Mariaca, *et al.*, 1993). They are also contemplated in research promoting or evaluating SM as an alternative to SB in Central America (Buckles *et al.*, 1998) and tropical areas of Mexico (Guevara *et al.*, 2000). Farmers considered also more practical management issues related to maize cultivation practices (Soule, 1997). Agronomic advantages and disadvantages were defined by criteria related to soil fertility, weed control, pest control, labor investment and yield. These general criteria yielded controversial results when different experiences are compared (Guevara *et al.*, 2000) making evident the diverse, complex and context-specific nature of these two land preparation variants. Peasants have the same experience: they explained to me on several occasions that the advantages or disadvantages of each variant depended on the particular circumstances.

This controversy was clear when they talked about soil fertility, which was considered one of the reasons to abandon a cultivated field in shifting cultivation. Manuel Clara from Amador Hernández (who had been cultivating velvet bean for five years) told me “an advantage of SM is that plants like velvet bean grow so much that they produce more than 20 cm thick layer of green manure. This green manure after decomposition nurtures our mother Earth”. However, Mariano who tried SM once but later continued with SB, explained to me that *ixim* plants “prefer burned soil as they grow greener than those plants cultivated without burning.” There are scientific studies comparing both variants that support Tzeltal peasants’ positions. Authors like Buckles *et al.* (1998) and Guevara *et al.* (2000) reported that after four years of using SM soil fertility was higher than that of SB soils. However, during the first few years, ashes from burning proved more nutrients to the plants (Reyes, 2000).

Weed control is another factor in considering abandonment of the field. On an occasion, when I visited one of Lázaro’s *k’altik* that was covered with stinging nettles, my hands started burning at their touch. According to Lázaro, working in the *k’altik* with so many stinging nettles and other thorny plants is very cumbersome, for this reason he sometimes felt like burning it to get rid of them. Nevertheless, as I stated earlier, Juan and his brothers have a “friendlier” weed in their fields that allows them to practice SM. Not only the presence of specific weeds but also, the survival of

⁷⁴ SB intensification refers to the decrease on the years in which fallow is abandoned and in the increase of the cycles that SB is carried out in the same field.

particular seeds in the soil are fundamental in the explanation of the choice between SM and SB. José Luis from *Ejido* Pichucalco indicated that some people prefer not to burn because without burning edible plants such as black nightshade (*Solanum nigra*) and tomato (*Lycopersicum esculentum*) occur 'naturally' in the *k'altik* – that is, without having to sow them. However, Domingo told me that black nightshade grows naturally in both burned and not burned fields. Apparently, burning does not have a clear relationship to the presence or absence of viable seeds.

Contrasts between the different justifications for field preparation variants did not appear to be very strong when discussing pest control. Farmers normally highlighted the usefulness of burning to control undesirable organisms like ants and rats. Ants for instance do not only damage maize by eating their leaves but also complicate cultivation practices. One time, while picking up maize cobs in Sebastián's *k'altik*, my hands were bitten by hundreds of ants and I threw the cobs all over the place as a reaction. Embarrassed by the situation, Sebastián said there were lots of ants and rats because he did not burn the *k'altik*. Thus, management practices become more complicated when green manure or *broza* cover the soil completely and dangers (e.g. presence of poisonous snakes) are more difficult to avoid.

In a similar vein, farmers had divergent experiences with labor investment. Most of them recognized that with SM they needed to weed their field twice while with SB they did so only once. Moreover as reader will notice in section 4.7 of the following chapter, leaving *broza* in the field complicates later cultivation practices such as sowing (e.g. tripping over the *broza* and finding a clear to sow the seeds). Juan told me about his 15-year-old *acahual* which he had already slashed, cut and burned that year. He explained that the burning had eliminated all the *broza* so that his crop could grow better and his work investment would render positive results. Not all farmers agreed that SB needed less labor investment than SM. Javier, for example, recognized that a bad SB will need several rounds of weeding and that sometimes SM only requires one, thus highlighting the fact that weeding in particular and labor investment in general also depend on other factors.

Finally, there were also opposed opinions in relation to yield. In a meeting with promoters in which we discussed the advantages and disadvantages of SB and SM, some of them argued that with SM they achieved higher yields. Others replied that that was incorrect, as they had better yields with SB. A third group disagreed with both, indicating that yields were similar in both variants.

Most farmers identified the advantages and disadvantages of each variant of land preparation, and that each is a response to specific agronomic challenges. As Don Eusebio once summarized: "there are types of land, on

which the plants are easily and thoroughly chopped. Yet there are others like mine where, even though I don't like it, the only option I have if I want to harvest *ixim* is to burn". His statement made me reflect on the complementary and unrestricted nature of both variants. In the meeting in which I discussed extensively with promoters from different communities, all of them recognized that in their communities there were fields that were better prepared with SM and others in which farmers applied SB. Nevertheless, Don Chebo was against burning. He actually hated the practice. Every time we walked by a piece of land that looked like it had been burned, he spoke ill of it and of the people who practiced it. If this happened on land within Salvador Allende, he got visibly angry. He would tell me people did not understand they could be evicted for burning and there was a community agreement not to burn. He made evident that the choice between SB and SM is not only based on agronomic considerations but also on political ones, as I already experienced when we prepared my *k'altetik* in San Martin and in Salvador Allende.

3.6.2 Slash-and-mulch as an alternative to slash-and-burn

When we agreed in preparing the land of my *k'altetik* I discussed with Don Chebo and Juan about the place, the dates and the people who were going to help us prepare the land. But there was no discussion as far as how we were going to do that. It was not necessary. It was obvious it would be SM, as burning was not an option. At least for me it was not an option, in April of 2007, when I thought that SM with green manure could replace SB as land preparation technique in order to avoid burning. However, upon encountering all the *broza* problems in Salvador Allende, I started reasoning differently. I began to think of burning as a practice that would make it possible for me to walk on the land without the fear of stepping on a snake because I could not see the ground, without tripping on or hurting myself with dry branches, without slipping off trunks. Yet I knew I could not burn the *broza*, it was politically incorrect.

My relationship with *CETAMEX* did not allow me to burn *broza*. After all, thanks to this NGO and their director, Ángel, I first met and then started working with Don Chebo and Juan. Since 2003 *CETAMEX* had been promoting the use of SM with green manure to avoid burning. Their position was that SM could replace SB in land preparation. Actually, as a result of the conversations I had with Ángel, I had also adopted this view when I first started my fieldwork phase without having any experience with the SB and SM field preparation practices that farmers had. Also, at the time I did not know about the debate that places SB – as a main characteristic of shifting cultivation system - in two different positions.

This debate is between two different strategies to advance and reconcile

biodiversity conservation and food production known as land-sparing/intensive agriculture *versus* nature-friendly agriculture (Padoch and Pinedo-Vasquez, 2010:550). They are based on different scientific traditions and empirical data (ibid). Departing from a binary view of landscape (in which nature and human activities⁷⁵ are separate) the land sparing/intensive agriculture approach promotes landscapes in which there is a clear division between pristine natural reserves and homogenous highly productive and intensive managed areas of farmland (Fischer *et al*, 2008). Assuming that human activities and nature co-occur within complex social-ecological systems⁷⁶, the nature-friendly agriculture approach highlights the value of heterogeneous landscapes in which patches of original vegetation are scattered throughout farmed areas structured similarly to native vegetation (ibid). The two approaches place shifting cultivation systems in a different position. From a land sparing/intensive agriculture approach, shifting cultivation systems do not achieve acceptable production levels and are therefore a threat for the conservation of pristine areas. In contrast, from a nature-friendly agriculture perspective, shifting cultivation is a system of complex and heterogeneous landscape management, which then becomes an alternative to balance biodiversity conservation and food production.

Added to my ignorance about this debate was the fact that during my entire stay in the area I played the role of *CETAMEX ingeniera* (field worker). Therefore I thought that burning *broza* would not only make me face Ángel-CETAMEX but, in my role as his *ingeniera*, challenge his position and thus his work on green manure. In other words, to burn *broza* in Salvador Allende would not have been politically correct. Instead, using green manure during SM was encouraged. But, there were other reasons why burning was politically incorrect.

3.6.3 Burning and the elements that make it politically incorrect

Out of all the tasks connected with land preparation in the already controversial shifting cultivation (Conklin 1968; Dove, 1983; O'Brien 2002), burning is the one condemned most. Single slash-fires produce nutrient losses that are estimated to require a century or more of fallow for re-accumulation and recovery of soil fertility (Kauffman *et al*, 1993:140). The fires also have a negative impact in seed density and seed bank species composition and thereby alter the secondary forest succession which some consider as undesirable (see Miller, 1999). Moreover, they contribute to the

⁷⁵ Fischer *et al* (2008:382) indicate that this conceptual model originates from the equilibrium theory of island biogeography and is highly compatible with mathematical optimization approaches that seek to allocate resources in the most efficient way.

⁷⁶ Fischer *et al*. (2008) say that in this view resilience and adaptive capacity are given greater emphasis and homogeneity is seen as a threat to spatial and temporal variability.

carbon emission because the greatest and most rapid rates of C and nutrient depletion occurs during fire events (Kauffman, 2009:1217). Furthermore, the burning as part of shifting cultivation together with other activities that change the land use of tropical forest causes deforestation (with a loss of 6 million hectares of primary forest per year; FAO, 2006:59-60); ecosystem degradation (transforming one fourth of the earth's surface from natural areas into agricultural land; UNEP, 2005:2) and climate change (for contributing 17% to the global emissions; UNEP, 2009). In relation to the burning, the FAO (2006:59-62) states that most wildfires "are a result of fires that get out of control on agricultural land that is almost always located next to forests or on their edges".

In Mexico, the *SEMARNAT* (Secretaria de Medio Ambiente y Recursos Naturales- Department of the Environment and Natural Resources) reports that the tropical forests are the terrestrial ecosystems of the country that suffered more transformations and affectations by human activities and there is a special concern over these ecosystems as they contain the highest levels of biodiversity (SEMARNAT, 2009:49). It also asserts that shifting cultivation, the common agriculture in tropical areas, is one of the main causes of the increase of disturbed vegetation in the country in the last decades as it has contributed to push the agricultural frontier forward by 75% (SEMARNAT, 2005). The *Comisión Nacional Forestal (CONAFOR - National Forestry Commission)* reports that 99% of wildfires are caused by mankind, and 44% of that total is attributed to uncontrolled agricultural burning from the SB (CONAFOR, 2009). The 15th National Official Norm that regulates the use of fire indicates that agricultural fires should be notified and can be restricted by the Minister of Agriculture or the Minister of Environment (NOM-015-SEMARNAP/SAGAR-1997, 4.2.2.1). The national environmental legislation defines that the government should promote in areas with tropical forest the progressive shift away from shifting cultivation practices involving SB to other practices that do not implicate ecosystem degradation (LGEEPA, article 101, IID). This legislation also prohibited in its article 48, any activity that alters the natural ecosystem in the protection area of Biosphere Reserves⁷⁷. It is in line with the RIBMA decree in which farming and livestock activities are prohibited in this zone (DOF, 1978:7).

In the case of the Lacandon Jungle, the government considers not only burning, but the entire shifting cultivation to be one of the main causes of the 30% deforestation that had occurred in the last 45 years (INE, 2000:13 and 62). The RIBMA declaration was government answer to the request of a

⁷⁷ The model of Biosphere Reserves as natural protected areas start in 1970 when UNESCO approved the establishment of the Program about the Man and the Biosphere (MAB). This model defines the clear delimitation of zones for different purposes like core central areas for protection, surrounded by buffer zones with ecological practices and transition areas working in sustainable development (Vásquez, 1992:24).

group of Mexican scientists (but without consulting the local population) to stop timber exploitation and the expansion of agricultural frontier at the expense of the tropical forest biodiversity (Vasquez, 1990). Studies about the deforestation in this Jungle show how shifting cultivation fields and grassland have been increasing at the expense of primary forest (Mendoza and Dirzo, 1999; Dias-Gallegos, 2008). Data show that the protection area of the RIBMA is threatened by these activities (ibid). Next to this, studies at local level in the Lacandon Jungle documented other roles of SB and shifting cultivation. Quintana-Ascencio *et al.* (1996) show that SB modifies soil seed bank characteristics when short fallow periods are used. These authors also highlighted that grassland causes a higher modification because it has not only lower number of species but also a different soil seed bank composition. And furthermore there is the point of CO₂ emission. De Jong *et al.* (2000) link land use/land cover changes with C fluxes and finds that heavily converted areas in 1990 lost an estimated 24% of their total 1976 C pools, whereas the low impacted (primary forest) region lost only 3%. They also reported that this loss converted into CO₂ emissions is higher in grassland than in plots of cultivated land. In relation with soil fertility Celedón (2006) reported that slash fires degraded sandy soils but that they did not have the same negative impact over alluvial soils. Although these points count as disadvantages for SB, other authors who have studied the traditional SB and shifting cultivation in detail propose them to be the point of departure for the development of productive systems in wet tropics (Nations and Nigh, 1980) and for environmental restoration of the tropical forest (Diemont and Martin (2009).

Every year during March, April and May, when the burning part of SB coincides with the dry season, *CONAFOR* deploys a comprehensive national campaign to prevent and control this practice. So, in April of 2007 when I entered la Mera Selva by plane, I immediately associated the smoke coming from the burning of the land with TV advertisements against forest fires. The airplane pilot complained there were days when the smoke was so dense that there was not enough visibility to fly. He said the smoke did not only come from the burning in the Lacandon Jungle but from the whole Mayan Zone that covers from the Yucatan Peninsula to Guatemala.

Later, flying over the Cañada de Amador Hernández, we saw fire and smoke coming from a wooded patch located in the middle of one of the mountains in the glen. Showing it to me, the pilot said, "See, *Ingeniera*, another fire has gotten out of their control. I bet the mountain is going to end up all burnt like the ones in front". He pointed at them on the other side of the ravine. According to him, "those mountains got burnt in 1998; they just let the fire run its course and did not do anything about it". I turned around to look at them: around ten peaks were thinly covered in light green, the green of shrubs and young trees. It had taken a whole ten years to get to that point.

That same day, already in San Martín and looking at the sunset, I asked Juan and Don Eusebio about the fire and smoke we had as a view. The first thing they said was that it came from a *xchequel* or burning in Rancho Aurora. After watching it a little longer, they added that it was already dying down and in a few days, it would be completely extinguished. Then we turned to see the other side of the glen, in the direction of the burnt mountains. According to them, that fire had been produced by someone from Pichucalco who had lost control of it, and since that year had been very dry, the fire had advanced towards the *Montaña*. They recalled how in 1998 everyone (not only people from Pichucalco, but also from Amador Hernández, Salvador Allende and they themselves) had worked several weeks on extinguishing the fire. They said the whole issue of not being able to control a fire, of not knowing how to burn the *k'altik* was a very punishable act to begin with. A few days later, when I turned to look in the direction of the smoky land, I only saw a black clearing in the midst of forest greenery. The fire had died down, as Juan and Don Eusebio had foreseen.

The wildfires of 1998 like the one referred above and caused by a person from Pichucalco in that year were created by exceptional conditions as *CONAFOR*, in its Compendium of Environmental Statistics of 2006, reported

“1998 was a particularly serious year in regard to wildfires. Though it is not the only year considered critical in this matter, many agricultural fires that got out of farmers’ control were combined with meteorological conditions – not registered in the last 70 years, approximately – which favored their spread. Among those were: intense rains in 1997, which translated into a large accumulation of vegetation biomass, frost, strong winds without moisture, scant rainfall and high temperatures during 1998, which caused the accumulated biomass to dry out and become flammable fuel” (SEMARNAT, 2005).

Authors like Pyne *et al.* (1996:639) assert that anthropogenic fires and tropical forests have developed side by side. According to them, there is evidence that nowadays less burning takes place in Mesoamerica than before the Spanish Conquest. Furthermore, they indicate that a substantive fraction of the legendary biodiversity of the tropics is attributed to chronic but low intensity disturbances (like SB) from people who have lived there. Uhl *et al.* (1990:30) studying the ecosystem response to natural and anthropogenic disturbances, sustain that fires have been the most important natural, large-scale disturbance over the last several thousand years in Amazonia. They also conclude that SB as a small-scale disturbance can aid the design of ecologically sustainable uses of rain forest lands for human ends. Padoch and Pinedo-Vasquez (2010:551) ask to see “beyond the smoke and the prejudice” that “have criticized, condemned and criminalized” shifting cultivation and the burning it involves and to recognize it “as an essential component of a tropical forest conservation-agricultural matrix”.

Like other scholars, in Mexico Gómez-Pompa considers shifting cultivation as “a natural way to use the regenerative properties of these forests for the benefit of man” (Gómez-Pompa *et al.*, 1972:763) and suggests that the composition of present-day tropical forest in Mexico may have been strongly influenced by the past management of Prehispanic civilizations (Gómez-Pompa and Kaus, 1990). He proposes that traditional forms of it carried out by traditional and indigenous farmers (and not the intensive SB undertaken by recent colonialists and squatters) can be an alternative for a wiser management of tropical resources (*ibid.*). His statements and proposition coincide with the nature-friendly agriculture approach to balance conservation with development. Nevertheless as Padoch and Pinedo-Vasquez (2010:551) recognize “there are near-infinite variants of what has been labeled shifting cultivation or slash-and-burn and a simple traditional/nontraditional dichotomy does not really work to distinguish the desirable from the destructive”. In contrast, the Mexican environmental legislation with regard to shifting cultivation and burning and Biosphere Reserves does promote an approach in which areas for conservation are clearly demarcated and human activity is forbidden. As we will realize in the next section Mexican policies also promote the idea of areas of permanent agriculture via SM.

3.6.4 The political correctness of slash-and-mulch

As said before, the use of velvet bean, canavalia and other plants is suggested for a land preparation practice that forms an alternative to burning. In the so-called slash-and-mulch (SM) these plants serve as green manure and after they have been slashed they form a mulch that subsequently decomposes. The resulting mulch is then used as fertilizer for cultivation purposes (Thurston, 1997:15). Spanish chronicles dating from the sixteenth and seventeenth centuries indicate that ancient Mesoamericans already made use of this technique (Thurston, 1994:30).

Several authors consider SM to be an environmentally friendly alternative to SB, since by not burning the land, it is not eroded by exposition of naked land (Thurston, 1997) and it reduces the risk of uncontrolled wildfires that destroy entire forests. Besides, it controls pests and diseases (Buckles and Erenstein, 1996:13) and is claimed to reduce productive risks (Pinto *et al.*, 2009). Maintenance of soil fertility and weeds control at the same time allows for more cultivation cycles. Buckles *et al.* (1998:52) found that after an initial slow introduction of velvet bean in the 1970, by early 1990s, almost two-third of hillside farmers in northern Honduras were using it in SM. Some of these farmers have been consistently cultivating their fields with velvet bean for more than 20 years (Buckles, 1992). Guevara *et al.* (2000:244) report that although the introduction of velvet bean in Mexico via programs started only 10 years ago, farmers from a small town in Oaxaca already

cultivate this plant together with maize in their *milpa* fields near the rivers for more than 30 years. These positive experiences with velvet bean as green manure support the idea of establishing permanent *milpa* fields using SM.

As a matter of fact, in 1999 the then *Secretaría del Medio Ambiente y Recursos Naturales y Pesqueros* (*SEMARNAP*; later known as *SEMARNAT*) uses the concept of sedentary *milpa* to refer to the potential of SM and its associated use of green manure to establish permanent agricultural fields. This idea was launched by the *Programa de Agricultura Sostenible y Reconversión Productiva* (Program for Sustainable Agriculture and Production Conversion - *PASRE*). It was the Mexican government's response to the 1998 fires with the objective to improve the productivity of agricultural systems and reduce the use of fire (INE, 2007). Putting the subprograms into operation consisted, among other activities, in financially remunerating peasants for each plot they cultivated with SM and providing and purchasing *Mucuna* and *Cannavalia* seeds. The program was implemented in nearly the entire country but after few years it was abandoned because there was a change within *SEMARNAT*'s top authorities. Still the government continues to invest in a land sparing conservation/intensive agriculture approach to convert shifting cultivation with SB into a sedentary agriculture through several programs of the Ministry of Environment and the Ministry of Agriculture (see Section 6.3.3).

The governmental policy to promote the SM with green manure has impacted projects of other actors promoting and working on agriculture innovation. That was the case for projects of several actors working in la Mera Selva as I realized in one of the meetings between *CETAMEX* and the Candelaria Region of *ARIC UU ID*. In that meeting, Lázaro acted as an authority of the Candelaria Region of *ARIC UU ID*, Don Chebo and Juan (among others) as promoters of agroecology of the Candelaria Region, and I as *CETAMEX* fieldworker. The meeting took place in January 2007, and its purpose was to define the activities *CETAMEX* was going to carry out along with the promoters of agroecology of the Candelaria Region of *ARIC UU ID* during that year.

The topic came up when Lázaro requested *CETAMEX* to seek support for those peasants who did not burn, who, in other words, were doing SM. He also mentioned that the *ARIC UU ID* general authorities (from other places in the Lacandon Jungle) as well as *ENLACE* (the other NGO working with the Region) were receiving funds for SM and were not sharing it with the peasants of the Candelaria Region who were practicing it. He even reminded them that when Ángel-*CETAMEX* started working in the Region, he gave the peasants who did not burn some financial support. Against this background, he concluded, "the Candelaria Region had agreed to request *CETAMEX* to provide money, *machetes* and sharpening files for those peasants who did not burn". With this argument, Lázaro pointed out that

SM was not only used by the peasants who practiced it as a means to prepare the land; SM was also used by them to obtain money, or files or *machetes*. More so, he showed how other actors, like his own peasant organization and the NGOs that work with them (*ENLACE* and *CETAMEX*) used SM to acquire money through projects that are related to it.

The case of *CETAMEX* illustrates how. In 2003, *CETAMEX* gave peasants who did not burn and sowed with green manure monetary support from government financing sources. But that “monetary support” was not offered to them again in subsequent years, even though the NGO continued receiving financing from the federal government’s *Instituto de Desarrollo Social (INDESOL* - Institute for Social Development) to promote SM with green manure. That year, 2007, Ángel purchased velvet bean and canavalia seeds and I distributed them among the promoters so that they and their communities would use them as green manure. In early January of 2008, I wrote a report for *INDESOL* in which I informed that new plots with green manure had been established to promote SM.

Thus for four years *CETAMEX* had been receiving financing to promote SM in this region. As a matter of fact, a video in which the NGO shows the work it conducts in this area addresses this point and presents its position on burning and on SM. In that video, which is titled “We are Children of the Earth”, Ángel’s voice associates images of agricultural burning with phrases like “peasant aggressions that deplete livelihood from the earth”. He shows peasants’ testimonies on the use of velvet bean and canavalia, alleging they are peasant efforts “to formalize their land rights and find harmony with nature”.

Based on this video, *CETAMEX* conveyed to governmental bodies like *SEMARNAT* the idea that agricultural burning is an assault on the jungle and the use of green manure in SM is the road to be in harmony with it. I heard Ángel mention this several times in his chats with Tzeltal peasants. Every time when discussing about SM, SB necessary appeared as well. When burning was mentioned, he would add the warning: “remember that every time you burn it is an invitation for the government to evict you. So if you don’t want to be evicted you had better use green manure and practice SM”.

3.6.5 Burning as an excuse for eviction and slash-and-mulch as a strategy to escape from it

I heard several Tzeltal peasants who agreed with Ángel’s associations between burning and evictions and SM as a strategy to avoid the last. In the testimonials part of the aforementioned video, Diego from Rancho San Antonio Miramar talks about these relationships as well. According to him, he works with SM because “we want that support from the government, we want them to see that we are not destroying the land, that we are appreciating it and taking care of it”. In the meeting with *CETAMEX*,

addressed in the previous section, Diego himself indicated that one of the reasons he did not burn was that it helped avoid evictions and, in addition, it helped to direct project funds to communities.

I mentioned in Section 2.3.4 that *ARIC UU ID* invited *CETAMEX* with the purpose of creating agroecological arguments to stop potential evictions and formalize land ownership in five of its communities in the forest (among them Salvador Allende). The indigenous peasant organization *ARIC UU ID* has a long history of confrontation and negotiation with the government against evictions and for the formalization of their land.⁷⁸

In the negotiations it held with agricultural, federal and state environmental authorities, and with the *Comunidad Zona Lacandona* (forest owners by Decree) during the Roundtable of Environmental Negotiations of 2001-2006, the *ARIC UU ID* used this agroecological argument with positive results. In this roundtable, environmental authorities and the *Comunidad Zona Lacandona* had accepted the formalization of two of the communities (Salvador Allende and San Gregorio) because “some of the landowners opted increasingly for nature-friendly agricultural practices (Ascencio, 2008:122)”.

The formalization of the two communities did not materialize due to the refusal by the new environmental authorities to approve such process within the *Reserva Integral de la Biósfera Montes Azules* in April 2007 (Mariscal, 2007). In their press release, the secretary of the *Reforma Agraria* declared, “in accordance with *SEMARNAT*, they must not be formalized, there is no negotiation” (CONANP Press Release, 2009). In addition, his response to the complex situation in which the previously relocated or displaced persons were living, was that in his view “the important thing is that they did not return to the Jungle; the important thing is the conservation of the environment” (ibid.). Months later, on August 19th, *CONANP* made a press release regarding the eviction of Jacinta, in which it stressed that the area recovered “is in a severe state of destruction” and since it was inside of the *RIBMA* territory, “its conservation is of vital importance” (ibid.). Finally, on November 12, 2009, in a press communiqué that talked about the “voluntary eviction” of several families in Salvador Allende, the *Secretaría de Reforma Agraria* indicated that although those families had requested formalization of the area occupied by them, it could not be granted according to environmental legislation that prohibits it. At the same time it reported, “the *SRA* maintains talks with the three families that stayed there to vacate 70 hectares so that the Cuenca del Río Negro (Rio Negro Basin), considered as

⁷⁸ This history began with the struggle for recognition of its members' land ownership since 1975, which was founded under the name of *Quiptic Ta Lecubtesel* (Legorreta, 1998:74). Since then, many confrontations and negotiations have taken place between this organization (which has had different names in the course of time) and federal authorities, described in detail by Legorreta (1998, 2008) and Ascencio (2008).

one of the biologically most important regions within the *RIBMA*, will be clear of any illegal human settlements” (Appendix 3.5).

3.7 SEBASTIAN’S PERMANENT *K’ALTIK* AS A SOLUTION?

In August 2007, as we were driving back from visiting Jacinta at the party venue in Trinitaria, Sebastián made a comment to me about his *k’altik*. We were traveling in one of the Ocosingo Parish cars, driven by Father Nelson (one of the priests). Sebastián sat next to the driver and I sat in the back, behind Father Nelson. Next to me were Toribia, secretary of the *Centro de Derechos Humanos Fray Pedro Lorenzo de la Nada*, and Santiago of *ENLACE*. After an initial chat charged with indignation and concern about the situation afflicting Jacinta and the other women, the children, the babies and the men who were in prison, there was a long silence, filled with uncertainty and hopelessness. What was going to happen to them, now that they had been evicted and had no land? What was the future of all those living under the same circumstances going to be?

Sebastián broke the silence and said to me, “Caro, I think I am ready for a permanent *k’altik*. For years now I have been adapting my *ixim* seeds to the *broza* of land that is not burned. I think it is time to try having one single plot where I cultivate *ixim* each year with SM. That way the government will not have the excuse to evict us because we slash, cut and burn the *Montaña*”. When he told me this, my thoughts moved from the place where we had just left Jacinta behind, to the different *k’altetik* in Salvador Allende. Making a permanent *k’altik* implies changing a complete way of farming and eliminating the variant of land preparation that includes burning. However, for Sebastián at that moment it meant not to be evicted like his sister. So it was neither Don Chebo, nor Ángel, nor Diego nor Lázaro but Sebastián who, with the experience gained from the eviction, associated once again the burning in SB with a practice that justifies evictions, and the SM with a political strategy that allows them to stay in La Mera Selva.

In other words, how does SB justify evictions? First, the historical landownership and land management conflict created the conditions for evictions to happen in this region. When scientific evidences linked the shifting cultivation together with its slash-burnings to soil erosion, deforestation, increase on CO₂ emission and loss of biodiversity, the government made use of these evidences for taking measures. Mexican government had formulated environmental legislation to prohibit this practice (as well as other activities that make use of forest resources) in the protective area of Biosphere Reserves. The Lacandon Jungle is an example of such deforestation in the Biosphere Reserve. The 1978 declared regulations see to it that no human activity making use of the forest resources is allowed

in the protective area of RIBMA. Such activities, and especially SB practices, are threatening the forest and the people who carry them out are committing an illegal activity. For that reason they can be evicted and go to jail. It makes evident that Jacinta's eviction is not only the violation of human rights but it also shows that a land preparation practice can become a criminalized act in the eyes of Mexican legislation leading in certain conflictive situations to a justification of evictions.

Let us now answer the question: How does SM become a strategy for Tzeltal peasants to avert eviction? SM using green manure has been documented as an environmentally friendly alternative to SB because it avoids soil erosion and destructive wildfires. It also maintains soil fertility and controls weeds two factors that lead to abandoning the field after some years of cultivation with SB. Experiences in Honduras and Mexico with SM and green manure such as velvet bean have showed that it is possible to think of the conversion of temporal SB fields and fallows to permanent SM agricultural fields. The Mexican government has promoted this conversion in different ways from direct activities like the PASRE program implemented by the Minister of Environment to indirect financing of the work of NGOs that promote these agroecological innovations. The strategy to change the shifting nature of SB into SM and eventually to permanent fields is directly related to the objective of an agricultural policy to create a landscape where conservation areas are legally and physically separated from production areas. Moreover, as SM using green manure is considered an environmentally friendly technology NGOs offering agroecological innovations like CETAMEX have included it into their portfolio of innovations. Finally, the farmers' organization ARIC UU ID has also made use of SB to negotiate the formalization of irregular landownership in this region. In this way, SM becomes a strategy to avoid evictions, and is also applied in contexts where farmers have experienced SB as a more agronomically adapted practice of land preparation. This is the way that we arrive to the conclusion, which is in line with that of the Tzeltal peasants themselves, that it is sometimes better to practice an agronomically inefficient, but politically acceptable SM to be able to continue living in La Mera Selva.

Having answered these questions, let's go back to the moment when Sebastián was waiting for my reaction to his suggestion of turning his *k'altik* into a permanent one. At that moment, as I was thinking as a crop scientist, I replied that I would like to join him in his feat to make the *k'altik* sedentary, which involves dealing with challenges such as soil fertility, pests, diseases and weeds typical of a permanent *k'altik* that is not burned, in a tropical climate that fosters all of the above. Today, thinking in land preparation performance as a situated and particularized action in which Tzeltal peasants respond to agronomic as well as political contexts, my answer is the same, but for different reasons.

CHAPTER 4

JUGGLING THE SOWING

4.1 INTRODUCTION

The sowing performances (*stunel*) on the *ixim* in San Martín and Salvador Allende were opportunities that made me understand the absolute disapproval I encountered during my first visit to this region. That occasion, in August of 2005, was the first time I proposed to Don Chebo, Juan and other promoters to experiment with the sowing dates. Dumbfounded, they rejected my proposal pointing out that their ancestors had already defined the right moments to sow a long time ago, and these could not be changed just like that. When I tried to explain the idea based on my knowledge of crop science, they replied the topic was not up to be discussed, and I sensed it was better not to insist. Years later, in May of 2007, after performing the sowing in my two *k'altetik*, I was able to understand their rejection, since I had submerged myself in all the details of those performances, which led me to think about the second facet of performance.

From this facet, I define the performance of sowing to be a situated and particularized action that sowers negotiate with their life circumstances and which I would like to evoke as a juggling act. I will break these negotiations down into coincidences, adjustments and agreements. Also, based on my own training, I further differentiate the description of the circumstances of making the *milpa* between environmental, technological and social circumstances. First, sowers must make the sowing coincide with the environmental characteristics of the region, which allow for two sowing seasons. The sower will adjust the sowing time of the *ixim* to the times of other practices and activities as well as to his specific technological possibilities. Finally, the moment to sow will reflect the sower's social circumstances. It is precisely these environmental, technological and social circumstances together, which make it unthinkable to experiment with the sowing date as if it were a well-established plan.

At the same time, however, it is the changing characteristics of each of its circumstantial components, which demonstrate how Tzeltal peasants are improvising while adapting the sowing to their life circumstances. The reader will perceive this tension between plan and improvisation throughout this chapter.

4.2 THE ENVIRONMENTAL CIRCUMSTANCE THAT DEFINES THE SOWING SEASONS

The peasants talked to me about the environmental circumstance that defines the two sowing seasons. They told me that these two seasons are related to the two cultivation cycles of *ixim*. The most important cycle is the one of the *temporal* or summer, called *ja bil k'altik* in Tzeltal, and its sowing season is during the months of April and May, since that is when the rainy season starts.

There is another cultivation cycle, which is complementary and is known as winter cycle, *tornamil* in Spanish and *sijumal* in Tzeltal. The months of September and October are the sowing season in this cycle, as there is still rainfall and it is not as cold as in November and December. At first sight the two sowing seasons are thus determined by rain, temperature and the *ixim* plant, representing the environmental circumstance that the sower adjust to. Let's now take a look at the peculiarities of each one.

4.2.1 Rainfall

At first glance, one could think that it rains throughout the year in the Lacandon Jungle, since it is a tropical rainforest. However, this average annual precipitation (INE, 2000:26) of 2,226 mm for the whole area is not distributed evenly throughout the months. In February and March, days go by without any rainfall or with hardly a drizzle. Thus, as these months go by, one is amazed at how paths that were once covered in mud quickly dry up and turn into dusty trails. This lasts until June, when the tropical storm and hurricane season starts, the *temporal*, bringing rainfall that constitutes 80% of total annual precipitation (ibid.). June, July, August and September go by and the skies get covered by clouds every day. Nights witness frequent intense downpours and paths inevitably turn into mud. Therefore, by October and November, when the *temporal* rains begin to diminish, flying in a small aircraft and walking the paths of this region turn into a sheer adventure filled with dangers. To say the least, people constantly slip and fall on these paths.

In December, the *temporal* ends but the season of winter rainfall begins, which can be very varied. Some years are excessively dry, others are dry, and yet others are moderately humid (ibid.). The winter rain showers called *nortes* diminish in quantity and intensity until precipitation reaches its lowest reading in March. However, it is not until April that the leaves of the shrubs start curling for lack of moisture. The rainy season may be expected to begin starting that month. And if the rains coincide with this, it is said that the *temporal* arrived early. They say this because nowadays the rainy season does not start until May, unlike in the past, when it began in April.

However, if showers have not arrived by May, they will certainly arrive in June along with the hurricane season, which is then considered a late *temporal*.

4.2.2 Cold and warm temperatures

One would assume that the small difference in temperatures registered in the Lacandon Jungle - between 5° and 7° in the 24° - 26° C average yearly range - (ibidem) do not cause variations to the extent that one feels cold or suffers from the heat. However, in the sub region of Las Cañadas, which La Mera Selva is part of, variations in temperature are greater due to its mountainous relief⁷⁹ (Márquez, 1996:138). Yearly fluctuations in temperature make March, April and May the hottest months, and December, January and February the coldest (Muench, 1978:56). Variations are also due to the localities' altitudes. During the hottest months, there are places with hot temperatures such as at San Quintín, which is situated 228 meters above sea level or at Amador Hernández, at 334 meters above sea level. San Martín, located 615 meters above sea level, is only hot at midday, when all one can do is lay in a hammock or bathe in the little cold creek. Salvador Allende escapes the hot days because it is located 949 meters above sea level. But in December, January and February, the cold of dawn makes one jump out of bed and join in the winter ritual of warming up around the kitchen hearth. In San Martín and Amador Hernández, one does not run to the hearth but a good blanket is needed in order not to lay awake during the cold night.

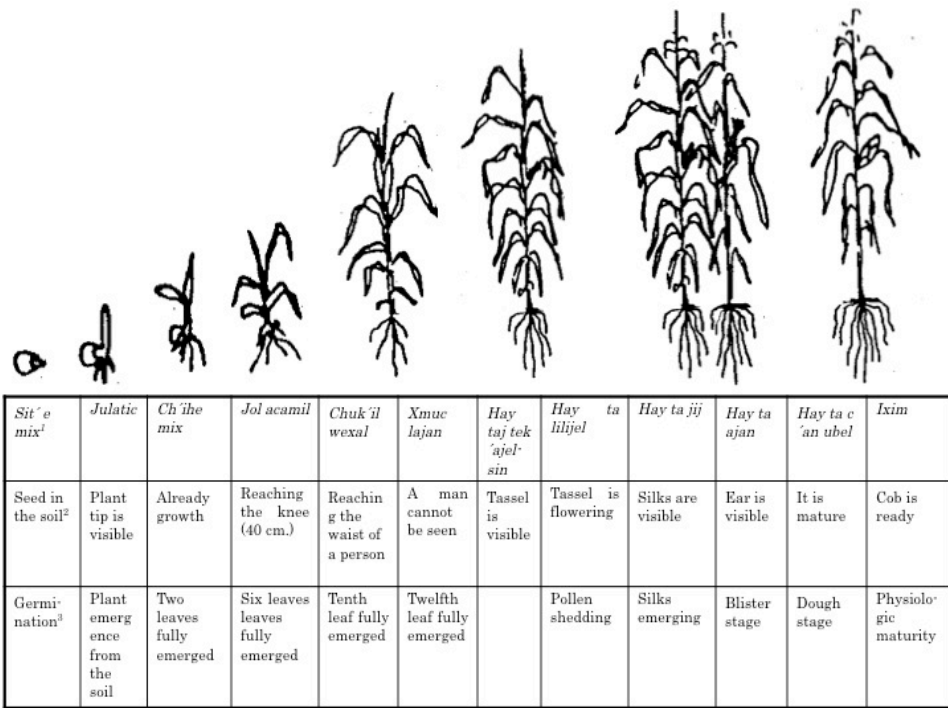
4.2.3 *Ixim* growing stages

Finally, it could be assumed that the different types of *ixim* cultivated in this area have adapted to changes in rainfall and temperature. However, part of the adaptation of the local types consists in peasants' ability to make rainfall and temperatures coincide with the different general requirements of maize plants. In other words, there are growing stages during which said plants are more or less sensitive to the presence or lack of moisture and to very cold or very hot days (Andrade *et al.*, 1996) (Figure 4.1).

After the sowing, when the *ixim* seeds are in the ground, they need to be moist and warm in order to germinate and emerge from the soil to show their tips. This changes when the small plants grow and continue developing to the height of our knees and start to tiller, or when they grow even more, reach our waist and are in a stage of active growth. During these

⁷⁹ For each 100 meters of altitude, there is a difference in temperature of one degree Celsius and the relation is the higher the altitude the lower the temperature (INE, 2000:26).

stages, high temperatures and the absence of rainfall do not drastically diminish yield, if the plants have the opportunity to recover later.⁸⁰ So it does not matter if there is a drought, because during these stages the high temperatures accelerate the speed of formation and emergence of leaves. This translates into a shortened time to flowering. That situation changes when the plants reach a height in which a man standing can no longer be seen and the twelfth leaf is emerging. At that point, they require more moisture and moderate temperatures. Those requirements are even more meaningful when the tassels are visible and the silks emerge. They are equally relevant during pollination and development of the cob. Finally, the plants need less moisture and temperatures are not as important while the kernels are maturing, or until the cobs are dry enough to be harvested.



¹Tzeltal term

²English translation

³ Stage of growth, Ritchie, S.W. (1982)

Figure 4.1 Development stages of the maize plant in Tzeltal and English

⁸⁰ As opposed to the flowering stage, when they are most sensitive to water stress.

4.2.4 The sowing season, the coincidence of *ixim* with rainfall and temperature

As the reader may have noticed, sowing seasons seek to be the coincidence of precipitation, temperatures and the requirements of maize. These are illustrated in Figure 4.2, which shows the data of monthly rainfall and temperatures collected from 1961 to 1990 in the weather station of San Quintín, which is the closest with climatic data available.

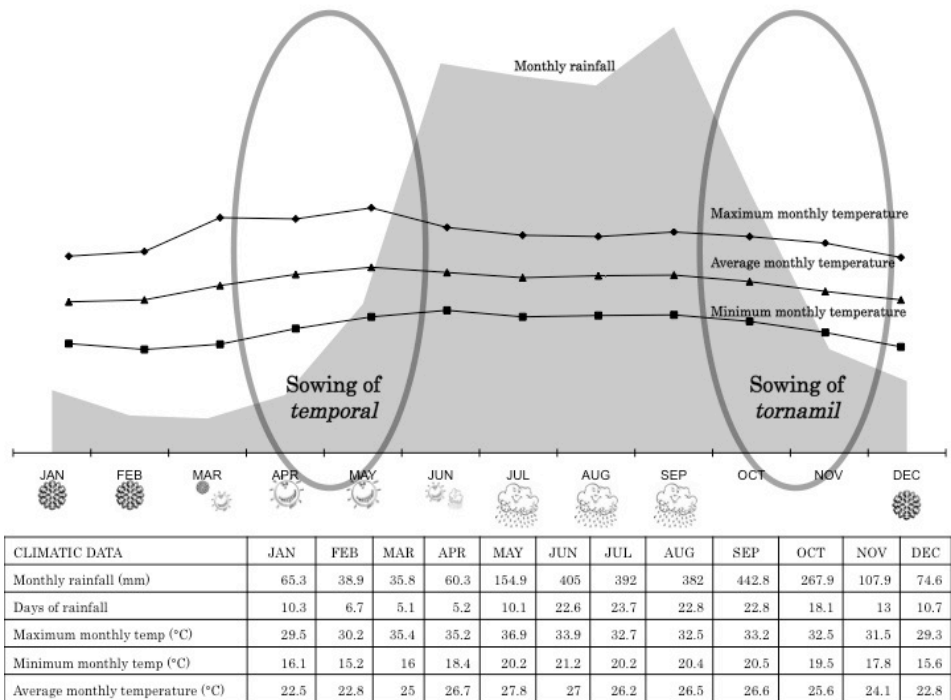


Figure 4.2 Climate data from the Weather Station in San Quintín, Chiapas 1961-1990

The highest peak in temperatures and the lowest values in rainfall are registered during April and May, the sowing season of the *temporal*. This means that during this season, the probability of rainfall is smaller and that of drought greater. This is a drought that, as several Tzeltal peasants told me, the type of maize called *Chaparro* is not used to since it is an improved variety recently introduced there. However, the original maize types called *C'anál ixim* and *Sacua*,⁸² which were the first types of maize cultivated in

⁸² To learn more details about the different types of maize Tzeltal peasants cultivate, see Section 6.4.2.

this region, do endure the drought. These original maize types take advantage of the high temperatures and clear days that a drought brings along and quickly accumulate the hours of light and heat required to reach the flowering stage. Based on all this, it is said that the plants of the *C'analexim* and *Sacua* types endure up to a month without rainfall from the moment they are sown in April or May, and just a few good showers during those months are enough to keep them growing. However, if they are not sown until June, when the *temporal* is already well established, the plants will keep growing. They become so tall that they forget to grow a cob, and they are swept away easily by the wind.

During October and November, the sowing season of the *tornamil* cycle, temperatures and rainfall both diminish due to the transition from hurricane to winter rainy season. Since the latter is very varied, it is difficult to predict how much rainfall there will be during this cycle and whether it is going to be very cold. Due to this uncertainty and because it has a faster cycle, the *Chaparro* maize type is the preferred one. Even so, this cycle is complementary since it is defined in September, one month before sowing, while the *temporal* plants are bearing their cobs and the harvest yield can already be calculated. It is also complementary in the sense that some peasants, like Juan, cultivate during this cycle “just to have tender maize cobs in January”.



































Moreover, within the sowing seasons, especially the one in the *temporal*, more specific coincidences are sought regarding such details as the intervals between days of heavy rainfall *versus* days without any rain or downpours after the sowing. So knowing that in April it rains five days on average is not the same as starting to count the days without rainfall from the sowing day. In this calculation, rainfall is expected every day, and if the total of days without rainfall or with just a drizzle amount to a month, one has to sow again because some plants do not make it. The situation is even worse when shortly after sowing there is a heavy downpour and afterwards there is no rainfall at all for several weeks. In that case, the whole *k'altik* must be sown again. These are all essential details that one worries about when the *ixim* has already been sown and it is unknown when it will rain. For all this information, the peasants rely on *cabañuelas*, a local weather forecast method and other on strategies to decide on the moment to sow.

4.2.5 *Cabañuelas* and other strategies to define the sowing

Cabañuelas are not only used by the Tzeltal but also by other Mexican, Latin American and Spanish peasants to predict the weather each year. While we were waiting for the beginning of the rainy season in 2007, I was told about several forecasting methods they practice there. One of them is the monthly forecast for the whole year, which they arrive at by observing

the weather during the first twelve days of the year, each day representing a month. Based on criteria such as whether it rains or it is hot, Tzeltal peasants create a monthly calendar that seeks to identify the months of drought or rainfall. As can be seen in the table 4.1, Don Chebo, Juan, Diego, Javier and Fernando provided different monthly forecasts for their respective localities. These differences, which could question the already criticized *cabañuelas*, also highlight the variation in rainfall between places located less than 25 km away from each other (see later in Figure 4.3).

Table 4.1 Different monthly rainfall and heat forecasts for 2007

PERSON	COMMUNITY	1-1-2007	2-1-2007	3-1-2007	4-1-2007	5-1-2007	6-1-2007	7-1-2007	8-1-2007	9-1-2007	10-1-2007	11-1-2007	12-1-2007
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Don Chebo	Salvador Allende												
Juan	San Martin												
Jerónimo	Amador Hernández												
Javier	Corozal												
Fernando	Pichucalco												
			rain			hot temperature							

Source: Fieldwork notes

Aside from this monthly forecast for the whole year, I had the opportunity to learn about other ways of predicting the weather for specific months or days. In March, Mariano mentioned that since it was still very cold that month, April and May would surely be very hot and bring little rainfall. One evening in early May, talking about the lack of rainfall, I said I hoped it would rain the following day. Sebastián replied it was not going to rain. He pointed out the crescent moon and stated, “It is not going to rain because the moon is laying flat like a cradle. If it were upright, it would surely rain tomorrow. Besides, the wild turkey had not gobbled that afternoon. So tomorrow it’s not going to rain either”. Thus, there are several ways to forecast the beginning of the *temporal*. However, these are not the only strategies employed by Tzeltal peasants to negotiate with their changing environmental circumstance. Along with the above, there are other strategies the sower may consider to diminish the risk of the sowing not coinciding with the beginning of the *temporal*.

Such is the case in the use of flat land *versus* hills. Don Lázaro explained to me that on the flats (fields without slopes found on low grounds) more moisture is stored than on the hillocks (fields with moderate inclines located on the middle grounds) and even more than on the hills (fields with steep slopes on high grounds). This explains why, in a year when the *temporal* is predicted to come late, it is better to sow on flat land if one wants to sow early. Besides, he added, it is even better when the soil of the flat land is clayey or muddy “because the *ixim* plants hold out better there without rain than on sandy soil”. On the contrary, if a *temporal* with abundant early

rainfall is expected, it is better to sow on the hillock and on soil that is not too clayey because the *k'altik* will surely get flooded.

Another strategy used by the peasants is having various sowing dates within the same sowing period. This was the case of Don Chebo who, during the *temporal* of 2007, sowed three times on different *k'altetik*; one in late March, another one in the middle of April and a third one in early June. Much the same way, Don Juan of Amador sowed in early April, but in mid-May, he re-sowed his *k'altik* again. He had to do this because in 2007, the period of drought was during April and May, and the rainy season did not start until the end of May and beginning of June. Therefore, it is not an easy task to choose the right moment to coincide the moment of the sowing of *ixim* with rainfall and temperature.

This became clear to me during 2007, when the late *temporal* affected the *ixim* plants sowed in the beginning, middle or end of April and May, in different ways. Rainfall sprinkled the *ixim* seeds we sowed in Salvador Allende in late May ever since the first night they were on the *k'altik*. Instead, the plants that we sowed in the middle of May in San Martín had to endure two long weeks without any rainfall. The same happened with the plants sowed in Juan and Sebastian's respective *k'altetik* in late April and early May, which were able to endure a month with no substantial rainfall. The plants that Don Chebo sowed in mid-April were still able to develop a few cobs in spite of April's scant rainfall. Similarly, Don Juan's *k'altik* in Amador was saved due to the re-sowing in May. The *ixim* plants Don Lázaro sowed in Salvador Allende in early April and those that Don Chebo sowed in March, however, did not have such luck. They did not withstand the prolonged lack of rainfall (almost two months) caused by the late beginning of that year's summer season.

4.3 TECHNOLOGICAL CIRCUMSTANCES THAT DETERMINE THE TIME TO SOW

Besides taking into consideration the environmental circumstances, it was necessary in 2007 to adjust the sowing of *ixim* to the times of other practices and activities that shape the technological circumstances of Tzeltal peasants in their interaction with La Mera Selva. These times refer to other practices that constitute the cultivation of *ixim* during the same cultivation cycle. They are also times in which cultivation practices carried out in one cycle overlap with those carried out in the subsequent cycle. One has to remember at the same time that the *k'altik* is not only *ixim* and that sowing times for other plants are also associated with it. Lastly, since the *k'altik* is not the only space, and since there are more areas Tzeltal peasants manage, the times of the activities taking place in these spaces are to be included.

All these times are defined by the most suitable environmental conditions in which each one of these practices and activities are to be performed. They are also influenced by the sequential order in which they are carried out. Thus, during the year 2007, we had to adjust the sowing to the times of all these practices and activities. Let's now look at these times individually.

4.3.1 Times for the other sequential cultivation practices of *ixim*

The other *ixim* cultivation practices are also carried out in specific months, according to Table 4.2. As was pointed out earlier, their times are defined by environmental conditions in which they are most suitably performed, and by their sequential order. In this manner, the times to prepare the field by means of two variants, slash-and-burn, and slash-and-mulch, are December, January and February. This is because, as Sebastián and Mariano told us in Section 3.3, the plants of the fallow are not dry yet and they are easier to cut during those months. This way, the *broza* will have February, March and April to dry thoroughly and be ready for the burn in March-April, or it will have time to decompose quickly when rains arrive in June. The burning is more effective in March and April when relative humidity is very low and high temperatures maintain the *broza* dry. Meanwhile, *ixim* crops grow as a result of June and July rainfall, but so do other crops that compete with it, which need to be removed during those months. By September and October, when the cobs are well formed, the stems of the plants need to be bent to protect the cobs from both rainfall and animals.

Finally, harvesting takes place in November and December, when both rainfall and temperatures decrease and cobs can dry better. Seen from this full cultivation perspective, the sowing turns out to be a specific but logical time among the times of other cultivation practices during a cultivation cycle. But what happens when both cycles are combined?

Table 4.2 Calendar of practices for the *temporal* cultivation cycle of maize

Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Slashing, Cutting and Chopping												
			Burning									
					Sowing							
							Weeding					
									Bending			
											Harvesting	

Source: Fieldwork notes.

4.3.2 Times for the combined practices of the two cultivation cycles

When both cycles of *ixim* cultivation are implemented subsequently, practices of the *temporal* cycle overlap with those of the *tornamil*. Table 4.3 shows the calendar of practices for both cultivation cycles. This calendar shows the omission of burning and bending during *tornamil*. It also proves that *tornamil* practices, from slashing to sowing, weeding, and harvesting overlap with practices of the *temporal* cycle such as bending, harvesting and slashing, cutting, chopping and/or burning. The manner in which these overlaps are adjusted requires refined management, for which Tzeltal peasants consider several details. For example, Sebastián explained to me that when he uses the same field, first for the *temporal* cycle and then for the *tornamil*, he performs bending and slashing on the same day. In other words, as he goes bending the *ixim* plants of the *temporal* cycle, he slashes the areas of land between those plants. In the middle of these slashed areas, he later sows his *tornamil ixim*, and that is why the distance between plants and trenches in his *k'altik* is a little more than one meter. Later on, in December and January, he harvests the *temporal ixim* and weeds almost all the plants on the field, even those that have just been harvested. That is, almost all, as he leaves the small *ixim* plants of the *tornamil* that are just starting to grow and need to be free of competition and/or shade from other plants.

Juan, meanwhile, allocates one of his fields to the *temporal* cycle and others to the *tornamil*. He says this way, if he staggers them, the fields can rest, even though there will be times when he will be in charge of two fields that are in different phases of the cycle and in different places within San Martín.

Table 4.3 Calendar of practices for the two maize cultivation cycles

Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
<i>TEMPORAL CYCLE</i>													
Slashing, Cutting, Chopping				Burning- Sowing		Weeding			Bending		Harvest		
<i>TORNAMIL CYCLE</i>													
	Harvest								Slash- Sowing		Weeding		

Source: Fieldwork notes.

4.3.3 Times to work the *k'altik*

As I mentioned in Section 1.2.2, although *k'altik* is understood to be a field where *ixim* is grown, it does not imply that it is a field where only maize is sown. In fact, the use of the word *k'altik*, or its closest translation into Spanish, *milpa*, entails the consideration that other crops are grown or utilized on this field. (Aguilar *et al.*, 2003:84). In the case of this area, some of these crops are beans (*Phaseolus sp.*), pumpkin (*Cucurbita sp.*), sweet potato (*Ipomoea batatas*), yucca (*Manihot esculenta*), chives (*Allium*

schoenoprasum), red tomato (*Lycopersicum esculentum*), mustard greens (*Brassica juncea*) and vegetable pear or *chayote* (*Sechium edule*). Each one of them has a specific sowing and harvesting time, which may or may not be shared with the timing of the different cultivation practices of *ixim*. Weeding the *ixim*, however, is usually done at the same time as weeding the other crops. Therefore, working the *k'altik* entails adjusting the sowing and harvesting times of all the plants that are being cultivated on it. The above translates into a calendar of practices that take place during the whole year, shown in Table 4.4.

Table 4.4 Calendar for other crops cultivated with maize in the *milpa*

Plants in English	Plants in Tzeltal	Ja	Fe	Mr	Ap	My	Jn	Jl	Au	Se	Oc	No	De
Beans	<i>te chenek</i>					■	■			■			
	<i>bac witz</i>					■	■						■
	<i>uluvera</i>					■	■					■	■
	<i>Tsil</i>	■	■				■			■			■
Pumkin	<i>ch'um</i>					■		■				■	
	<i>chiua</i>					■							
Sweet potato, Yucca						■					■	■	
Chives	<i>tux ak</i>					■			■	■			■
Red tomato	<i>ichiloc</i>					■			■	■			■
Mustard greens	<i>kulix</i>					■	■						

■ Sowing
 ■ Harvesting

Source: Fieldwork notes

As can be observed from this table, May is the most active month, since it is the sowing season for *ixim* and for most of the crops related to it. Only in the case of plants like the *chayote* does this period begin before the *ixim* sowing. This period usually concentrates in this month and, in the case of the different types of beans and sweet potatoes, it extends until June. On some occasions, some of these associated crops may be sown on the same day as the *ixim*, but on others, they are sown days or even weeks later, thus creating several possibilities. This does not only depend on the *ixim* sower, but also on the sowers of the associated crops and, therefore, on their available times and preferences. For example, at the beginning of May 2007, when I paid a visit to San Martín, I found Juan sowing *ixim* in straight trenches. Elisabet, his young daughter, was doing the same, planting pumpkin seeds between the trenches her father had just dug. In the meantime Pancha, his wife, was transplanting the chives shoots, creating small grids scattered throughout the field.

Meanwhile in mid-May, America, who lives in Rancho San Gabriel, invited her neighbor Pancha, Elisabet and me to sow pumpkins, tomatoes and beans. We sowed two weeks after the *ixim* sowing, when the small shoots of

the latter served us as guides. One day at the end of May in Salvador Allende, I met Lazarín and his wife Anita, who were coming back from the *k'altik*. They said he had gone there to sow beans, and she had sown pumpkin and chives, since they wanted to take advantage of the previous night's rainfall. Finally, at the beginning of June, a month after her husband Sebastián had sown their *ixim*, Juana went with her sister-in-law Guadalupe and her young daughters to sow beans and sweet potato seeds. They rather wait for the rains to begin to do the sowing right.

Thus, the times to sow other crops associated with *ixim* such as beans, sweet potato, pumpkin, yucca, chives and tomato revolve around the *ixim* sowing time. It is not only the *ixim* sower who participates in these times and sowings, but also the sowers of the associated crops cultivated on the *k'altik*. Therefore, it is necessary to adjust all these times to those who participate in the different sowings meaning also that the amount and availability of labor should be considered as section 4.4.5 will show. However, the times of crops from the *k'altik* are not the only times to be considered for sowing.

4.3.4 Times of activities in other management areas

The *k'altik* is not the only area Tzeltal peasants manage in their dwelling. Like many indigenous groups of the Mexican tropical rainforests, the people living in La Mera Selva practice what Toledo (2000:125-189) calls the Mesoamerican model. Besides the *k'altik*, this model includes other areas like the bean plantation or *t'okal* in Tzeltal, the pastures, the sugarcane plantations, the coffee plantations, the homegarden, the fallows, the mountain, the creeks and rivers. In fact, Don Chebo illustrated this the first time I went to Salvador Allende, in January of 2006 (see Section 2.2.2). Besides showing me the trial *k'altik*, I helped him harvesting black nightshade (*Solanum nigrum*) on his *k'altik*. In addition, he took me to cut the tender flowers of the *ch'ib* (*Chamaedorea*) on one of his mountain areas. He also gave me a tour of his coffee plantation and grazing field where he showed me his different coffee varieties, cattle breeds and pasture grasses. Then I went with him to cut a bunch of bananas from fallow field and oranges from the small fruit tree plantation that was on the side. We ended the tour in his sugarcane field, sucking on the juicy stalks of the sugarcane (*Saccharum officinarum*). When we got back to his house, his young granddaughters adopted the role of guides and showed me all the different plants and animals they have on the homegarden surrounding their houses.

Each one of these management areas requires a different schedule for its various activities. Without going into depth, Table 4.5 lists both management areas and the activities carried out on them during different months of the year. If we take April and May again as a reference, it will become clear that

the time to sow *ixim* must be adjusted to the timing of other activities to be executed in other areas. This time coincides with the time to sow beans on the bean field, sow grass on the pasture, transplant fruit trees in the homegarden and plant the sugarcane seedlings in the sugarcane plantation. These months are also a time to carry out other activities.

Table 4.5 Calendar of activities for the various management areas

Managed areas	Details	J a	F e	M r	Ap	My	Jn	Jl	Au	S e	O c	No	De
Temporal <i>k'altik</i>	<i>ixim</i>	Land preparation			Sowing		Weeding		Bending			Harvest	
Tornamil <i>k'altik</i>	<i>ixim</i>	W		H						Land prep and sowing		W	
Temporal <i>t'okal</i>	<i>bital chenek</i>	Land preparation			Sowing		Harvest						
	Tapachula	Land preparation			Sowing		W		H				
Tornamil <i>t'okal</i>	<i>lumil</i>	W		Harvest							Sowing		
Pasture	Establish	Slash and cut		Burn		Sowing							
	Maintain	Weeding ones a year mostly before rainy season											
	Livestock	Care during the whole year, more births during the rainy season											
Sugarcane plantation		H	H	H*	H*	H-S	H	H	H	H	H	H	H
Coffe plantation		Harvest cleaning			Weeding					W		Harvest cleaning	
Homegarden	vegetable	Harvest							Sowing				
	Fruit Trees H					Planting							
		Sapote, jocote, mango			Avocado, lemon, orange, grapefruit, soursop								
Chickens	Feed three times per day and special care in rainy season												
Pigs	Feed three times per day												
Forest/fallow	wood	Cut											
	woodfire	Cut and transport (better before rainy season)											
	palms	<i>Ch'ib, chapay</i>			<i>Pacaya</i>								
	<i>xaté</i>	Harvest during all the year											
	mushroom						H of local types						
	Wild fruit	Wild avocado		Ash									
	Hunting	Agouti, deer, collared peccary											
Rivers, streams	Fishing	Shrimp, snail, crab and seasonal fish											

Ja= January, Fe= February, Mr= March, Ap= April, My=May, Jn= June, Jl, July, Au= August, Se= September, Oc= October, No= November, De= December, W= weeding, H= Harvest, S= sowing, *month of higher harvest

Source: Fieldwork notes

During the dry spells of March and April, pastures and coffee plantations undergo weeding. All the plants in the sugarcane plantation are pruned to promote their re-growth and dry firewood is collected from forests and fallows. Besides these activities, the timing of other ones that are carried out on a daily basis year round must be included. Such activities, for example, are feeding the chickens and pigs on the homegarden. Others like collecting palm inflorescences and reaping the Mexican plum or *jocote* (*Spondias sp*) and mango in the homegarden are performed seasonally. Yet others, like reaping the *Chamaedorea* fronds (called *xate* in Tzeltal) or hunting and fishing, are performed occasionally. Taking all of this into account, the time to sow *ixim* in the *k'altik* is ultimately adjusted to the various times of other activities in other management areas that conform the technological circumstance of Tzeltal peasants.

4.3.5 Adjusting the times of the technological circumstance: the case of Juan

During 2007, Juan illustrated how Tzeltal peasants adjust the timing of practices and activities in the different management areas. When I spoke with him at the end of April to define the sowing date for my *k'altik* in San Martín, he replied that he needed to find a moment amidst all the work he had to carry out during May. Then, reviewing his agenda in his mind, he told me he had no time until mid-May. Slowly, as May went by, I was able to witness all the different practices and activities he took care of. The first activity, during the first days of May, was sowing his *k'altik* with *ixim* and other crops. Then he sowed pole beans (*te chenek*) in his beans plantation. When he finished that, he went on to harvesting his entire sugarcane crop and later to processing the molasses. He continued with weeding his pasture to control the weeds that do not contribute to feeding the cattle, and to fixing the wires that divide his pasture. Furthermore, he sowed grass to restore part of his pasture. At the same time, he dedicated almost a week to cutting wood from the trunk of a tree he had felled when he made his *k'altik* to fix up his house. In between these activities, he collected dry firewood and stored it close to the kitchen. At last, he killed the pig he had fattened on in his homegarden, as it had reached a good size and they had run out of cooking lard. Therefore, sowing my *k'altik* in San Martín was just one more practice that Juan carried out after taking care of the other practices and activities he performed in various management areas of his farm.

Still, the technological circumstance was not the only one Juan took into consideration when negotiating the time to sow. He also contemplated his social commitments.

4.4 SOCIAL CIRCUMSTANCES THAT DEFINE THE MOMENT TO SOW

As if defining the sowing dates were not complicated enough already by making them coincide with the environmental circumstance of this area and adjusting them to the timing of the technological circumstances, it is also necessary to agree on the moment they will be performed in terms of the peasants' social circumstances. In fact, this is what happened to me with my *k'altetik*. I had to agree with Juan and Don Chebo on the moments to sow. I was introduced into each one of their social circumstances through these agreements.

4.4.1 Agreeing with Juan on the moment to sow

At the beginning of May, I agreed with Juan on the moment we were going to sow my *k'altik* in San Martín. As I mentioned before, he first told me about all the other practices and activities he had to perform on his farm during that month. Also, together with Pancha and Elisabet, he had a commitment to attend the Santa Rita festival in Amador Hernández, which would take place on May 21, 22, and 23, 2007. He explained they were going to help Tono, Pancha's brother, who was one of the organizers of the festival. Thus, it was better to perform the sowing before these dates, and he suggested we do it on Saturday, May 19. I agreed to the date since my priority for May was sowing. Then he said that since his younger brother Martín was visiting him, he was going to ask him to help us. According to him, he was going to tell his *compadre*⁸³ Hilario, from the neighboring Rancho San Gabriel, about this date to see if he could also help us. Both Martín and Hilario are members of the network of people Juan relies on to carry out practices and other activities in San Martín. And since I relied on his social network not only for sowing but also for the other cultivation practices, let's learn some more about it.

Juan and Pancha's network of neighbors and relatives

Hilario and Martín are only two of the members of the extensive network of people Juan calls on daily to ask for help, mainly because of the small size of his family, made up by himself, Pancha and their daughter Elisabet. Besides getting help with the sowing, we were also assisted in the other cultivation practices, which constituted an opportunity to meet other members of this network. Thus, during land preparation, Juan was helped by his brother Martín, who lives in Rancho Corozal. Later, during the

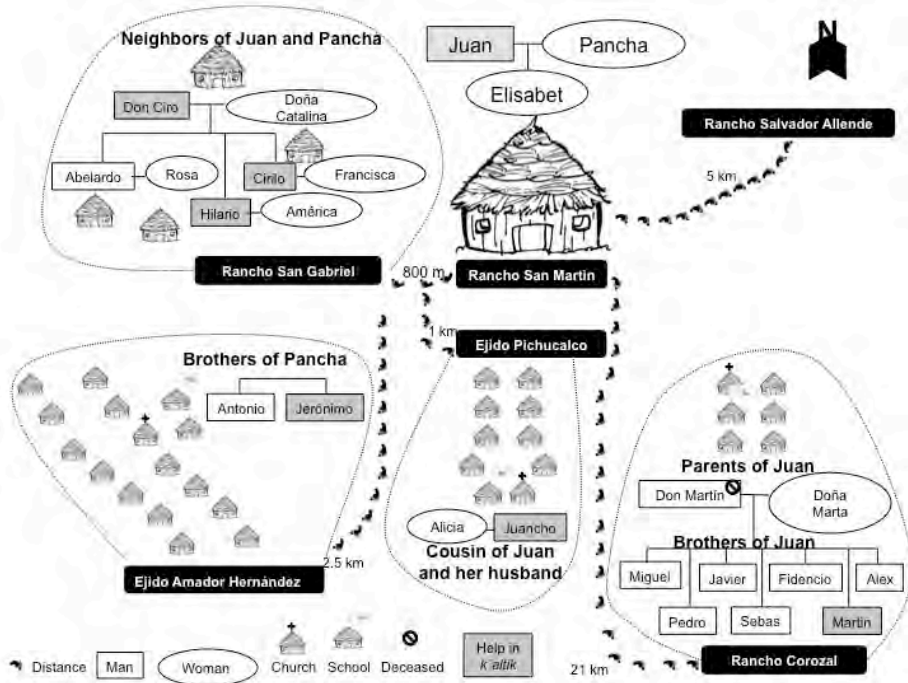
⁸³ The *compadre* (literally, "co-father" or "co-parent") relationship between the parents and godparents of a child is an important bond that originates when a child is baptized in Hispanic families. *Compadres* have a brotherly relationship without necessarily being blood related.

weeding, Don Eusebio, Hilario's father, also from the same farm, offered to help us. Juan carried out the bending with Juancho, who is his cousin's husband and lives in the *Ejido* Pichucalco. Finally Hilario, Don Eusebio and Cirilo (Don Eusebio's youngest son and Hilario's brother), all three of them from Rancho San Gabriel, were present during harvesting. Jerónimo, who is Pancha's brother and has a house in the *Ejido* Amador Hernández, also participated. Through their support, I was able to identify more people that constitute this network, represented in Figure 4.3. This network is made up of neighbors in Rancho San Gabriel, relatives in *Ejido* Amador Hernández and *Ejido* Pichucalco, and relatives in Rancho Corozal. It is limited to the different performances in 2007, and therefore does not reflect all the persons that make up San Martín's entire network. Even with this limitation, it is worthwhile to talk about them since it allows us to meet the hands that help Juan, Pancha and Elisabet in their everyday lives.

The people that Juan, Pancha and Elisabet most rely on in their daily lives are their neighbors of San Gabriel. Aside from being the nearest community to San Martín (see Figure 4.3), they maintain very close past and present ties with them, even though they don't share any kinship. In Section 2.3.4 of Chapter 2, I mentioned that Juan's father purchased Don Eusebio's land, which turned into Rancho San Martín. He lived there with his wife, Doña Marta, their 10 children and respective families, until they moved to Rancho Corozal in 1995, when San Martín was invaded by the *EZLN*. In 2000, Juan and a pregnant Pancha returned to San Martín and slowly recovered the farm with the help of Don Eusebio, but especially his older son Abelardo, who at the time was an authority in the *EZLN*. Since then, the four families that live in San Gabriel and the small family made up of Juan, Pancha and Elisabet share a very close relationship. Not a day goes by without them helping each other with various activities. Every afternoon Don Eusebio, or his wife Doña Catalina, or else their sons Hilario and Cirilo, or their daughters-in-law Rosa, América and Francisca pay a visit to them in San Martín. They stay there and chat until evening falls. If that is not the case, Juan, Pancha and Elisabet take a stroll to San Gabriel to do the same.

The relationship with their relatives in the *Ejid*os Pichucalco and Amador Hernández is close, but not quite so intense. The short distance between San Martín and *Ejido* Pichucalco (see Figure 4.3) enables Pancha, Elisabet and Juan to visit the shop that Alicia, Juan's cousin, owns with her husband Juancho. In turn, this married couple's children frequently go to San Martín to borrow the shovel for their father or to reap Mexican plums. On the other hand, Pancha's numerous relatives in Amador Hernández also visit her, especially her brothers Jerónimo and Tono, who constantly show up to help Juan out with various matters. Besides harvesting the *k'altik*, Jerónimo is usually in charge of electricity issues brought about by the use of solar cells. Tono, whom Juan helped during the Santa Rita festival, is a carpenter, and

in March, April and May of 2007, he spent time cutting boards and fixing up the house in San Martín.



Source: Fieldwork notes.

Figure 4.3 Juan and Pancha’s social network called upon in 2007 to make *k’altik* in Sn Martín.

Juan’s mother and brothers, who live in Rancho Coroza, do not visit San Martín as frequently, but they do show up once in a while. On special occasions, they undertake the two-day walk covering over 21 kilometers from Rancho Coroza (see Figure 4.3). I have already mentioned that Martín, Juan’s younger brother, helped with the land preparation and the sowing. In May 2007, he lived in Rancho San Martín with his wife, Emilia, and their first son until she gave birth to their second son. Doña Marta, Juan’s mother, visits San Martín each year in November to honor the memory of her husband, Don Martín, who passed away and who is buried there. Pedro and Sebas, Juan’s younger brothers, pass through San Martín when they visit the families of their respective wives in Pichucalco and Amador. Miguel, Juan’s older brother, uses San Martín as a stopover every time he has to go out to Ocosingo to deal with issues related to the conflict about Coroza property rights. Alejandro, Fidencio and Javier, Juan’s younger brothers, do the same when they have to settle issues in Ocosingo related to the school in Coroza, or the church or its organization, the *ARIC*

UU ID. So Juan's extended family uses San Martín as a temporary residence or stopover. Whenever they stay there, they all join in on the various practices and activities that Juan performs to manage his farm. For instance: in November of 2006, I found Juan with Miguel harvesting *ixim*; in March of 2007, I found Juan with Fidencio preparing the land to sow beans; in July of 2007, I found Juan with Sebas in the confection of molasses, and in 2007, I found Juan with Pedro killing the pig.

Maintaining the network of exchange

As the reader may have already noticed, the network I described is not limited to the help Juan and Pancha receive. More so, it reveals an exchange between them and their relatives and friends. This network is not only kept alive through fraternal and friendship ties but also through a system of reciprocity which includes mutual help in practices and activities, in the exchange of products, as well as in the use of tools, equipment and facilities. Below I will give examples of such acts of reciprocity.

Once a month, people of San Gabriel mill their sugarcane and process their *panela*⁸⁴ in the San Martín mill. In doing this, they avoid "wearing out the mule in our mechanical mill". During March, April and May of each year, San Martín, an already well-visited place, is overrun by people, especially children, like Juancho's from Pichucalco. They go there to reap, at no cost, the ripe fruits that dress the twenty Mexican plum trees (*jocote* or *pom*) that Don Martín planted in the homegarden when he came to live on the farm. Pancha leaves San Martín once in a while loaded with vegetables (like radish) or fruits (like avocado) and returns from Pichucalco with money, maize, beans, chalk and/or candies for Elisabet. Her brothers, Jerónimo and Antonio, visit San Martín to help, but they also return to their homes in Amador Hernández loaded with sugarcane syrup, *panela* or fruits of the season.

When they need help, as was the case with Tono during the festival in Amador, they count with Juan and Pancha. Whenever Juan's brothers are in San Martín, they help him with the various activities on the farm, and in return, they have a place to stay every time they need it. In fact, San Martín is not only a stopover coming from Corozal, but also between Salvador Allende and Amador Hernández, or even on the way to Ocosingo. Likewise, in the opposite direction, it is on the way for people from Amador who make their *k'altik* on the fields adjacent to Rancho Salvador Allende. Not a day goes by without someone passing through or visiting San Martín. All visitors get a warm welcome from Pancha and Juan. Thus, keeping the network that Juan and Pancha rely on alive depends on this reciprocity,

⁸⁴ *Panela*, also called *piloncillo*, is a block of solid, dark sugar common to many countries in Latin America.

enabled by the location of the farm. The people who constitute this social environment and who participate in these acts of reciprocity are the same ones who help in the performance of practices and activities like sowing *ixim*.

4.4.2 Agreeing with the community of Salvador Allende on the moment to sow

In Salvador Allende, agreeing on the moment to sow my *k'altik* was very different. Instead of writing it in my agenda as I did with Juan, I had to negotiate not only with Don Chebo but also with other people who make up his community. These negotiations unfolded in various agreements that are explained below.

Agreeing with Don Chebo to ask for support

The first agreement I reached was with Don Chebo, after he told me that he and I alone were not going to be able to manage the various practices on my *k'altik*. So he proposed that I ask for support from the community. I agreed because Don Chebo was a solitary worker, as opposed to Juan whom I usually found working with someone else.

Of all the times I accompanied him to work his *k'altik*, there were only a few times that someone joined us. His most frequent companion on those occasions was his 11-year-old grandson Remigio, who Don Chebo and his wife Doña Mica raised as the youngest of their sons. However, Remigio's transfer to Ocosingo in April of 2007 to continue his school education no longer let him continue to help Don Chebo.

Among the other companions were visitors like myself, Doña Mica - the few times she did not feel ill - and acquaintances or relatives from other communities who would ask for a place to stay for a few days. But I do not remember his sons going to help him at all. He explained, "Sebastián and Lázaro (his older children) have their own separate homes and lives and need to take care of their own families and work". Upset, he also indicated his younger children, Hil and Chebito, whose duty it was to help him, "prefer to work for a stranger in the United States". He went on complaining that even though he received money from them, he alone could not take on the entire burden of the work. He said that hopefully when they came back from the United States they would finish all the work that was pending. However, when they returned they dedicated themselves to their own activities, like their older brothers, and Don Chebo went on working on his own.

His solitary labor was not strange to the general support dynamics of the men in the community. I learned a little about this when we were sowing. It all began while I observed them at work. I noticed that six of the ten families were represented there, and that the three generations that make up Salvador Allende were sowing together. Excited, I asked them how often they got together like that for sowing. They told me this was the first time they did it. According to Don Lázaro, in the beginning, when he and his *compadre* Don Chebo's children were young, they both used to help each other. Later, each one of them began to sow with their married children in the same area, as larger *k'altitetik* are less prone to animal attacks. But then each family got their own separate *k'altetik* and fallows. Mariano said what happened was that "in the past we used to help others sow their *k'altik* since it is better to do the sowing on the same day, so the crops can grow evenly. But they were not returning our favors, and we decided not to continue helping them". According to Sebastián, he preferred to sow his *k'altik* alone with his family in an isolated place because he did not like how others worked and he did not want his seeds to get mixed with the others.'

Thus, the community dynamics in that moment were such that the members of each family managed the practices of their own *k'altetik* and there was no community support for them. Since all of Don Chebo's sons had formed their own families away from him, and since those who were supposed to help him (the younger ones) were working in the United States, his work was solitary.

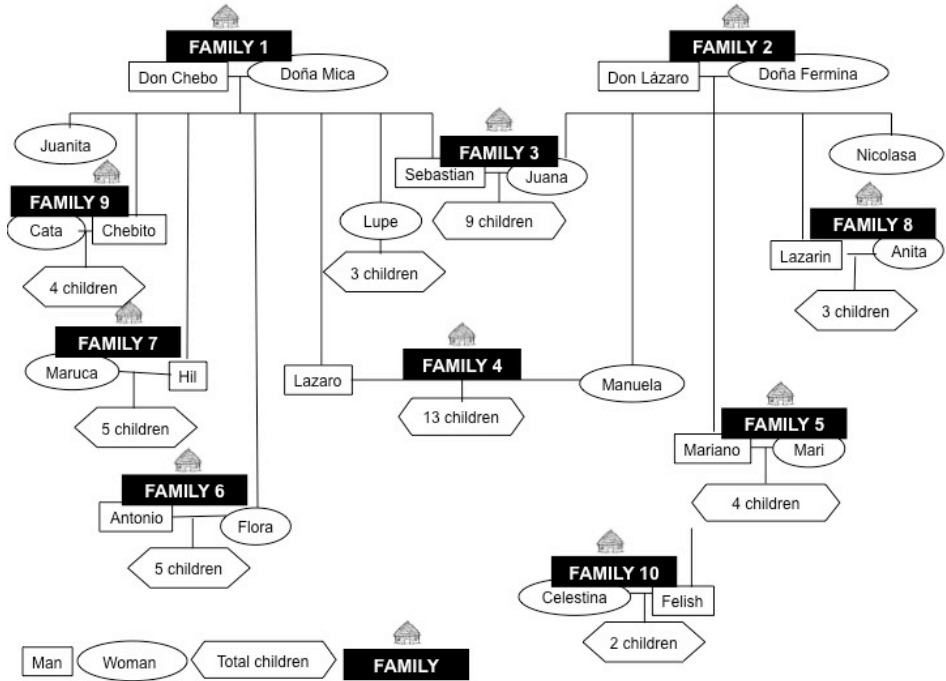
The reader will then ask herself/himself how I was going to get community help for the various practices on my *k'altik*. Let me go back to the afternoon of the second day of slashing, cutting and chopping the *k'altik* in April of 2007, after I agreed with Don Chebo on asking for support in a meeting with the community.

Agreement with Salvador Allende community

My second agreement was with the community of Salvador Allende. As months went by and after many visits, this community had turned into people whose names, smiles and voices I had become familiar with. These people were grouped together in ten families who were closely related by different marriage ties.

As can be observed in Figure 4.4, the first two families were constituted by Don Chebo and Doña Mica on one hand, and Don Lázaro and Doña Fermina on the other. Both Don Chebo and Doña Fermina, and Doña Mica and Don Lázaro are second cousins. They are parents-in-law to each other, since three of their children are married amongst each other. Meanwhile, two of these marriages, Sebastián and Juana, and Lázaro and Manuela make the rest aunts, uncles, cousins, or brothers or sisters-in law of them all. As if

this were not enough, there are also *compadrazgo*⁸⁵ relationships between them (system of god parenting), which I gradually began to learn about.



Source: Fieldwork notes.

Figure 4.4 The extended families living in Rancho Salvador Allende

From my first visit in January of 2006, when I only spoke with Don Chebo, to the moment we asked for their support, I had shared many experiences with them. These included meeting by the river where they all bathe, attending their religious services on Sundays, going to the San Jose festival (patron of Salvador Allende) or trying to fulfill the various errands and favors they started to ask of me. These things made me think that it was reasonable to ask them for support in managing the slashing, sowing, weeding, bending and harvesting of the *k'altik*. The opportunity to talk to all of them was, in Don Chebo's opinion, in a community meeting.

⁸⁵ *Compadrazgo* ("co-parenthood") is used to refer to the institutional relationship between *compadres*.

This meeting was neither the first nor the last I was to attend while living in this community. Attending meetings, I was able to experience how these decision-making mechanisms of Tzeltal communities in Las Cañadas of the Lacandon Jungle function, as Leyva and Ascensio (2002:116), and Vos, de (2004:256, 268) refer to them. Community meetings in Salvador Allende are opportunities to organize activities and events such as the renovation of the school, or weeding of the landing strip for small airplanes, or the organization of the festival. They are furthermore held as opportunities to resolve internal disputes. At the same time, they serve to inform people and give them an opportunity to take a stand in community issues that are of their concern, or in problems that affect them. They also offer a venue in which they receive, discuss, accept or reject visitors and their petitions, as in my case.

Said meeting took place, like all others, in the community school, located next to the clinic and the San José chapel, which constituted what they call the Centro Cívico of Salvador Allende. Don Chebo first had to look for Felish, the person in charge of calling the meetings, to inform him about my request. So that April afternoon, after we had bathed and had heard Felish play his drum, I set out with Don Chebo to the community school. We waited there until other members of the community representing each one of the ten families that put it together started to arrive. Like on some other occasions, men and women, teenagers, children and babies were present. The meeting started after Felish played his drum the second time. My subject was not the only one to be addressed, but it was the first one. Don Chebo started by bringing up the topic of the *k'altik* in Salvador Allende and requesting support with the performance of different cultivation practices. He then gave me the floor to do my presentation too. When I finished, no one asked me any questions, and they continued addressing other issues.

Almost at the end of the meeting, Sebastián turned around and looked at me as if he was just remembering something he had forgotten. Then he asked me when we were going to do slashing and mulching on the *k'altik*, and I told him the following day. Based on this, he said, "Who can help tomorrow with the slashing?" This question, which the whole community was being asked openly, was really being directed at the men and male teenagers. Even though the women participate in many of the activities on the *k'altik*, they are not in charge of practices dealing with *ixim*. Young boys, on the other hand, accompany their fathers to help them.

After a few minutes of silence that seemed like an eternity to me, he and Mariano replied they would have time three days later. With this, I understood that the community (that is to say, its men and boys) had accepted to help us with the practices, but this help was going to depend on

whether those people were available to do so. This was the agreement I had come to with the community. Thus, the men joined in the performance of different cultivation practices. And now, let's look at the effect their participation had on the sowing of my *k'altik* in Salvador Allende.

Agreeing on support for the sowing after commitments were fulfilled

As opposed to Juan, with whom I was able to arrange a sowing date in one conversation, reaching an agreement in Salvador Allende required some waiting. Indeed, I first had to wait for the sowers to return as they were gone from their homes for various social commitments during most of May. They gradually started returning after they fulfilled these commitments.

The first ones to come back were Don Lázaro and Lazarín (Don Lázaro's youngest son) with their respective families. They had stayed in Amador Hernández for several weeks in May visiting relatives and partaking in the Santa Rita festival. Don Lázaro had lived with his family in Amador before moving to Salvador Allende and, during that time, two of his children had married and settled there. So he and his wife took this opportunity to spend some time with his children and grandchildren. Besides, he took up an important position in the festival of 2007, which forced him to be present in all the events during the three days it lasted. At the same time, Anita, Lazarín's wife, who was originally from Amador, made use of the festival days to visit with her family. Once they were back in Salvador Allende and I approached them to agree on a sowing date, they replied that we needed to wait for the others to be back. And so the waiting continued and I started to get a little impatient, as I had things to tend to. But of course, sowing was my priority.

Then Mariano and Felish returned. They had traveled for two days (one walking and one in a pickup truck) to Ocosingo, and another two days back. Mariano went to take care of some paperwork at the offices of the *Secretaría de Educación Pública* (Ministry of Public Education), since he was the promoter of elementary education (teacher) at the school in Salvador Allende. He had held that position for over 18 years, since the *ARIC UU ID* negotiated with the *Secretaría*, through the *PEICASEL*⁸⁷ program, the presence of local teachers in isolated communities that rural teachers did not reach. Meanwhile, Felish had attended a meeting organized by the

⁸⁷ The *Programa de Educación Integral de Campesinos de la Selva Lacandona* (Integral Rural Education Program of the Lacandon Jungle) was a project implemented between 1989 and 1998 by the *ARIC UU*, supported by the *Secretaría de Educación Pública (SEP) de México* funded by the World Bank (Legorreta, 1998: 229-231). This program has been continued to date under and is now known as *PECI (Proyecto del Educador Comunitario Indígena)*, in English: Indigenous Community Educator Project.

ARIC UU ID for coordinators of promoters of livestock management of the different regions that constituted this peasant and indigenous organization. He had recently been appointed coordinator and he had accepted the position partly honored and partly concerned because it required him to attend many meetings, workshops and visits. The first opportunity I had, I told Mariano and Don Lázaro about the support needed to sow my *k'altik*. Mariano's reaction was to ask me when I wanted to sow and how many sowers I needed. I told him that there were only a few more days left in May and that I wanted to sow during this month and not in June. As far as the number of sowers, I told him I needed more than in San Martín, due to the difficulties implied by the presence of *broza* on the *k'altik* in Salvador Allende. I mentioned to him that waiting for the sowers was holding up other matters I had to take care of.

Mariano, Don Lázaro and Felish decided they could help me the next day. So far, three sowers were available. Don Lázaro suggested that we finish the sowing in two days with three sowers. According to Mariano, however, the plants were not going to grow evenly as the ones sowed on the second day were never going to catch up with the first ones. For this reason, he suggested to leave the sowing pending until June, when more people would be back to help. But Don Lázaro reminded us that if we waited until June, plants would only grow tall and forget to flower. Finally, Mariano thought it would be better to wait one more week until the end of May, when Sebastián returned with Migue and Muro.

Days went by and Sebastián arrived with the Pastoral Team constituted by priests and catechists of the Ocosingo Parish. As he was the Regional Coordinator of the Word of God, he had accompanied them on their Annual Pastoral Visit covering all the communities that formed the Candelaria Region at that moment. Salvador Allende was their last place and they stayed there one night to hold the annual community mass. Sebastián's involvement with the Pastoral Team was a commitment that engaged him to participate in the activities organized by the Diocese of San Cristóbal de las Casas for its congregation. When he was back after the annual mass, and during a community meeting, Mariano and I took a moment to talk about support for sowing the *k'altik*. In that meeting, Lazarín, Sebastián, Muro and Migue added themselves to the three initial sowers. We all agreed on sowing the next day, May 29.

That same afternoon, Don Chebo arrived in Salvador Allende. As was to be expected, he also accepted to participate in the sowing of my *k'altik*, even though he was running behind schedule with his work. He had spent the majority of May participating, as representative of the community, in several meetings on the conflict of land property rights. Don Chebo had been the representative of his community since he arrived in Salvador Allende and initiated all the procedures to formalize the property rights to his land.

More than twenty years later, he was still holding this lifelong position, which shows how complicated the conflict is and what kind of commitments this position entails.

May, month of sowing versus month of meetings

The political context represented by the landownership and management conflict that defined the way Tzeltal peasants prepare their land (Chapter 3) appear again in this chapter affecting the time to sow. Don Chebo's experience illustrates this. During most of May of 2007, he attended meetings related to the conflict of land property rights in Salvador Allende. In April, he first received the news, and then the official notice, that the new agrarian authorities had not granted the petition to formalize Salvador Allende (see Mariscal, 2007). This notice came in lieu of the so eagerly awaited property titles he had been fighting for so many years, and which he thought were finally going to be granted as a result of the negotiations with the previous agrarian authorities (see Section 2.3.4 of Chapter 2). However, with this denial the communities in conflict, among them Salvador Allende, were at risk of being evicted again.

This is why it became necessary to enter into one meeting after the other, and spend more time in these meetings to negotiate the land property rights conflict. Thus at the beginning of May, instead of sowing his *k'altik* as planned, Don Chebo left Salvador Allende. He walked eight kilometers in one day to attend the meeting of representatives of the communities in conflict with the new authorities of the *ARIC UU ID* in *Ejido Candelaria*. The meeting lasted several days, and the decision was that they had to talk to the authorities of *Ejido Nueva Palestina*. The reason was that this *Ejido* is part of the *Comunidad Zona Lacandona*, which the government acknowledges as legal owners of La Mera Selva. This meant walking approximately 30 kilometers in two days, because the *Ejido* is located on the other side of the Reserva Integral de la *Biósfera Montes Azules (RIBMA)*.

According to him, the Tzeltal authorities of Nueva Palestina "gave us a nice welcome and told us they did not want to take away our land. They reminded us that there already was a *CZL* agreement in place which entitles us to keep the land legally, and entitles them to receive an indemnification". He also found out in the meeting that he had to attend another one a few days later, this time in Ocosingo. In that one, Don Chebo and other representatives of the irregular communities, along with the authorities of their organization, the *ARIC UU ID*, were going to reinstate negotiations with the new representatives of *CZL* and new federal and state agrarian and environmental authorities.

He decided to drive from Nueva Palestina in a pickup truck, which, covering about 80 kilometers in one day, took him to the municipal headquarters in Ocosingo. But when he got there, he found out that the federal authorities had postponed the meeting by a few weeks. So he returned to Salvador Allende, driving about 100 kilometers in a pickup truck one day, and walking about 20 kilometers the following day.

On the day he finally arrived home, he found out about the sowing of my *k'altik*, and the next day he joined in. It was only after this sowing that he was finally able to sow his own *k'altik*, the first days of June. Thus, traveling and attending meetings had kept Don Chebo out of Salvador Allende for most of May. Due to commitments related to land property rights, he had hardly had time to manage the practices of his own *k'altetik*.

Including Don Chebo, eight men in representation of six families in the community helped me with the sowing. They were actually all the adult and young adult males that were in the community at the time. I did not get help from Chebito, Hil or Antonio, since they were working in the United States at that moment. Although Lázaro lived in Salvador Allende, he did not help either. He was in Ocosingo taking care of some vaccine matters, since he was the community health promoter. In order for the sowers to participate in the sowing, I had to wait until they had fulfilled their various types of commitments.

4.4.3 Sowing moments, agreements with particular social circumstances

The sowing dates were also agreements that turned around the availability of people participating in this activity. These negotiations were different in my San Martín *k'altik* than in Salvador Allende due to the way Juan and Chebo work on a daily basis, the community dynamics in Salvador Allende, and the social commitments of participants in the sowing.

In the case of Juan, reaching the agreement was fairly simple because we relied on the circle of friends and relatives he turns to when he needs help. This network became known during the various practices. It included his neighbors who lived in Rancho San Gabriel and his relatives of *Ejido* Pichucalco, *Ejido* Amador Hernández and Rancho Corozal. With them, he shared everyday life, kinship and common history. In addition, he maintained fraternal and friendship ties as well as a complex system of reciprocity just outlined in this chapter.

In Salvador Allende, instead, this agreement involved all its inhabitants. This is because of the solitary way in which Don Chebo works, coupled to the particular dynamics of the community, and all the commitments that keep him away from his locality. For one, getting support entailed

participating in community meetings and depending on social commitments of those who supported us. Those commitments kept them away from their homes and should not be underestimated. They determine the moment for sowing and hence affect the availability of time and helping hands. They are part of their social circumstance and play an important role in sowers' lives. In the case of Juan, for example, his attendance to the festival in Amador Hernández precluded him from carrying out practices and activities in San Martín. Meanwhile, his participation helping his brother-in-law, Tono, fed into the system of reciprocity he maintains with his network of relatives, friends and neighbors. What is more, getting drunk with Hilario on an occasion renewed their friendship tie.

In the case of Salvador Allende, the sowers had various commitments that kept them away from the community in May, the sowing time and season. However, these commitments allow them to play a role within their community, they instill in them a sense of belonging to the region in which they live, the peasant organization they serve, and the religion they practice. In the same way, it is through these commitments with their organizations and institutions that they maintain the ties that help them resolve their daily problems. For instance, the fact that Mariano was the promoter of the elementary education in Salvador Allende, an intervention by the *ARIC UU ID* in 1988, was the response of this organization to the lack of governmental education of children in their communities (see Legorreta, 1998:229-231).

On the other hand, the pastoral visit of the Ocosingo Parish kept Sebastián away from Salvador Allende for several days. But, as I described in Section 2.3.1, precisely the Ocosingo Parish was the one that had helped the people of Salvador Allende a few months earlier with their lack of maize for personal consumption. Ultimately, Don Chebo justified his attendance to all meetings organized by the *ARIC UU ID* regarding the land property rights conflict with the argument that all this partaking in meetings had prevented the government from evicting Salvador Allende. Without land, it would be very difficult for Don Chebo to make the *k'altik* and therefore worry about the exact moment to sow *ixim*.

This is how all these commitments with relatives, friends, organizations and institutions turn into other factors the sower considers when he determines the sowing date of the *ixim*.

4.5 SOWING DATES: JUGGLING COINCIDENCES, ADJUSTMENTS AND AGREEMENTS

Taking into account all the negotiation details that this facet of performance brings to the sowing date, arriving at the date is like a juggling act of several actors, their individual commitments and priorities vis à vis the sowing act. These are factors that the juggler-sower needs to manage skillfully, not only while sowing but actually when interweaving sowing with all the circumstances that form his making *milpa* and making life in La Mera Selva. This is what the performance of sowing entails.

For the above, the juggler-sower makes all the factors of his environmental circumstance coincide. This means that rainfall and temperatures have to match the different requirements of the *ixim* plant. Even though general patterns of change are known and although there are two sowing seasons, the rate at which temperatures and rainfall change varies from year to year. This is why, at the beginning of January, when those balls start their journey through the air, the juggler-sower asks, “How long will the drought last?” and “When will the *temporal* start?” He tries to find those answers forecasting the weather in the first twelve days of the Gregorian calendar and in the course of days and months to follow with the help of other *cabañuelas*. He searches during months and waits and for the hot season to arrive, and he carefully looks for signs such as a full moon. He searches, waits and ponders when he should make the sowing of *ixim* coincide with the rainfall and the temperature. He also thinks about his plot and all the other commitments he has to attend to simultaneously with the sowing of *ixim*.

Even though the sower is able to stagger the various practices and activities, there are certain moments, for example in May, when these activities overlap and two hands are not enough to keep them all in the act without missing any. This is when he needs to engage the help of other hands. And those hands will bring other balls into the act.

And so new balls come into play, which prompts the sower to agree with whoever is helping him on the exact moment they are to enter. This implies, on the one hand, giving relatives, neighbors and other members of the community, and on the other, the organizations and institutions they belong to, a part in all this. It means including all of those who make up his social circumstance. With the former, he has kinship and friendship ties that he renews through a continuous exchange of goods and labor. The hands of those relatives and friends are usually the ones directly helping him manage the activities related to sowing *ixim*, or milling *panela* or harvesting beans. Reciprocally, the juggler helps them with what they need to keep in the complex game of life, such as their commitments during regional festivities.

He develops a sense of belonging to organizations and institutions through participation in the various activities they organize. Their hands are not likely to help him weed the pastures or cut the sugarcane, and he will have to delay these activities. He will delay it to maneuver commitments, to participate in workshops in Ocosingo or conduct pastoral visits in the region, or to attend conflict meetings throughout the extensive municipality of Ocosingo. Nevertheless, these organizations and institutions help him resolve serious problems like the lack of basic services, the shortage of maize, or the land property rights conflict. These are problems that are part of living in this region.

This is how the sowing date is ultimately defined: not based on agronomic generalities only, but also on a large and detailed description that takes into consideration not only the sowing, but all other actions that the people make to live. The reader will now understand how this practice is ultimately flexible and rigid, being subject to tensions between plan and improvisation.

4.6 FINALLY THE DAYS OF SOWING ARRIVED

May 17, a day in which the sun emitted its usual heat, was the date on which we sowed the *k'altik* in San Martín. Pancha and I got up very early to prepare lunch for the sowers. While we were cooking, Martín and Juan came into the kitchen to have breakfast. Juan told me to join them because it was going to be very hot and we had better start sowing soon. Pancha also insisted I eat breakfast with them and said she would finish preparing lunch. So I sat down to have breakfast with them. We were almost finished, when we heard the voice of Hilario greeting us and letting us know he was waiting for us outside. Soon Juan, Martín and I left the kitchen. Before living, we picked up satchels, *machetes*, hats, seeds and ropes and we made ourselves on our way to the *k'altik* with Hilario.

Before arriving, they disappeared one by one into the fallows we were crossing and then reappeared with the young stem of a tender tree in their hand; only the stem, without the root or leaves. When we arrived at the *k'altik*, they sharpened the end of the stem with the *machete* and turned it into their *coa*⁸⁹ or *awuteil* (in *Tzeltal*). With the *coa* ready, we laid the ropes that were going to serve as guides to sow at a distance of one meter between trenches and shrubs. Thus, the sowers started the performance of the old practice consisting in sowing with a *coa* or dibble stick. A practice that is found around the world (Visser, 1989: 64) and represented in the ancient Mayan codices and which, as I observed, entails a cyclic and rhythmic repetition of several movements. The first one consists in taking a well-

⁸⁹ The *coa* is also known as sowing stick or dibble stick

defined step, about a meter in length, guided by a rope or an imaginary line. This step lands next to the spot where the *ixim* seeds will be sown. The second movement entails using the sharpened end of the *coa* and thrusting it into that spot to dig a hole. The depth of this hole, as Juan explained, will depend on whether or not it has been raining. And so that day in May 2007, the hole was dug deep due to the lack of rainfall.

Then, after taking out the *coa*, it is moved in a circular motion to somewhat enlarge the hole. When the hole is ready, the third movement consists in grabbing the seeds from the satchel, hurling and aiming them at the hole that has just been dug. If the sowing is done with precision, five seeds are thrown into the hole; if it is finished quickly, around nine. The last movement consists in covering the seeds, shoving a little soil over them with the *coa* or the foot. All these movements are the essence of the sowing routine. And they are only the essence, as there are variables as far as style, experience and mood go, since they are accompanied by conversations, whistling, singing, laughing or silence. This performance ends when there is no more land or seeds to be sowed, but on that occasion, it was interrupted when our stomachs complained of hunger. So, after filling them with the meal Pancha and I had prepared, we (4 persons) finished sowing the quarter hectare of my *k'altik* in San Martín after expending all the morning and afternoon in this activity.

On May 29, I woke up in Salvador Allende and was very excited because finally the day for sowing had arrived. In the morning, when I came into the kitchen, Juanita and Doña Mica told me they would be in charge of preparing food for the sowers. They also had me sit down and eat breakfast with Don Chebo. Sitting down in front of him, I ate delicious fried plantains with coffee. While Don Chebo ate, he told me about all the meetings he attended during May (section 4.4.2) and about how delayed he was sowing his *k'altik*. He chatted avidly about his concerns, until Juanita announced that Sebastián and Muro were waiting. So we quickly gathered seeds, hat, *machete*, satchel, rope, *pozol* and water, and left to meet up with them. On the road to the *k'altik*, we were joined by Mariano and his sons Migue and Felish, Don Lázaro and Lazarín. Like the sowers in San Martín, they started disappearing into the fallows we were crossing, and they reappeared with young stems that they later turned into their *coas*. When we arrived at the *k'altik* and saw all that thick *broza* covering the land, we knew how difficult it would be to sow. Therefore, we decided that four people would hold the ropes as a guide to digging the trenches and the other four would sow. Muro, Felish, Migue and Lazarín were the first ones to hold the ropes.

Meanwhile, Don Chebo, Don Lázaro, Sebastián and Mariano executed the four movements of the sowing, like in San Martín, except that they constantly had to deviate from the spot where they were to insert the *coa* to dig the hole due to the thick *broza*. At a certain moment, Mariano told me he would sow,

but he could not guarantee that the small seeds of the *ixim* plant would grow in all that *broza*. I just made a face expressing my gloom, what else could I do? After a while, Don Chebo and Don Lázaro's slow and paused performance prompted their respective sons, Sebastián and Mariano, to complain that they were delaying them. At a certain moment, the first two men handed over their jobs to their grandsons, Muro and Felish, and they in turn held the ropes. However, neither Sebastián nor Mariano wanted to trade *coa* for rope. So Migue and Lazarín had to trade with Feliciano and Muro to be able to sow. Like in San Martín, stomachs started to complain, and we took a break to mix the *pozol* with water and drink it to quiet our hunger. We controlled our hunger until we (seven persons) finished sowing at the late afternoon the quarter hectare of my *k'altik* in Salvador Allende and we got back to Doña Mica's kitchen, where food was awaiting. While we were eating in the kitchen, Lazarín commented that the only thing missing was the arrival of rainfall, because if that took too long, our work had been in vain. I remained quiet, remembering all it took to arrive at the moment of sowing. This thought was interrupted by an opportune premonition. I commented the dogs had whispered to me that we were going to get a good downpour that night. They all laughed at my forecast.

That night the tapping of raindrops on the metal roof of the room I stayed in kept me awake. The next morning Don Chebo came to visit me very early and with a big smile on his face told me I was a very lucky woman because it had rained on the same day I had sowed. I simply smiled as this rain marked the formal start of the rainy season.

CHAPTER 5

DELEGATED OR POSTPONED WEEDINGS AND BENDINGS

5.1 INTRODUCTION

In La Mera Selva, after sowing and before harvesting, two practices are performed that seek to protect both the *ixim* plant and the cob. The first one is the weeding or *yaqu'entayel* or *porrial* in Tzeltal. In this practice, plants that compete with the *ixim* plant for light, water and nutrients are selectively cut with the *machete*. The second practice is the bending or *spuxel* in Tzeltal, which consists in bending the stem of each plant below the well grown cob in order to prevent damage from moisture, fungal diseases or various animals. These two practices are important in order to harvest a large number of undamaged and well developed cobs.

Tzeltal peasants carry out a weeding once or twice during June and July, depending on how fast the plants that block the sun from the *ixim* plant grow. With this practice, they prevent the latter from growing weak and not developing cobs. Furthermore, weeding the *k'altik* renders subsequent practices like bending and harvesting easier. Peasants indicate that they do a bending once, either in September or in October, when the kernels are mature. This practice causes the *ixim* plants to dry faster. At the same time, the tips of the cobs face the ground, not allowing weevils and water to penetrate. Bending also decreases the damage caused by birds and mammals, as the cobs are hidden under the leaves. This practice thus translates into healthy cobs of corn that stay in good condition for a longer period of time in both the *k'altik* and the storage.

The performance of weeding and bending with Juan on my *k'altik* in San Martín, and with Don Chebo in Salvador Allende were practices that allowed me to think about the third facet of performance. During June, September and October of 2007, when we expected to carry out those practices, we ultimately had to delegate or postpone them because we got involved in some events that affected the lives of Don Chebo and Juan. Even though they are not part of the cultivation practices, these events eventually affect the way in which these practices are performed. They are actually everyday life events which show the problems Tzeltal peasants are concerned and busy with. The fact that they integrate these events into their juggling evidences the peasants' strategies to confront them. Therefore, by showing how performances as situated and particular actions that are postponed or delegated, it is possible to see how the weeding and bending are negotiated with the events that constitute everyday life. The experience of delegating or

postponing them will lead us to reflect on the peculiarities of these practices, on the characteristics of the events that affected them, and on the relationship between practices and events. To illustrate this, I will describe what happened during the months of June, September and October of 2007 when weeding and bending were performed.

5.2 JUNE 2007, MONTH OF CHANGES IN PLANS

In the middle of June, together with Juan, I performed the weeding of my *k'altik* in San Martín. This was not the case with Don Chebo. We had to delegate the performance of weeding in Salvador Allende due to events related to his wife Doña Mica's illness. These were instances which made us play with the dualities between plan *versus* unforeseen, correct *versus* incorrect, convenient *versus* inconvenient, hope *versus* hopelessness, as well as impotence and courage. These are instances which address the healthcare problems in this region. Moreover, they are examples through which the reader will learn about prevailing relationships between Tzeltal peasants and their former employers turned 'service providers'.

5.2.1 Negotiating the days for weeding

In early June I met with Juan and Don Chebo in Rancho Corozal, where Juan's brothers live. A meeting was held between the Candelaria Region and Ángel-CETAMEX, and I conducted a workshop as part of my activities as fieldworker for this NGO. The first person I spoke with was Juan, with whom I agreed on the date to perform the weeding of my *k'altik* in San Martín.

With Don Chebo, however, we were not able to define a date to perform this activity in Salvador Allende. He arrived to Corozal late since he had been very busy transporting the maize that the Ocosingo Parish had furnished him as a loan⁹⁰ to supplement his need (see Section 2.3.1). Besides, a matter of greater urgency took up our attention. This was the illness of his wife, Doña Mica, who was also in Corozal at that moment.

5.2.2 Doña Mica's longstanding illness

Doña Mica, a small and thin woman (see Picture 5.1), yet strong because of the tough life she has lived, had not been well for quite some time and had been taking different remedies to feel better. The previous year they had taken her to Hospital San Carlos in Altamirano because of this. However, as Don Chebo told me, "We only wasted our money and I missed the sowing

⁹⁰ The loan consisted in eight tons of maize delivered to Ocosingo. These tons, or their value in Mexican Pesos, were to be returned at the end of the harvest of the *temporal* cycle of 2007.

date of my *k'altik*, because they did not find anything wrong with her". They returned to Salvador Allende, she with her stomach pain, and he to perform a late *ixim* sowing.

In early January of 2007, Doña Mica asked me to get her a dewormer called *Metronidazol* since her stomach was bothering her. But this medicine did not seem to work, as the discomfort eventually turned into intense pain. In May, trying to find a cure, she went to Rancho Corozal, where her daughter Manuela lives, and who had told her about a *curandera* (healer woman) who could make her pain disappear with massage. It took her two days to walk from Salvador Allende to Corozal. Even though the Candelaria clinic was on her way, she did not want to be seen there. She said there almost never were any doctors in that clinic and they had very little medicine.

We met in Corozal in June, and we agreed to walk back to Salvador Allende together. But she was not feeling well and Manuela finally proposed that, instead of walking to Salvador Allende, which is two walking days away, we contract a 15-minute overflight.⁹¹ I told her yes, aware that this entailed covering the cost. A day later, when Don Chebo arrived in Corozal and saw his wife was sick, he got very worried. Our conversation focused on both the sick and her disease, and we did not even discuss the date for weeding in Salvador Allende.



Pic. 5.1 Doña Mica during those June days in Rancho Corozal

⁹¹ An overflight, as opposed to a special flight, is a flight that is not planned (it is not specifically chartered for specific people), but is rather a flight used when an aircraft that made a special flight to a locality (let's say Corozal) has to return to Ocosingo. Therefore, anyone can take it and the pilot sets the price based on distance and number of people flying.

5.2.3 Change of plans

My plans for June were to stay in Salvador Allende a few days for the weeding, a few in San Martín to do the same activity, and finally in Amador Hernández, where I was going to conduct the same workshop I had offered in Corozal. However, on the second day of waiting for Don Chebo in Salvador Allende, who took that two-day walk, my plans changed. There were two reasons for this. The first one was, when I went to the *k'altik*, I noticed that, besides stunting the growth of the small *ixim* plants, the *broza* covering a large part of the plot had also obstructed the emergence of other competing plants. Therefore, it was not necessary to carry out the weeding at that moment.

The second reason was the severity of Doña Mica's illness: her health had definitely deteriorated. In fact, when I asked Lázaro, who was the community health promoter, how Doña Mica was doing, he answered, "My mother is not getting any better. It seems that those massages left her even worse. We need to take her to the San Carlos hospital in Altamirano". Then he asked me from where I was going to fly to Ocosingo, and I told him my plan was to fly from Amador Hernández. I was not sure, because I needed to go back to weed the *k'altik* in Salvador Allende.

Then he asked me if I could please take the airplane leaving from Salvador Allende, instead of leaving from Amador, so that Doña Mica could go with me. I told him I could change my place of departure to Salvador Allende, but it would have to be a few weeks later since I would go to San Martín and Amador first and then come back to weed. He said that was not a problem, Doña Mica could hold out a few more weeks in Salvador Allende. Hence I walked to San Martín that same afternoon.

5.2.4 The weeding of the *k'altik* in San Martín and Lázaro's plea.

On the afternoon of June 19, when I arrived in San Martín, Juan welcomed me with the news that he had already done the weeding of half of my *k'altik* because it was almost getting too late to do it. Weeds were growing taller than the small *ixim* plants. Besides, the weeding was easier and faster that moment, as weeds were still tender. So he had not waited for me. I did not complain: at least the remaining half still had to be done. The next day, after our coffee with *tortillas* and fried beans, we went to finish the weeding. Don Eusebio arrived when we were starting and he offered to help us.

As I watched Juan, I saw that the weeding consisted in cutting almost all the plants that had grown around the *ixim* plants with a *machete* at ground level. The movement of the body was more or less the same as when slashing. He was standing with his legs apart and his back bent over. With the right arm and hand, Juan swayed the *machete* from one side to the other

and with the left hand he held the weeds he was cutting. But the swaying motion was shorter and more careful, trying to avoid cutting the tender *ixim* or other plants that were not supposed to be cut. In this case, since we had only sown *ixim*, he was careful not to cut the black nightshade (*Solanum nigra*) and the red tomato (*Lycopersicum esculentum*) that had grown freely in the field. In addition to these, which were spread all over the field, *xchaji* plants (*Podachaenium eminens*) covered it. Juan told me that the *xchaji* was “a good soil fertilizer” and after cutting it he chopped it finely for faster decomposing.

Having learnt the above, I went to do the weeding on one area of the *k'altik*, while Juan and Don Ciro did the same on other areas (see Picture 5.2). After having worked a while I asked Juan how long it would be until the plants we were cutting surfaced again. He replied, “Not very long, we only cut them so they don't cast shade on, or grow taller than the *ixim* plants. Once they are taller, the *ixim* plants can handle them on their own”. When I heard this, my interpretation was that more than fighting the so-called weeds or undergrowth, we were helping the *ixim* plants in their competition against the rest of the plants growing on the field. Thus the practice of weeding in this area does not consist in controlling weeds by completely eliminating them, as they would have been by the use of herbicides like glyphosate (Kremer, 2004: 724). Weeding is practiced as a selective management to decrease competition, which is a common practice among peasants (Visser, 1989:60), and is currently being revisited by some scientists (Zimdahl, 1995).



Picture 5.2 Elisabet, Juan and Don Chebo weeding the *k'altik* in San Martín

In the afternoon, when we had finished weeding and had eaten some delicious nightshade *tacos* with tomato sauce, Lázaro arrived in San Martín. Worried, he told me his mother was not going to endure waiting so many

days. With a dramatic grimace, he added that if his mother died, he would not know what to do, because it made no sense to live in Salvador Allende, and he would die of sorrow. Then he asked me if I could take an earlier flight next day. I just remembered all the motherly care Doña Mica had showered me with during all my visits, and I answered yes, because that was the correct thing to do. Lázaro said that I had to be back in Salvador Allende by next morning. He would continue his 20 km walk to San Quintín, where, at 4 in the morning of the next day, he would get on the first pick-up truck going to Ocosingo. He would get to the landing strip at around noon, where he would insist that someone send an airplane to Salvador Allende urgently to pick us up and fly us to Ocosingo. He would be waiting for Doña Mica there and immediately take her in a taxi to *Hospital de San Carlos*, located in Altamirano, 20 km from Ocosingo.

5.2.5 Delegating the weeding of the *k'altik* in Salvador Allende

The next day I left San Martín at dawn, and I arrived in Salvador Allende before noon. I found out Doña Mica had stopped eating because she was in great pain. She was so weak, she could only eat a little maize porridge, and she would spend the entire day in bed. Don Chebo, who had just arrived from Corozal, was all worried. He told me that as he had transported the maize the Parish had advanced him as a loan in a special flight from San Quintín to Salvador Allende, he did not have the money to pay for another special flight. I said not to worry about the flight; the important thing at that moment was Doña Mica's recovery. But I remained quiet, thinking about the matters I still had to take care of during that visit. I was going to have to postpone the workshop in Amador Hernández, and the weeding in Salvador Allende would be pending. He interrupted my thoughts saying he would go with Doña Mica to the hospital in Altamirano and stay with her until she was well, and he would not be able to participate in the weeding. I replied that for me, too, it was somewhat complicated to leave this area and return in such a short period of time, since airplane flights were very expensive. Thus he proposed asking his nephew Lencho, son-in-law of his cousin Don Jacinto, to do the weeding for us.

Don Chebo told me Lencho lived with his wife and daughter on a farm close to Amador Hernández. He had been cultivating *ixim* for many years, but last year things had not gone well for him, and when June came around, they did not have any more maize to eat. At that moment, they were in Salvador Allende offering their labor in exchange for maize or money to buy it with. "If we pay Lencho his wages for weeding, we will all help each other". I asked him how much we would have to pay him and he said 50 pesos (more or less 3.5 Euros) per day worked. He also indicated that Lencho would need at least two days to carry out the weeding of my *k'altik* in Salvador Allende, which encompassed one fourth of a hectare, because the large amount of

broza which had not decomposed yet made it difficult to weed. I thought this agreement was beneficial and thus accepted it. I handed him the money and he arranged the weeding with Lencho.

Lencho was not the only one who received money to help us with cultivation practices; also Don Jacinto was paid daily wages for helping with the slashing and chopping in Salvador Allende (see Section 3.3). In fact, not only did I pay both Lencho and Don Jacinto for these practices, other people of Salvador Allende paid them as well to do other activities. Especially Lázaro, who spent most of his time outside of the community and received remittances from his oldest son working in the United States, paid them to carry out activities such as weeding his part of the community pasture.

On his own account, Don Chebo told me that in former times, when the sale of pigs and coffee, and later livestock allowed it, he used to give people like Lencho and Jacinto work if they ran out of maize supplies before the harvest. These people usually looked for work in the same region after sowing their own *k'altik*. Later when they met their need for maize with money or in kind, they returned to their homes to carry out the remaining cultivation practices. He also told me that after the *ixim* sowing other men from the region sought work as bricklayers in the tourist city of Playa del Carmen (at a distance of over 650 km). They usually did not return until the harvest, and they delegated such practices as weeding and bending. Lastly, he said that, with the increase in migration to the United States, the men now not only delegated weeding and bending, but sometimes even all of the practices of *ixim* cultivation. He stated that, due to the high price of maize in meager seasons, it made more sense for migrants to delegate and pay for these practices than to send money to buy maize. Anyhow, in our case, we actually had to delegate the weeding in order to wait for the plane.

5.2.6 Waiting for the airplane

The following day Doña Mica, Don Chebo, their daughters, sons, daughters-in-law, sons-in-law, grandchildren, *compadres*, nieces and nephews, and I (in other words, all of Salvador Allende) waited for the plane on the landing strip. It did not arrive. In spite of the pressure Lázaro exercised on the Ocosingo base, we had to wait five days before a plane flew in from Comitán. Those were five long days.

All these days, before eight in the morning, the men carried Doña Mica, tucked in a chair, on their shoulders (they told me that in former times, before planes ever landed there, this was the way they transported their sick to Ocosingo). They carried her to the landing strip, which is one kilometer away from the housing area. When they got there, they laid her in a hammock and hung it underneath an improvised roof of leaves, and thus the wait started. All of us people of Salvador Allende were there, waiting for the

arrival of the plane. We had all put our activities on hold in order to wait for it.

Thus the hours went by, along with sunlight, clouds, *pozol*, drizzle, conversations, rainfall, bean *tacos*, downpours. In between, we could sometimes hear the engines of planes landing on other nearby airstrips. They picked up or dropped off passengers and all sorts of cargo, but they did not land in Salvador Allende. Every afternoon around six we were faced with the reality that the plane would not get there anymore that day. We were certain it would not get there, but uncertain of the reason why. Since the nearest telephone to make a call was 5 km away in Pichucalco.

And so we picked up everything only to start the procession back. Again, they placed Doña Mica in the chair resting on someone's shoulders, to be carried across the hills of Salvador Allende's great pasture, to her house. In the kitchen, there would only be enough food to endure another day of waiting. Well into the night, one went to sleep praying that the plane would get there next day and fearing that Doña Mica's condition would turn so serious that it might be too late when she arrived there. So serious, that her possible passing away and absence would fill Salvador Allende with immense sadness and a feeling of senselessness.

5.2.7 Feelings that surfaced during the wait for the airplane

During this long wait, I experienced some new feelings. In addition to that deep anxiety that is felt when a loved one is in very serious condition I experienced deep frustration and resentment; frustration because I felt powerless before the captain and the airline company. Resentment, because I knew that this situation was created due to a decision of the federal government not to build a road, in order to "protect" the *Reserva Integral de la Biósfera Montes Azules* (Montes Azules Biosphere Reserve). This road had been long needed and requested by the people of La Mera Selva.

These feelings came up with each minute and dramatic scene we witnessed. I recall one of these scenes very vividly. At a certain moment, when the sky closed on us with a dense downpour, we all surrounded Doña Mica with a piece of plastic to protect her and ourselves from the intense rain. While we were waiting for the shower to pass, Sebastián told me that an officer of the *Secretaría de Reforma Agraria* (Ministry of Land Reform) with whom they had been in negotiations regarding Salvador Allende's land property rights conflict, had told them that if they insisted on staying there they would never have a road, or a telephone system, or schools or healthcare centers. So, "we will always be screwed". Miguel, who was on my other side, said, "We have never received anything from the government, and we do not need them to make our lives".

5.2.8 Serum from the Amador Hernández clinic

On the second day of waiting, they gave Doña Mica a serum bag which they got from one of the clinics in Amador Hernández. At the time, the newly inaugurated clinic had a supply of basic medicines but lacked doctors. It was part of a program called Caravanas Aéreas de Salud (Aerial Healthcare Caravans), which was started in the middle of May of that year, with the approval of the federal and the State's health secretaries in Ocosingo (MdeR, 2007). This program was advertised as being the first after the 1994 uprising with access to Zapatista zones that had not previously enjoyed government medical services (Gómez, 2007).

The day the program was approved an airplane transported one of these caravans, constituted by one orthodontist, one general practitioner and one nurse, to *Ejido* Amador Hernández, to offer healthcare services in the region. They installed themselves there on a monthly schedule of 20 days of work inside the Region and 10 days outside. When they were there, they provided consultations in a clinic that had been built in previous years with financing from the *Gobierno Autónomo Vasco* (Basque Autonomous Government) for the *EZLN*. The clinic hardly had any furniture, equipment, and medicine. They were actually never supplied, despite their promises.

During the initial months medical presence was constant. Many of the sick needed to be hospitalized, however, and the cost of their trips was covered by the *Jurisdicción Sanitaria Núm. IX del Gobierno de Chiapas* (Health Jurisdiction Number IX of the Government of Chiapas), which services the municipality of Ocosingo. But not too many months went by before, just like in the Candelaria clinic, the presence of medical personnel became less frequent, the equipment and medicine did not meet the needs, and the *Jurisdicción* became reluctant to covering the large amount of costs incurred by special flights.

In addition to the above there were political tensions, caused when the *ARIC UU ID* was divided (see Section 2.3.2), which hindered the new negotiations between the two regions and the *Jurisdicción*. In that sense, the negotiation with the Candelaria Region was tense, since this region marked out its participation in governmental programs. At that time, the region was negotiating that the *Jurisdicción* cover air transportation expenses for the sick. This was something that, according to Lázaro, “was already being agreed because we had negotiated this with the *ARIC UU ID*. But now, with the new authorities in the *Jurisdicción*, we have to re-negotiate this”.

In the midst of all these tensions, Lázaro, who participated in the negotiations, was more pragmatic when his mother fell ill. He set out walking to Ocosingo and on his way he passed through Amador Hernández. There, he asked the local person in charge of the clinic for a serum bag for

his mother. The serum helped Doña Mica feel better by the third day. However, on the fourth day she looked so ill we profoundly feared she was going die while waiting for the plane.

That afternoon Sebastián said that because of the severity of his mother's condition, he better travel with her. Besides, he mentioned that he had the money to pay for the special flight.

5.2.9 Airline services to La Mera Selva

The cost of a special plane trip from Salvador Allende to Ocosingo was, in 2007, 2,500 pesos (around 180 Euros) per 350 kilograms. This was usually equivalent to three passengers plus luggage or cargo, for a one-way trip. This price covered transportation from the airstrip in Ocosingo and/or Comitán to the airstrips of localities that were located on the Lower Basin of the Perlas River, such as Amador Hernández, Pichucalco, El Guanal, Plan de Guadalupe and Salvador Allende, or vice versa. Traveling to communities of the Negro River Basin that had a landing strip, like Candelaria and San Gregorio, costed 2,800 pesos (about 200 Euros). This price did not include any taxes. So, if one wanted to buy a round trip and bill the expense, the cost increased to more than double that amount.

This price makes plane flights a luxury service for communities that are considered highly marginalized by the *Secretaría de Desarrollo Social*⁹² (Ministry of Social Development). This has always been the situation, and it has impacted the dynamics of the economy in La Mera Selva. This dynamic is defined by the need to get involved in economic activities that generate money, like livestock. It also meant that most of the money earned from these activities, as was the case with pigs or coffee in the eighties (see Legorreta, 1998; Márquez, 1996), was spent on airplane flights. Beyond the high economic cost, there is the issue of how the people who constitute the airline company relate to the people of this region.

The only company that flies to the communities of La Mera Selva commercially is called *Servicios Aéreos San Cristóbal S.A. de C.V.* It is a family business headquartered in two places, Ocosingo and Comitán de Domínguez. Both bases are managed by two sisters-in-law, widows of pilots who died in airplane accidents. Besides the owners, more than 10 additional people work there, among them the pilots or captains of the planes, the secretaries-administrators, the mechanics and the guard. Each base has a different relationship with the Tzeltal peasants.

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<http://cat.microrregiones.gob.mx/catloc/default.aspx?tipo=clave&campo=loc&valor=07059&varent=07&varmun=059> revised September 1, 2010 using the *Ejido Amador Hernandez*, Pichucalco and Candelaria, and small communities like Salvador Allende and San Gabriel as reference.

The relationship the Comitán de Domínguez base has with the people of this area is sporadic, since the latter is not their principal area of business. For a long time, they catered to the communities of Cañadas de las Margaritas which is geographically closer. Since the construction of a road linking the communities of these Cañadas with Comitán, however, they have focused on servicing tourists who visit the Montebello lagoons, the archeological ruins of Bonampak, or other tourist attractions in the Mexican southeast. In this sense, the relationship of the owner and personnel of this base with the people who use their services is that of an enterprise providing a service to a customer. Their offices and airplanes are well kept. On those occasions when I used their services, their personnel were forthcoming and courteous. In most cases, when I scheduled a flight either inbound or outbound, the date was observed. There were, of course, some exceptions, but those were due to adverse environmental conditions.

The situation at the Ocosingo base is different. Their dealings with Tzeltal people and with all of us who have to do with them are frequent. Ocosingo is not only the municipal seat of communities in this area, but also a place where their organizations' offices are located. Moreover, it is a place where people live or meet relatives and acquaintances from other communities of the Cañadas de Ocosingo. In addition, it is a commercial center. So when in Ocosingo, one usually runs into people of La Mera Selva in the offices of its organizations, at the municipal market or while walking its streets. Therefore, the relationship between the people working at the Ocosingo base and those of this region is not only more frequent, but also goes further back in history.

The offices of this base and its planes need maintenance. There are many reasons why their services leave room for much criticism. The first one is a lack of transparency in the prices they charge, which is especially true concerning overflights and maximum weight allowed. The second is the wait for hours or days caused not by rainfall, but by problems with pilots and/or planes. This translates into a different treatment of their customers. The Tzeltales, who in my opinion are their main client and the reason of their business' existence, are treated as if transportation to their communities were not so much a service, but a favor to them. The situation lends itself to this. Airplanes are the only option to the complications of traveling on paths that are often impossible to walk on. Especially during the rainy season, pilots take advantage of this situation and behave like almighty lords, determining who leaves and who stays behind to wait one or more days. Looking at the stories of their lives, this behavior goes back in time.

The life stories of airplane pilots

The stories I heard about the lives of most of the pilots who fly for this company have several facts in common. They come from families of land owners from the Ocosingo or Margaritas Valleys, who lost their land after the invasion by the *EZLN* in 1994. Of these stories, Captain Alfonso Vega's is an interesting one. It reveals the historic relationship between those former land owners, now providers of services and products, and the Tzeltal peasants. Captain Poncho (as they called him), a tall and strong man of white skin and dark hair was very proud to tell his family story. He died in an airplane accident in 2010.

His grandfather was of Spanish origin and owner and landlord of several estates in the Ocosingo Valleys. That is to say, he was not only owner of the land, but also the landlord of Tzeltal farm laborers. Captain Poncho asserted that "all the white people in La Mera Selva are my relatives, because my grandfather was a *chingón*:"⁹³. He used to blow his horn to call all the Tzeltal women he slept with". On the other hand, his great-uncle was Pedro Vega who, besides writing novels about the Lacandon Jungle, was one of many explorers seeking the utilization of its mahogany and cedar trees (Vos, de, 2004:59-92).

Captain Poncho grew up on one of his grandfather's farms and decided to follow the quite costly education of airplane pilot. After flying in different parts of Mexico, he went back to Chiapas, where he purchased a small plane that he started to fly to transport people and goods. He invested his proceeds in several businesses such as a tire repair shop and a dairy farm. The latter was invaded after 1994 by, as he called it, "the Zapatista relatives of Don Chebo and Lázaro who live in the Ocosingo Valleys". That was how he said he lost his entire investment in the farm - even though the federal government compensated people for many of those invasions (see Villafuerte *et al.*, 1999).

Sometime later, he also lost his airplane; it was confiscated by the *Procuraduría Federal de Protección Ambiental* (Federal Environmental Protection Agency) for illegally transporting *Chamaedorea* fronds without a permit. His explanation was that he was doing some people of one of the communities a favor flying their palms, and they did not tell him he needed a permit for this. Rumor had it, however, that the illegal transportation of the palm had been Captain Poncho's business all along until they caught him. Since he lost his plane he was now working, reluctantly, as a pilot for the Ocosingo base. In the meantime, with funds collected from political favors to the Ocosingo municipal president, he was trying to obtain a contract to build the long awaited, but not yet agreed upon, road that would

⁹³ In this case, the word "chingón" refers to a man who is proud of having several women and children with each one of them.

finally connect the communities of this region with the outside world. Therefore, his relationship with the people there was one of conflictive feelings. This alienated him from the image of being a service provider, and brought him closer to that of an estate lord, as discussed extensively by Legorreta (2008).

5.2.10 Doña Mica's departure with the Comitán plane

But let us return to my conversation with Sebastián on the fourth day of waiting on the Salvador Allende landing strip. After he had told me he would cover the cost of the flight, I asked him if he knew what was holding up the plane to transport Doña Mica. He said Lázaro had sent him a short wave radio message - a system used throughout the Cañadas communities - indicating that the only plane with the ability to land on the Salvador Allende airstrip was broken down. So we would have to wait until it was repaired. I observed we would be better off calling the Comitán base. According to Sebastián, this was not a good idea, as both bases would charge for the flight, since each flight requested and landed had to be paid, whether or not it was used. I assured him I would cover the cost of the second flight, if needed. But he thought this was of little help. I suggested Doña Mica stay home the next day and to only take her to the airstrip when the plane had actually arrived, as this was less taxing on her health. He did not agree: the captain would not wait for them to bring her to the airstrip, and he would take off without her. Sebastián said, "Caro, don't despair".

But I really was despairing, and therefore, later on, I convinced Don Chebo of going to Pichualco, 5 kilometers away, very early in the morning the following day, to make a telephone call to the Comitán base. The next day at dawn, in order to get to Pichualco quickly, we rode horses on the path which, months earlier, I had been afraid to even to walk on. Once there, I phoned the owner of the base, and she told me she would send the plane as soon as the weather was cleared for flying. We went back to Salvador, where Sebastián greeted us with little optimism as to whether our actions would change what was supposed to happen. But it seems that the fact that I, in my position as the *CETAMEX Ingeniera* from the DF (Mexico City, Federal District), had called produced some results.

At around ten in the morning we heard the sound of the airplane. It was coming from Comitán and, no sooner had it landed than Doña Mica was lifted onto it, and in half an hour she was on the Ocosingo airstrip, where Lázaro was waiting. A few hours later, Doña Mica was being helped in the San Carlos hospital in Altamirano. The doctors there diagnosed her with uterine problems, but they said the intense pain had been caused by the parasites harboring in her stomach. She had to stay in the hospital for several weeks

5.3 SEPTEMBER, MONTH OF BREEZES AFTER THE STORM AND THE STRONG WINDS

In late September, we performed the bending on my *k'altik* in San Martín, in the remnants of a breeze that not too long before had been a storm and strong winds. The storm had been a peculiar one, taking on the form of evictions on August 19, 2007.⁹⁴ The winds had hit them a few days before the evictions and one week after them. They were so strong that in some fields they destroyed many *ixim* plants. The evictions, as well as the strong winds, were events which impacted our performance of the bending in San Martín. The reader may learn about the destruction, fear, disagreements, misunderstandings and oblivion the evictions left behind. They describe what impact an aggressive act of that sort had on the lives of the peasants who were not evicted and, finally, how we performed the bending of the *ixim* plants.

5.3.1 The strong winds that toppled the *ixim* plants

A little before and after the evictions took place, some winds from the North came through intermittently on different days, playing with the foliage and trunks of big trees on the mountain. There were days during which this was so intense that several trees toppled over and lay flat on the ground, exposing their large roots. The winds blew through all the *k'altetik* of the zone. As they meandered through, they combed the *ixim* plants they encountered on their way. The plants reacted by being flexible and stubborn at the same time. They were flexible in that they allowed the wind to bend them or sway them to and fro without toppling them. But at the same time they were stubborn enough to straighten up again once the wind gust had gone through.

This was not easy especially since, at that moment, most of the plants were a little out of balance with the weight of a silking cob on one of their sides. Some of them were not affected because they benefited from the protection of the mountains and trees around them, as was the case with most of the *ixim* plants on the fields in Salvador Allende. Others were able to straighten themselves back up even without this protection sometime after the wind went through. Such was the case with most of the plants on my *k'altik* in San Martín, as Juan had rightly predicted. But not all of them fared well: there were some in the same field which ended up with broken stems and roots, in other words, causing lodging. Initially the loss was evaluated as 45%, but later it appeared less, and the effect on yield traits was found to be not significant. In cases of lodging there was not much that could be done “since the wind does not blow through the *k'altik* evenly, and besides

⁹⁴ Details of the above mentioned evictions are addressed in Section 3.5.

gophers dig tunnels that cause the plants to topple easier,” Juan explained. At least the plants were not victims of the same bad fortune that struck most of the *ixim* plants on the *Ejido* Candelaria. The winds that went through a week after the evictions, combed the plants in so many different ways that they finally broke, which caused serious damage from lodging. All this devastation notwithstanding, the strong winds did not compare to what the storm of evictions left behind.

5.3.2 The consequences of the evictions

The evictions that took place on August 19, 2007 were the first to befall La Mera Selva after more than 30 years of threats. These evictions, like a storm, had several consequences, not only for the people who were evicted, but also for those who were not.

A storm of devastation and fear

The evictions left behind devastation, caused by police forces that destroyed homes, in which all sorts of possessions like clothes, official documents, money, kitchen utensils, chickens and livestock were abandoned. It took Don Chebo and other people several weeks to transport these possessions from San Manuel to safeguard them in Salvador Allende.

The evictions also left behind fear. A fear among the conflicted communities of being victims of the same misfortune that struck those who had been evicted. Thus in early September I walked with Juanita on a side of the *Montaña* that is part of Salvador Allende. Juanita was Don Chebo's daughter, who migrated to the United States at the first opportunity she had. On this occasion, she showed me the bags of clothes and kitchen utensils the women had hidden underneath some big palms. Grimacing, she said, “These poor women of Salvador Allende, when the helicopters come to evict them, they will have to run with their babies and small children and hide in the *Montaña*. They will run like animals”.

This fear not only haunted the contended communities, it extended to the communities that already formalized their land rights since the nineteen eighties (Legorreta: 1998). In mid-September, when I visited the Pichualco *Ejido*, I witnessed how children, hearing the sound of helicopters, ran to the landing strip and started screaming, “They're coming to evict us, they're coming to evict us!” The adults had contrasting reactions. There were those who completely ignored this event in their conversations with me. Others, instead, talked extensively about this matter, explaining why they had occurred and how they, even though being formal *Ejid*os, might or might not be evicted.

Disagreements and meetings

At the same time, the evictions caused many disagreements. There were differences of opinion as to the reasons why they occurred (see Section 3.5.6). There were also disagreements as to the prediction of future evictions and therefore the strategies to confront them.

In some people's view, the communities to be evicted next were the ones that, like Salvador Allende, were in negotiations with the government. Other people assured however, that all communities, those that were contended as well as those that had land property titles, were going to be evicted. This was based on the fact that, added to the evictions, on May 8th, 2007 another new presidential decree was published (DOF, 2007). This decree expropriated 14,000 hectares from the Lacandon Jungle in favor of the *Secretaría de Medio Ambiente y Recursos Naturales* (Ministry of Environment and Natural Resources) for conservation purposes. Since this decree did not explicitly indicate the area to be expropriated, many people guessed it covered different areas and parts of existing communities in their region. On the other hand, opposing positions whether to confront or disapprove of the government *versus* to continue the process of negotiation caused disagreement concerning strategies to face the problem of evictions.

All these disagreements took place in countless meetings in which the Tzeltal people were forced to participate. They were called to community meetings almost every day, and the attendees received information and discussed the pertinent matter. Regional meetings, which in themselves were held frequently, were called with even more frequency. This meant that representatives of each community not only spent time being present at these meetings, but also traveling at least two days to the meeting place. Meetings were also held between the different organizations that had a presence in the region. In spite of all these efforts, no agreement was reached. Disagreement, fear and confusion were overwhelming. Nevertheless, these meetings kept them busy during most of September.

A storm inadvertent to many

The evictions were also a storm that went through without warning for many people. In spite of the notices published in newspapers, communiqués on the internet, complaints and informative bulletins about the evictions, few people living outside of this area were concerned about and acted upon this issue. Even if they had work-related matters that directly linked them with the area in which these events had just taken place.

This was the case with the personnel of state government entities I was in contact with during my fieldwork and the people working for *CETAMEX*. On the first opportunity I had to talk about the topic of evictions, they showed their worry and concern. They expressed that this was not the way the

conflict should be solved and they spoke at length giving examples to prove their points. Then, when I asked them if something could be done to that effect, they said it was all very complicated, but they would do everything in their power, and they immediately began talking about the projects they were doing or were planning to implement in this region.

In search of normalcy after the storm

The evictions proved to be a storm that, above all, left the Tzeltal people with a great need to find normalcy through their everyday and seasonal September activities. Thus everyone continued their everyday activities of feeding (preparing food and eating), hygiene (bathing, doing laundry and house cleaning), rest (sleeping) and various chores. They also performed the management activities of that month. They cut the fruit of the avocado trees, as September was the month to do that. It was also the time to harvest some bean types such as the pole bean (*te chenek*) and the *tapachula* bean on the *k'altik* as well as on the bean plantation (*tok'al*) (see Picture 5.3). It was time, too, to prepare and sow the *k'altik* for the *tornamil* or winter cycle. Lastly, it was also time to bend the *ixim* plants that had grown cobs.



Picture 5.3 Pancha and Elisabet harvesting pole beans.

5.3.3 The bending in San Martín

During most of September, Juan and I were both busy with meetings and other activities in which we participated. It was not until the end of September that we coincided in San Martín and performed the bending of my *k'altik*. He had already started a few days earlier to bend those plants which were precocious and had stayed very short and dried out sooner. He explained to me that it was necessary to bend them since the cobs were beginning to sustain damage due to water infiltration and bird/mammal

attacks. Therefore, on September 29, I finished this practice with him on the plants “that are still in time for bending, because they are just beginning to dry”. That day I observed how Juan performed the bending. The first step was the elimination of plants. One by one, Juan approached the hills made up of several *ixim* plants. In each hill, with the *machete*, he cut those plants that did not have cobs, locally called *jorras*, at ground level; those with very small cobs also known as *molcates* or those with good-sized cobs but with damage to their husks (*jojoch*) and seeds (*ixim*). He explained that these plants were cut during the bending because the first were not going to bear cobs, and the cobs of the second and third were going to be damaged more if they were left on the *k’altik*. When the plants had been cut, Juan harvested his cobs. “The clean and healthy kernels of those cobs are going to be used to make *tortillas* and the rotten kernels will go to feeding the chickens and pigs”. And so the bending ended up being at the same time a preliminary harvest, in which all the *jorra* plants and those with damaged cobs were removed.

Thinking about the implications of this on the overall yield, I asked Juan how many ears of corn he had harvested during the two days of the bending. He said about 140 cobs, among which were especially the precocious ones that had not been bent on time, and those that had been affected by a combination of wind and gophers. In the latter case, the plants that were sowed on top of the tunnels the gophers had dug did not grow strong and the soil was too loose. “When the winds of August went through”, he explained, “these plants were flattened or broke and their cobs stayed small”.

Once he had cut and harvested them, Juan performed the second step, the bending itself. He worked on bending each one of the remaining plants on the hills. To perform this activity, he focused on certain parts of the plants. First he took the stem (*Johoc ixim*) of the plant and found the ear of corn. Then he gave a blow to the stem with the dull side of the *machete*. This blow was inflicted below the cob, on the other side, on the stem internode, causing the plant to bend almost in half (see Picture 5.4), leaving the tip of the cob (*snihil ixim*) pointing to the ground. Then, placing one hand below the fold and the other above it, he folded the plant as if he were hugging it (see Picture 5.5). He also arranged the leaves (*yabenal ixim*) of the upper part in a way that the cob was hidden underneath them. He repeated this with all the plants on the same hill.

And so, little by little, instead of hills, there were heaps of plants that were folded. On occasion, when he found a plant flattened by the wind but with a good ear of corn, he cut it from the base and put it on top of the heap created by the other plants. He mentioned that it was more difficult to bend plants that had been tilted by strong winds but nevertheless developed cobs because, having dried faster, they broke easier, so it was better to cut them before bending.



Pic 5.4 Juan bending the internode of the stem



Pic 5.5 Juan hugging the *ixim* plant

Finally, the third step consisted in weeding, which he performed when he finished bending all the plants that constituted a hill. He performed the weeding around the *ixim* plants that had just been bent to “make the harvest easier”. He explained that this last step was important especially if the same field was to be used for the following *tornamil* cycle. Thus, this practice turned into land preparation for the *tornamil*.

I started to perform the steps of the bending. With the first and the third I had no problems whatsoever. However, inflicting that blow with the *machete* was difficult for me. Since I did not control the force of the blow, I ended up breaking the stems of the plants several times. I was beginning to hesitate, and Juan told me I could do the bending by hand. He showed me how to do it, taking the stem with the right hand and putting pressure on it with the thumb to make a fold. In doing so, I replaced the blow of the *machete* with the pressure of my thumb. I carried out by hand the bending of the stems of plants that had not yet dried out.

I was not able to do this in late October, when I helped Don Chebo with the bending of a *k'altik* with plants that were completely dried out. To perform this bending, there were other particularities we had to consider. However, most of October went by and along with it, the occurrence of other events, which caused this bending to be very late.

5.4 OCTOBER, AND THE EVENTS THAT LED TO ENTRUST BENDING TO OTHERS

It was mid-October when Antonio, Don Chebo's son-in-law, performed the bending on my *k'altik* in Salvador Allende. Don Chebo delegated this practice to him since during most of this month both he and I were gone from the region, busy with other events. He stayed with Doña Mica the first two weeks of October during her hospitalization and then her recovery. I was busy organizing the visit to Tabasco, as part of the *CETAMEX* activities. In mid-October, while Don Chebo and I were on that trip, Antonio did the bending of *ixim* plants on my *k'altik*.

These circumstances both interfered with the bending, not only of my *k'altik*, but also of one of Don Chebo's. Let's then take a look at the details of these events. They open the door for discussion about the complex relationship between promoters and NGO's like *CETAMEX*. Moreover, they create the opportunity to join Don Chebo on a very late bending in one of his *k'altetik*.

5.4.1 Seeing Doña Mica and Don Chebo at the San Carlos hospital

I saw Don Chebo days after I performed the bending with Juan in San Martín. Although it was my intention to speak to him about the bending of my *k'altik* in Salvador Allende, I was not able to do so. The occasion did not lend itself for it. I met up with him in the middle of September at the *Hospital de San Carlos* in Altamirano. He had been there since the beginning of September, accompanying Doña Mica, who had undergone uterine surgery.

When I arrived at the hospital, the first person I met was Sebastián, who stayed with me while we waited for his parents. Don Chebo showed up briefly to greet me and tell me I could count on his participation on the trip to Tabasco (see following section). He said goodbye quickly since he was very busy doing cleaning and maintenance work in the hospital, which he did to cover the room and board expenses for Doña Mica and himself. I also saw the newly operated Doña Mica briefly, between a medical checkup and a mandatory walk in the garden. She looked pale and her body was aching, but she was doing better, definitely better than a few months earlier, when we had been waiting for the plane. Thus I spent most of my time in the hospital talking with Sebastián.

Sebastián updated me on the situation with the people who had been evicted and the discrepancies he had with his brother Lázaro's strategies. At Lázaro's advice, his brother-in-law, Feliciano, and his sister, Jacinta, had decided to negotiate with the government without the backing of any organization. Sebastián did not agree because he thought this lack of support did not pressure the government authorities to get a fair negotiation.

He also told me the story of the *Hospital de San Carlos*. It was founded by the Dominican Order of the Ocosingo Parish and the Daughters of Charity Vincent de Paul Order at a time when there were no hospitals. It is currently one of the most important and renowned regional hospitals providing health services to the indigenous communities of the Cañadas de Ocosingo and Margaritas. In addition, it is an alternative to the government hospitals located in the Altamirano, Ocosingo and Comitán municipalities. An alternative, because it is well visited by members of the *EZLN* and other independent organizations. “Even though it is not completely free of charge, as government hospitals supposedly are and which, in the end, charge you for everything,” he said. “We can cover the cost of room and board with our work, and surgeries are very inexpensive. We prefer to pay, because here our sick get well. Last year, I had surgery here, then Lázaro, and a few months later my little brother Hil. Early this year one of my children had surgery, and now my mother. We already know the people in the hospital and they know us well. That is why in June, when my mother was in very serious condition, we took a taxi to this hospital even though the plane flew us to Ocosingo, where there are government hospitals”.

When I heard the long list of people who had been sick in such a short period of time and all the surgeries they had undergone, I told him so much illness must be exhausting. He said that, in addition to the worries that go along with disease and hospitalizations, they had to worry about the expenses involved. Expenses they now had to cover such as surgery, medicine and Doña Mica’s subsequent stay in Ocosingo. These were expenses which, in times past, when the price of livestock was not quite so low, could be covered by the sale of one or two young bulls. In Doña Mica’s case, however, they were going to be paid with the money Hil and Chebito, his two younger brothers, would send from the United States.

As if this were not enough, he stated that all this sickness, along with other events such as Jacinta’s eviction, had delayed his work on the *k’altik* and other management areas. He still had to finish the bending of one part of his *temporal k’altik*. He also needed to prepare the land and sow his *tornamil k’altik*. He wanted to clean his coffee plantation too, as he had been able to make good money off the sale of coffee the year before. Those were the reasons why, he explained, he rejected my invitation to participate in the Tabasco visit. Because, just like sickness and evictions, the Tabasco trip ultimately interfered with his activities. He concluded by saying that he did not understand how his father had accepted going on that trip, especially because in a few days he was going to stay with Doña Mica in Ocosingo, when she was discharged from the hospital. They would stay there several weeks, until the risk of recovering in Salvador Allende, far from hospital care, had subsided. I remained quiet and had mixed feelings in regards to his remark about the trip to Tabasco.

5.4.2 The visit to the neighbor state of Tabasco

I had mixed feelings because it had taken me most of October to organize the visit to Tabasco as part of my work as a *CETAMEX* fieldworker. The purpose of this trip was to expose the promoters of Agroecology of the Candelaria Region (among them Don Chebo and Juan) to agro-forestry, fruit and livestock farming techniques that were being carried out in Tabasco. The trip had been scheduled for the end of August. However, the evictions had interfered, and it was postponed to mid October 2007. I had a very difficult time convincing the promoters to travel due to the tense political environment created by the evictions and the delays they caused in other activities. But slowly, the promoters started giving in, and a total of seven people made the trip with me to Tabasco a neighbor state of Chiapas in the South part of Mexico.

For some time already, Tabasco's presence has been noteworthy in the management dynamics of the Lacandon Jungle. In his book "*Oro Verde: La conquista de la Selva Lacandona por los madereros tabasqueños 1822-1949*," (*Green Gold: The Conquest of the Lacandon Jungle by Tabasco Loggers 1822-1949*), Vos, de (1996:12) tells about the exploitation of precious wood and expresses that "it was exclusively in the hands of Tabasco companies". This and the geographical characteristics of the Lacandon Jungle were the reason why, up until 1919, the latter served as Tabasco's backyard (Vos, de, 1996:261). Subsequently, activities such as livestock farming gave this relationship continuity. Legorreta (2008:270) writes that during the peasant colonization of the Lacandon Jungle, which took place between 1950 and 1970, the sale of pigs transported to Tabasco and to other states of the Mexican southeast was the only source of income for the new settlers. Currently, the majority of young bulls sold by Tzeltal peasants end up in livestock farms in Tabasco for fattening (Alemán *et al.*, 2007:36).

On top of this, many technological innovations in livestock production have entered via Tabasco. Such was the case with the introduction of star grass (*Cynodon plectostachium*), which currently covers most of the pastures of this region. Don Eusebio told me it was precisely the pig buyer who, utilizing the plane flights to take the animals out of the jungle brought rolls of star grass from Tabasco in exchange. In fact, talking with the Tzeltal peasants about livestock farming implied listening to their stories about what was happening on the Tabasco livestock farms. On an agricultural level, this image was adopted by many people in Chiapas and Mexico in general, who used the big banana plantations of Tabasco as a reference point for the development that all areas of the humid tropics of the Mexican southeast should follow. All these facts led me to assume that the promoters would benefit from this visit. However, their impressions questioned my assumption.

Impressions from the visit

The visit lasted seven days. Although the distance between the communities of La Mera Selva and the destinations we went to is a little more than 200 km, the excursion consisted of 5 days of traveling and a 2-day stay. Ocosingo was the meeting point. There I met with Don Chebo, Juan and his brother Javier who lives in Rancho Corozal, with Nicolás of Rancho San Gregorio, and Agustín, Jorge and Cristina from *Ejido Candelaria*. All of them represented the five communities that made up the Candelaria Region of the *ARIC UU ID*. The places we visited were: The *Centro Regional Universitario del Sureste de la Universidad Autónoma de Chapingo (CRUSE* - The Southeast Regional University Center of the Autonomous University of Chapingo) in the Municipality of Teapa; the *Ranchería San Miguel de Afuera* in the Municipality of Jalapa and the *Campo Experimental del Instituto Nacional de Investigaciones Forestales y Agropecuarias* (Experimental Campus of the National Institute of Forestry and Agricultural Research) in Pichucalco, Chiapas. To get there, I arranged with the driver of a passenger van to drive us from Ocosingo to Teapa, crossing the northern part of Chiapas and the southern part of Tabasco.

The impressions we collected on the trip such as, among others, the vast and flat pastures of Tabasco, were the first to question my assumption. Both Jorge and Nicolás highlighted that many of these pastures were flooded and the poor cows and horses were stuck in water. Don Chebo remarked that, in one of the negotiation meetings they held with the representatives of the Ministry of Agrarian Reform, the latter offered to buy them a farm in Tabasco in exchange for leaving Salvador Allende. He did not accept because he knew that all these pastures got flooded during the rainy season. He said his godfather had taught him that a pasture should not be located on flat land; it was better if it had small hills the cows could climb on when the low parts were flooded. Indeed, his pasture in Salvador Allende had many small hills.

We made field excursions and participated in workshops in the various places we visited. The topics of discussion were diversification of the *milpa*, fallow management, organoponics⁹⁵, fruit and insecticide tree orchards, dairy livestock management, pasture and forage plant management as well as silvopastoral systems.⁹⁶ The participants expressed various opinions on the

⁹⁵ This is a technique derived from hydroponics, also known as semi-hydroponics or geoponics. This method consists in placing solid substrates that meet the nutritional requirements needed for plant development. It is practiced successfully in different regions of the world, and currently, with the use of earthworm humus, the technique has been improved.
http://www.eraecologica.org/revista_03/lee_03.htm?organoponia.htm~mainFrame

⁹⁶ A silvopastoral system is a land use system involving the presence of woody perennials (trees and/or shrubs) which interact with the traditional components of a pasture (forage grasses and animals) under a comprehensive management system (Pezo and Ibrahim, 1996).

above topics. Some had to do with the intent to implement the experiences observed during the visit. Most, however, focused on the obstacles involved in applying these experiences in La Mera Selva.

Lack of infrastructure and equipment

Participants made statements regarding the lack of infrastructure and equipment. For example, Don Chebo asserted he liked the idea of a commercial fruit orchard like the one we visited with rambutan trees (*Nephelium lappaceum*). But how was he going to sell them if there was no road close to his house? Jorge thought dairy farming was interesting since it was not a known practice in the region, but he did not have a cow shed like the one we saw in the CRUSE, where he could milk the cows. Agustín expressed his interest in the milking we had observed, even though he was not going to be able to carry that out because he did not have mechanical milking machines. Nicolás summarized it all saying he liked what he observed about livestock farming, even if he could not practice it in his community. Thus dairy farm management was the topic in which the lack of infrastructure and equipment became most evident.

Some readers may think it is precisely that lack of equipment which prevents Tzeltal peasants from developing an efficient and productive livestock farming system. Others may notice, however, that beyond the lack of infrastructure and equipment, these views point out the lack of adaptability of the experiences gained in Tabasco to their own life situation. Tabasco certainly had a great influence on the Lacandon Jungle and the general weather conditions are sufficiently similar for both to be grouped within the humid tropics of the Mexican southeast. However, there are differences in the technologies we observed during our visit to Tabasco that are unsuitable to the context, circumstances and events in La Mera Selva.

The innovations we had observed were inadequate because I made the wrong selection of experiences, which I had chosen based on my contacts with universities and research centers. I suppose that, instead, experiences such as those that are passed on from peasant to peasant in Central America⁹⁷ (Holt-Giménez, 2006) would have been more beneficial. But I did not have any acquaintances in such civil organizations like peasant organizations and NGOs. And Ángel-CETAMEX, with all their years of experience, did not draw my attention to this. I find that the explanation for that lack of attention lies in the relationship CETAMEX maintained with the regions (see Section 2.3.2). This relationship meant that the NGO's were providers of development and the promoters turned into passive receivers of visits, workshops, and materials such as seeds and seedlings. In fact, peasants' interest lay mostly in materials.

⁹⁷ In these cases peasants act as instructors who share their experience in the utilization of different technological innovations.

Seeds, propagules and other materials

One of the subjects the visitors to Tabasco were most interested in was the seeds and seedlings they acquired and ultimately took home with them. There was a great variety of them and each visitor picked the ones s(he) was interested in. For example, Juan took two cobs of *barraquilla* maize, which Don Manlio (Tabasco peasant) uses on his diversified *milpa* (see Picture 5.6). Don Chebo took a purple agave from the organic agriculture module (see Picture 5.7). Jorge, like all the others, cut bunches of fruit from the rambutan trees to eat the pulp and later sow the seeds on his homegarden (see Picture 5.8). Nicolás, like Agustín, collected sprouting coconuts from a short palm tree they found on the forage plant trial plot (see Picture 5.9).



Pic. 5.6 Juan with his *barraquilla* cob



Pic. 5.7 Don Chebo and his purple agave



Pic. 5.8 The rambutan branch that Jorge cut



Pic. 5.9 Nicolás' sprouting coconut

At the end of the visit, each one of them got a great assortment of seeds and seedlings. This became a burden when it was time to transport them from Ocosingo to the different communities during one of the rainiest months and therefore on very muddy paths. I myself contributed to increasing this cargo with the white mulberry (*Morus alba*) stakes Ángel had sent me to hand out to the promoters. They refused to accept them, though, explaining that they had already received these stakes in advance from *CETAMEX*.

They were right. During the twelve months I had been working as fieldworker they had received these mulberry cuttings twice. It was the same case with other seeds, like velvet bean (*Mucuna pruriens*) and canavalia (*Canavalia ensiformis*) which they had been receiving since 2003, when this NGO started working with them. Since then, *CETAMEX* had been sending their stakes and seeds, and other types of forage plants and vegetables. Much the same way, they supplied equipment like sprayers and electric fences.

These materials and equipment were subject to different fates. Some were never used, since they were not practical, as was the case with the mulberry stakes I distributed, which were tossed out on the road. Others, like the electric fences, were junked in the corner of a house due to internal community disputes as to who had the right to utilize them. Sometimes, as was the case of the forage and seed chopper, they used the equipment, but then due to various circumstances (such as the lack of gasoline or the failed sprouting of a plant) they could not continue using it anymore. In the end, they only used a few materials and equipment.

Said materials and equipment were not the only things Ángel and I procured for them. There were all their requests and petitions, which I had begun listening to since my first visit to this region. They were mainly related to things they could not come by, or which were harder or more expensive to obtain in the region due mostly to the lack of roads. The requests and petitions were very diverse in nature and they were expressed in a way that to me they seemed more errands than favors. They involved transporting goods from cities like Ocosingo to the different communities of the region by plane and vice versa, or transporting people, as in Doña Mica's case. They asked me to make journeys that were related to the agroecological activities of *CETAMEX*, like requesting forage grass and vegetable seeds. However, most of their errands had to do with things that were not related to our work.

Some favors, like procuring sacks of salt, were asked for because they were needed, as they could not obtain those goods in La Mera Selva. Others were related to the lack of basic services like electricity or health care, so they asked for candles or lamp batteries, or medicine. And lastly, there were those demands that questioned my conception of Tzeltal peasants' lives, such as the request for baby walkers, televisions with DVD players, and bread baking forms. All these petitions and requests made me think that, more than *CETAMEX* agroecological innovations, the peasants' desire was in Ángel and me obtaining and transporting goods and people for them.

I tried to satisfy these demands and requests for favors as best I could within my means, since I soon understood their importance as a tool for negotiation. This played a very important role in the relationships I established with them, because I secured their help without the need for payment in most of the practices we performed on both my *k'altetik*. But there were some practices for which I had to pay others to perform them for me, due to the second obstacle the participants of the trip identified when they tried to implement the experiences they had on their visit to Tabasco. This relates to the amount of work it takes to carry them out, combined with the lack of time available.

Much work and the lack of time

There were several promoters who pointed out that the large amount of work and lack of time were a restriction to implement the experiences they had observed during their visit to Tabasco. Jorge was interested in vermicomposting, but said it required a lot of work and he could not do it because he was very busy as regional authority of the *ARIC UU ID*. Javier liked the *milpa* Don Manlio cultivated with beans (*Phaseolis vulgaris*) yucca (*Manihot esculenta*), sweet potatoes (*Ipomoea batatas*), malanga (*Xanthosoma sp.*), taro (*Colocasia esculenta*), peanuts (*Arachis hipogea*) and yams (*Dioscorea alata*). He liked it so much that he said he would like to have the time available to do his *k'altik* like that. After a day of traveling and conversations, Nicolas commented, "Everything, cows, earthworms, as well as the *k'altik*, require work and time, and I cannot do it alone. I need someone to help me, and for that I need to pay them".

Don Chebo thought so too, he liked everything, "but it all requires work and time". He told us he had lost the Californian earthworms Ángel had given him the previous year, which he had seen again in the organopony module. This happened because he went to meetings and the ants and birds ate them. Agustín agreed with them and assured, "It is hard to do everything we have seen; it is a lot of work". He said that since the moment he became coordinator of promoters, "I don't stop at my house anymore because of all the workshops, visits and meetings I have to attend, and this makes it impossible not only to convince other of implementing these experiences but also for me to apply what I learn in all those workshops and visits".

It seems that this combination of so much work and lack of time is a significant reason for the failure of the agroecological innovations I promoted as a *CETAMEX* fieldworker. Not burning of the *broza* during SM land preparation in fact implies an increased difficulty and time needed to perform the subsequent practices and, in some cases, more weeding than with the burn (see Section 3.6). As far as livestock, the establishments of forage banks, plots that are used as alternatives to the extensive pastures to produce more fodder, add onto activities such as cutting forage and subsequently processing it for fodder. All of the above would not be a problem if the peasants would have the time. But they all have a very tight work schedule due to the multiple practices and activities they perform in their region. On top of it, they get involved in events which not only take away time they could be dedicating to these innovations, but also interfere with their daily practices and activities. Such was the case of the Tabasco visit, which actually interfered with the bending of my *k'altik* in Salvador Allende.

5.4.3 Assigning the bending of the *k'altik* in Salvador Allende

The Tabasco trip was one of the reasons Don Chebo delegated the bending of my *k'altik* to his son-in-law, Antonio. During our last night in Tabasco I approached him to make arrangements. But he said, "Don't worry, *chulita*, I assigned Antonio to do the bending for us". He added that Antonio was already doing the bending, while we were in Tabasco. When he saw my disappointment instead of my relief, he continued explaining that the *ixim* plants would not wait for us to return to Salvador Allende. He said they had to be bent soon, or else the cobs would spoil because of the numerous rain showers they were having and all the animals that were eating them. Besides, he highlighted the fact that, two years earlier, before leaving to the United States, Antonio had been an agroecology promoter, and he knew how to do the bending. He also clarified that he was not planning to travel to Salvador Allende with Doña Mica until late October, and he thought that due to the Tabasco trip I would surely end up doing the same. I did not complain, because I knew he was right. I just asked him how we would arrange payment for the bending work. He said I had to negotiate this directly with Antonio.

Towards the end of October, when Don Chebo and I finally met in Salvador Allende, we went to see the *k'altik*, along with Antonio. The latter was proud to show us the bent *ixim* plants and the weeded field. He told us he had been forced to cut all the plants in two of the trenches because a raccoon had been nibbling at all their cobs, and we went to look at the barren space. He also told us that his wife, Flora, Don Chebo's daughter, had sowed chives (*tux ak*) on some of the many patches where the *ixim* plants had not grown due to the *broza*. Thus we walked to see the small patches where the chive sprouts were only just starting to be visible. I asked him if he had removed many cobs during the bending, and he said not so many. He had barely filled half a sack, but they were all so rotten and crumbled that Flora had to feed them to the chickens and pigs.

On the way back, I asked Antonio how much I owed him for the bending work. He said it was nothing. But he inquired what I was going to do with my harvest, because he was buying maize. I told him the only thing I needed from it was to collect some data on the cobs, but I would talk to Don Chebo to see about the destiny of our harvest. In talking with Don Chebo, we agreed to give one *zonte*⁹⁸ of the harvest to Antonio as a means of payment for the bending. And in this conversation I also agreed that I would help him with the bending on his *k'altik* the following day.

⁹⁸ *Zonte* is a measure peasants use to refer to the harvest. One *zonte* equals two nets filled with cobs. Though there are some discrepancies, a *zonte* can accommodate up to 400 first class cobs weighing between 70 and 75 kg without threshing and 50 kg of threshed kernels without the cob rachis.

5.4.4 The late bending of Don Chebo's *k'altik*

The performance of the bending with Don Chebo was an opportunity to learn new things. First and foremost, I learned to look at the *ixim* plant in a different light. The plants had grown so tall, that in some cases they reached a height of up to four meters (see Picture 5.10). When I asked Don Chebo about the reason for that height, he said the plants of his *bac 'anal ixim* very tall in themselves to start with. He added, however, that since he had attended so many meetings about the land property rights conflict during the entire month of May, he did not sow until early June, and the plants grew even taller (see Section 4.4.2).

Besides being very tall, some of them had very thin stems. When I asked him again why the stems were so thin, he said this happened because he had not done the weeding until late July. He reminded me that during June and part of July he had stayed with Doña Mica at the hospital in Altamirano. After asking him how these tall and thin plants had endured the strong August winds, he explained that they had been protected by the mountain and the traps he had placed to catch Lady Wind (see Section 6.3.2).

At last he said, "Since I am always so busy, I end up postponing these practices and little by little my *c'anal ixim* has gotten used to these delays, especially to being sowed as late as June". I looked at the tall, slender and dry plants on his *c'anal ixim* and I stopped seeing them as the expression of their genotype and phenotype, as the genetic and environmental characteristics are called. I stopped seeing them in this light and began seeing them as the product of the events Don Chebo lived through during their cultivation cycle.

I was also able to look at the plants in a different way when they had been bent. Since both the plants and the cobs were so high, the blow to fold them had to be inflicted with the tip of the *machete*, which was held up high by a fully extended arm. This blow was given to a spot several internodes below the cob. When the plant was folded, the cob was lowered to a relatively comfortable height, so that it could be harvested extending one's hand. Meanwhile, it remained high enough from the ground and thus from mammal attacks (see Picture 5.11). As I watched the plants in this new light, I started doubting the suggestion I had made to Don Chebo and the other promoters to lower the height of cob and plant through plant selection so they would look like the crops of improved maize types. Looking at the folded plant, this recommendation made no sense.

Secondly, I learned a little more about the bending. After bending the stem, Don Chebo cut the spike and the upper leaves. Once they fell on the ground, he chopped them finely, stating they were a good fertilizer for the soil. At the same time, he weeded nearby plants. He repeated these steps until he stumbled upon plants around the velvet bean. After bending those *ixim*

plants, he arranged them in such manner that the velvet bean (*Mucuna pruriens*) plants rested comfortably on top of them. As I observed the *ixim* plants folded like that and supporting the velvet bean ones, I understood why the plants of the *c'anal ixim* were so tall. They needed to hold the heavy weight of the velvet bean or other legumes, like stick beans (*Phaseolus spp.*). I even found less sense in my recommendation to lower the plants' height. Taking into account the bending and its objectives, I concluded that other criteria - different from the improved varieties of low height - must be considered to define the height and architecture of the *ixim* plants.



Pic. 5.10 Don Chebo lost between the high and dry *ixim* plants



Pic. 5.11 Bending the plants on his *k'altik*

When I started bending the plants, Don Chebo drew my attention to the way I was doing it. Thus I learned some more about the bending. I was folding the plants that were not quite so high with my thumb, as I had done with Juan. However, the first and second one I did this way were broken, instead of bent in the middle. Don Chebo said it was better to use the *machete* or else I would break them all. He indicated it was always better to bend with the *machete*, but in this case it was the only way, since the plants were completely dry. This kind of bending was not easy. It was getting dark and time to go home. Don Chebo taught me that the bending can be a selective practice applied only to some plants in the *k'altik*. He told me to stop bending the plants in that part of the field because the next day he would return to harvest the rest of it. Thus I understood that the folded plants would be exposed longer to rain, animals, insects and rot. Don Chebo asked me to move to the center of the *k'altik*, where he had marked the plants he would extract seeds from for the next cycle. His intention was also to protect the cobs of these plants from damage and to keep the seeds in good condition until the next sowing.

5.5 CONCLUSION

We have arrived at the end of this experience created by the facet that presents weeding and bending performances as a situated and particularized actions which are delegated or postponed. Those performances tell us something about the juggling of practices, the events that caused them to be delegated or postponed, and the relationship between practices and events. Let's reflect on them in this conclusion.

First, these details feature weeding and bending as flexible practices in several ways. They are certainly important to protect *ixim* plants and cobs from other plants, animals, moisture, or diseases. However, they play a different role than land preparation, sowing or harvesting. As Chebito, Don Chebo's youngest son, once told me, "Sometimes we don't have time to weed or bend, so we harvest a little". But not to prepare the land or not to sow or, even worse, not to harvest, is unthinkable. This is why, like other peasants in the Mexican southeast (Warman 1985:25), Tzeltal peasants delegate weeding and bendings to relatives and friends.

On the other hand, the performance of these practices is also flexible vis-à-vis events and delays. Thus, due to the strong winds that lodged several *ixim* plants, Juan did not bend the plants but actually cut them at the stem. Doña Mica's illness and the Tabasco visit, which translated into a late bending of Don Chebo's *k'altik*, were responsible for adapting the performance of the bending to dry plants with limited time. That bending also enabled us to witness the adaptability and plasticity of maize. Don Chebo's maize plot, which he is adapting to late cultivation practices, illustrates the maize attributes that Scott highlights in the slash-and-burn practice of Vietnam (Scott, 2009: 196). These are attributes of a cultivation system that requires little attention and shows great adaptability, from which not only Don Chebo, but apparently also Asian peasants are benefitting (Visser, 1989).

Second, we have the particularities of the events that caused postponing or delegating weeding and bendings. Events like Doña Mica's illness, the aftermath of the evictions and the Tabasco visit represent links between the technical, social, and environmental circumstances that surround everyday problems such as health, land property rights and lack of infrastructure. While learning about the details of each of these, we have been able to discern the complexity of these problems and also detect some of the elements which make them remain problematic. For example, the wait for, and the expenses of an airplane trip, ultimately show us how hate, spite and frustration are generated, or how airlines and pilots continue practicing their feudal relationships. On the other hand, the effects of the evictions prove the social cost of this type of actions as they threatened the social network through fear, disagreements, and lack of interest. Lastly, the visit to Tabasco itself appeared to be an event that lead to the postponement or

delegation of activities.

Yet, these same details also reveal the various peasant strategies in relation to their problems. Thus Lázaro, Don Chebo and Sebastián preferred taking Doña Mica to *Hospital de San Carlos* in Altamirano instead of the government hospitals in Ocosingo. This was possible because they relied on money transfers from Don Chebo's two youngest sons who were working in the United States. In the face of the eviction, on the other hand, some prefer to confront the government and others prefer to negotiate with it. Lastly, the people who went on the visit to Tabasco were not those who, like Sebastián, thought they had more important things to do, but those who, like Don Chebo, found it was of strategic importance in order to continue receiving favors and products. These are strategies that peasants use in their daily life.

Finally, our detailed study on the delegated or postponed weeding and bending, and its links with interfering events has been useful for two final reflections. The first reflection serves to understand how time becomes a limiting factor in the performance of these agricultural practices of *ixim* cultivation as an integral part of making life. Don Chebo's situation illustrates how the subsequent and frequent emergence of time consuming events puts the apparent flexibility and adaptability of his maize swidden cultivation to the test. The events that occurred in his life during the *temporal* cultivation cycle of 2007, such as the meetings, delayed the sowing, while Doña Mica's illness delayed the weeding, and finally the Tabasco meeting delayed the bending. As his hands were tied in all these events, Don Chebo had to postpone his performance to make *milpa*.

The second reflection on the relationship between practice and events points in another direction. Their details allow us to recognize that even though they momentarily postpone or delegate weeding and bending, in the long run these strategies make sure that they keep being performed. These strategies are necessary to make life in La Mera Selva, and thus to keep performing maize cultivation practices there.

CHAPTER 6

THE DIFFERENT DIMENSIONS OF THE HARVEST

6.1 INTRODUCTION

In this chapter, we will explore the last facet of performance namely the different dimensions of harvesting or *sc'ayel* in Tzeltal. We will begin by getting involved in the activity that the harvester performs to separate the ears of maize from the *ixim* plants, to classify them and to prepare them for transportation to the storage or *troje*⁹⁹. After carrying out this physical dimension of harvesting, we will reflect on the quantity of cobs harvested in relation to other harvests and to the peasants' frame of reference. The uncertainty that comes to light in these reflections will show the reasons why Tzeltal peasants cultivate *ixim*.

Some of the reasons they mention are the shortage of maize and scarcity of money to buy it. However, other motives will only surface where their thoughts are linked the meanings that maize has, as will be exemplified below. The performance of harvesting becomes a situated and particularized action, which the peasants reflect upon and evoke as part of the meaning they convey onto *ixim*. This meaning is based on what Florescano (2000:25) calls "a peasant conception of the world based on the marvelous creation of cultivated plants and the origin of maize". A cosmogony in which, as the Popol Vuh – the sacred book of their Maya ancestors - affirms, human beings were created with white and yellow maize dough. Since those times, *ixim* has been not only their main crop but also their principal food and their life companion. This meaning makes them continue with their juggling of making *milpa* and dominates this chapter. However, it is a meaning with a counter meaning at the same time, giving us a glimpse of other people's justifications why Tzeltal peasants should stop cultivating maize in La Mera Selva. Let they themselves teach us about the meaning of *ixim* as they perform the different dimensions of harvesting.

⁹⁹ Place where maize is stored for daily use as a kind of rustic pantry near the house or next to the maize field.

6.2 THE STEPS THAT CONSTITUTE THE PHYSICAL DIMENSION OF HARVESTING

We carried out the harvest of my *k'altik* in San Martín on November 15, 2007, and in Salvador Allende on December 3. We performed the same steps in both places, which I will describe below.

The first step consisted in removing the cobs from the dry plants and piling them on a heap. Thus, we first looked for the ear of maize in each bent *ixim* plant. Whenever we found it, we broke its husks with our nails or with a deer horn (*poch'oj ixim*) (Picture 6.1). Then we twisted its peduncle until it snapped, thus detaching the ear from the plant. We squeezed the cob in our hands and then threw it in the air towards the place where we were piling them up. We repeated this with all the bent plants around the pile until we got too far to keep throwing cobs on it. Then we started another pile in the plot, closer by. That is what we did until all the ears of maize we found on the *k'altik* were removed. When we had finished, we gathered them all into one heap.

The second step was to classify and separate the piled cobs. We examined each one of them (Picture 6.2) to see if there was any visible damage from plagues or diseases. We felt whether their kernels were well filled. We held them to estimate their length, width and weight. Based on this examination, we separated the cobs into two new piles. On one of these, the so-called *mazorca de primera* in Spanish and *mucul ixim* in Tzeltal (first class cobs) pile, we gathered those that had well-developed kernels, were longer and heavier, and had no apparent damage. On the other pile we accumulated the *molcate* cobs or *molcates* (*lica ixim* in Tzeltal), the ones with apparent damage, not well developed or with immature kernels, and smaller in size and weight.

For the third step, we prepared the harvested cobs to be transported to the storage (*troje*). To do this, we used a knitted net of rope or string called *chojac* in Tzeltal. Opening the net as if it were a sack, we placed the piled cobs inside of it until the sack was full and reached half a *zonte*. Then we closed it and tied it tightly with a string making sure no cobs could fall out. We did this several times until all the cobs had been packed. But we were mindful of keeping both piles separated, as *molcates* are consumed before *mazorcas de primera*, which last longer when they are in storage. When all the cobs were in the tightly tied nets, we placed them in twos - one on either side - on the saddles of the horses and mules that had carried us on their backs earlier. These animals carried most of the nets to the storage (Picture 6.3). Some of the harvesters carried the remaining nets on their foreheads and backs by means of a leather strip (*cutsil*).

We put the nets down in the storage and left the arrangement of cobs there for another time because our tired bodies were craving for food. Before leaving, Juan and Don Chebo asked me a question that will introduce their reflections upon the harvesting.



Pic. 6.1 Opening the husks of a cob



Pic. 6.2 Exploring the harvested cobs in piles



Pic. 6.3 Transporting the harvested cobs in nets

6.3 DIFFERENT REFLECTIONS ON HARVESTING

The physical dimension of performing harvest that results in the total cobs obtained from the cultivation cycle opens the door for the reflective dimension of this performance. The next section will show the questions and thoughts discussed by the performers.

6.3.1 How much did we harvest?

No sooner had we put down the nets in the storages than Juan and Don Chebo both asked me the same question: How much did we harvest?

Estimates and calculations of the harvests

Both Juan and Don Chebo had an estimate based on the number of nets and, therefore, *zontes* we had transported. However, they wanted to know the data on quantity and weight of the cobs, which I had been recording during the harvest (see Table 6.1). In the case of San Martín, Juan knew beforehand that we had harvested five *zontes* and one sack. However, he asked me how many cobs and kilograms I had tabulated. I replied I had counted 2,289 cobs in total (1,234 *mazorcas de primera* and 1,055 *molcates*) that weighed 391.50 kg in total (272.25 kg of *de primera* and 119.25 kg of *molcates*). These numbers translated to 5.34 *zontes* harvested from my *k'altik* in San Martín.

Don Chebo said we had hauled three *zontes* and one net from Salvador Allende plot, but he wanted to know what my calculations were to that effect. I told him according to my tally we had harvested 1,464 cobs in total (954 *mazorcas de primera* and 510 *molcates*) that weighed 254.58 kg (212.45

kg *mazorcas de primera* and 42.13 kg *molcates*). That is to say that in this plot we harvested 3.42 *zontes*. Since these data were based on one quarter of a hectare (0.25 ha), we projected them to one hectare. This meant that in San Martín we attained a harvest of 21.38 *zontes* per hectare (1,093.68 kg/ha) and in Salvador Allende 13.70 *zontes* per hectare (706.09 kg/ha). All these estimates and calculations informed our conversations and reflections on the harvest yield. These were carried on in the kitchen, where the meal especially prepared for the harvesters was awaiting us.

Table 6.1 Calculations of yields obtained in San Martín and Salvador Allende in 2007

ESTIMATIONS	Number <i>mazorcas de primera</i>	Weight <i>mazorcas primera</i> kg	Number <i>molcate cobs</i>	Weight <i>molcate cobs</i> kg	Number of total cobs	Weight total cobs kg
SAN MARTÍN						
Total production	1234.00	272.25	1055.00	119.25	2289.00	391.50
Total <i>zontes</i>	3.09	3.89		1.70	5.72	5.59
Average <i>zontes</i>	3.49		1.7		5.19	5.50083333
kg cobs	174.36	272.25	85.00	119.25	259.36	391.50
kg grains per ha/ <i>zonte</i>						279.642857
Average <i>zontes</i>						5.3439881
<i>Zontes</i> per ha						21.3759524
kg grain per ha/ <i>zonte</i>						1068.80
kg grain ha/weight						1118.57
Average kg grain per ha						1093.68
SALVADOR ALLENDE						
Total production	954.00	212.45	510.00	42.13	1464.00	254.58
Total <i>zontes</i>	2.39	3.04		0.60	3.66	3.64
Average <i>zontes</i>	2.71		0.60		3.31	3.54
kg cobs	135.50	212.45	30.09	42.13	165.59	254.58
kg grains per ha/ <i>zonte</i>						181.842857
Average <i>zontes</i>						3.42404762
<i>Zontes</i> per ha						13.6961905
kg grain per ha/ <i>zonte</i>						684.81
kg grain ha/weight						727.37
Average kg grain per ha						706.09
1 <i>zonte</i> = 400 <i>mazorcas de primera</i>						
1 <i>zonte</i> = 70 kg of cobs						
1 <i>zonte</i> = 50 kg of grain						

Source: Fieldwork maize trials summer season of 2007

Volumes harvested and consumed

I made use of the mealtimes to continue talking about the number of *zontes* we had just harvested, but now in relation to the yield and consumption. Therefore, I asked, as I had done on numerous occasions earlier, how much *ixim* they normally harvested. They replied, as always, that each harvest was different. They stated there were many differences in the number of *zontes* harvested depending on the cultivation cycle (in the *tornamil* the yield is lower than in the *temporal*), how the rainy season appears to be, the field and the *acahual* where the *k'altik* is made, and a long list of circumstances and events that make each harvest unique.

Nevertheless, I was able to collect during a meeting that I had with the promoters of agroecology in January 2007 the following data regarding the number of *zontes* harvested and consumed, and the number of hectares cultivated with maize. As one can observe from Table 6.2, the number of *zontes* harvested fluctuates between 10 and 50 per hectare. Meanwhile, the number of *zontes* used in one year by a family of three plus chickens and pigs is 30. The area cultivated with maize, hence the number of *zontes* harvested increase proportionately with the number of family members when the number of people in the family increases to 13.

Table 6.2 Answers in relation with number of *zontes* harvested and consumed in a year

QUESTIONS	Juan	Don Chebo	Diego	Javier
How many <i>zontes</i> do you harvest per hectare?	10-40	40	25-30	50
How may <i>zontes</i> do you need for personal consumption in one year?	30 for three people plus chickens and pigs	110 for three families of four adults and nine children, plus chickens and pigs	30 for three people plus pigs	30 for three people, chickens and two pigs
How many hectares do you cultivate with maize?	1 hectare	3 hectares	1 hectare	1 hectare

Source: Internal fieldwork report

As some of these answers made references to the summer season of 2006 (Don Chebo and Javier) and others gave an average (Juan and Diego), I would also like to refer to data I had the opportunity to collect during my PhD fieldwork. They are based on three harvests. Those were the harvests in San Martín and Salvador Allende during this 2007 *temporal*, and a harvest I carried out with Don Chebo in Salvador Allende during the 2006-2007 *tornamil*. On that *tornamil k'altik*, which got a late weeding, we harvested the equivalent of 12 *zontes* per hectare. Averaging out the three calculations, I arrive at 15.64 *zontes*/ha (782 kg/ha). This figure is low, and it lies in the bottom of the range reported in the 1989 Census by the *ARIC UU* for the Cañadas of the Lacandon Jungle (cited by Márquez, 1996:142), with yields that range between 750 and 1,250 kg/ha (between 15 and 25 *zontes*). In that same census, a 5% deficit was reported in maize consumption. These data show that the number of *zontes* we had just harvested was about the lowest yield in this region and it also explains that there is a common need to procure maize via other means.

Maize yields compared

The number of *zontes* harvested in La Mera Selva is far below that of maize yield data in the literature (Table 6.3) like Márquez (1996:212), who carried out an experiment of improved and native maize types in Patiwiits (another region of the Cañadas) in 1992. In his experiments, cultivation practices

were similar to the ones we conducted. However, he registered yields from 19 to 44 *zontes* per hectare. In an update on the spring-summer cycle of 2007, data from the Mexican government (*Sistema de Información Agroalimentaria y Pesquera, SIAP*¹⁰⁰/ Agricultural Food and Fishing Information System), indicate that the yield in the state of Chiapas during the *temporal* season reached 28 *zontes*, and overall in Mexico 32 *zontes*. Data registered by the Food and Agriculture Organization (FAO)¹⁰¹ during 2007 indicate that maize production in all agricultural systems in Mexico and throughout the world, including those with mechanized systems, agrochemicals and improved seeds, attained yields of 64 and 100 *zontes* per hectare.

Table 6.3 Maize yields compared

YIELD	K'altik Salvador Allende-San Martín 2007	Patiwits 1992 (Márquez, 1996:212)	Average Chiapas temporal 2007, SIAP	Average México temporal 2007, SIAP	Average México 2007, FAO	World Average 2007, FAO
<i>Zontes</i> per ha	13-21	19-44	28	32	64.12	100.2
Kg per ha	684-1068	950-2200	1,400	1,600	3,206	5,010

The differences between these data were astonishing and although I did not know the exact average yields of 2007, I discussed about general average yields in San Martín as well as in Salvador Allende. They all said that one should not make such comparisons because each *k'altik* turns out to be different and unique. In the end, they insisted the yields were not bad, considering “everything that had happened”.

6.3.2 Considering “everything that had happened”

Don Chebo stated that in Salvador Allende “The harvest yield was not bad, considering everything that had happened, especially since the *broza* did not decompose well”. He thus referred to the presence of *broza* as a factor that directly affected the number of *zontes* harvested. Meanwhile, Juan was sure that the harvest of the *k'altik* in San Martín had been good, considering all the damage the wild animals that eat the *ixim* cause each year. Finally, speaking with Antonio about the yields of the *k'altetik*, he said they “had been good, considering the late arrival of rain, the evictions and the visit from Lady Wind”.

¹⁰⁰ The *Sistema de Información Agroalimentaria y Pesquera (SIAP)* is an organization of the Mexican federal government that generates databases on the production of crops in Mexico (SIAP, 2007).

¹⁰¹ The Food and Agriculture Organization relies on a database that reports on production data on a national and international level. It can be reached at FAOSTAT production crop (FAOSTAT, 2007).

Broza and the heterogeneity of soil

Don Chebo rightfully commented that the presence of *broza* affected the harvest of the Salvador Allende's *k'altik*. As mentioned in Section 3.4, this became evident the very moment we prepared the land without burning the *broza*. Therefore, I collected data in small 5 x 5 plots that helped me measure the effect *broza* had on the maize harvest. I carried out an analysis of variance, which concluded that *broza* significantly¹⁰² affected yield (Fig. 6.1).

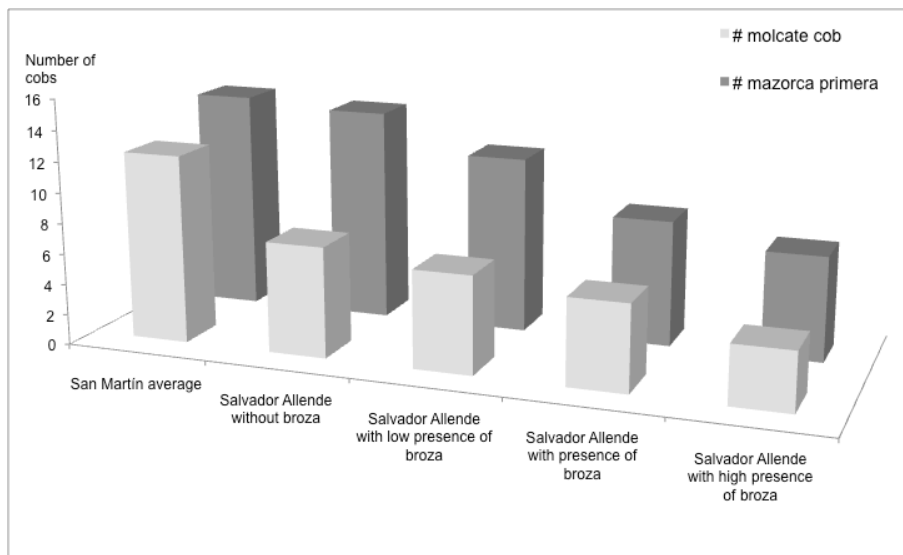


Figure 6.1 The effect of broza on the number of cobs harvested on 5 m² plots in two *k'altetik* (2007)

The highest values of the number of cobs harvested were achieved in San Martín, where there was no presence of *broza*. The next highest values were the ones attained in Salvador Allende from the fields without *broza*. Subsequently these values gradually decreased with the increase of *broza* until they reached the lowest level in the fields with a high presence of *broza*. Comparing these last values with the ones for the fields in Salvador Allende without *broza*, we estimate that the losses due to *broza* are about 50% of the number of cobs harvested.

My scientific data thus clearly support the practical agronomic knowledge of Tzeltal peasants (Section 3.6.2) and the fact that slash-and-mulch (SM) is preferred over slash and burn (SB) for political-ecological reasons (Section 3.6.3) as a strategy to escape from or prevent eviction from their land.

¹⁰² Significantly, because analyses of variance were carried out to measure the effects of *broza* in relation to variables that were considered to be components of the yield, such as the number of plants, number of cobs harvested and weight of the cobs.

However, the presence of *broza* was not the only factor affecting the quantity of cobs we harvested. Other elements that were related to the soil also affected it. Figure 6.1 also clearly shows the different numbers of *molcate* cobs as compared to *mazorcas de primera* cobs. The number of *molcate* cobs in San Martín was almost equal to the number of *mazorcas de primera*. This was not the case in Salvador Allende, where the number of *molcates* was much lower. I relate this difference to the history of soil use and, therefore, soil fertility. The plants in Salvador Allende always looked greener and healthier than the ones in San Martín (see Section 3.4).

Another element to take into consideration is the heterogeneity of the plot that was used as *k'altik*. Jerónimo highlighted this point as follows: “The plants that grow in the middle of the *k'altik* never fare as badly as the ones on the edges which always grow shorter and end up falling prey to everything that comes close. These plants rarely grow a big and healthy cob”. Juan pointed out that the *ixim* plants had not grown well on top of the tunnels made by the gopher living in his *k'altik*. With the August winds, some of the plants that were on top of those tunnels were flattened.

Animal attacks

Juan was not the only one to address the issue about animals (*chambalantik* in Tzeltal) that partially eat the *ixim* or damage it enough to impair its growth. This was a frequent topic, especially every time we visited the *k'altik* and found the wreckage caused by some of them, listed in Appendix 6.1. This destruction occurred throughout the cultivation cycle, even while the cobs were stored in the *troje*.

During the sowing in San Martín, we had to look for a space between the ant nest and the gopher's tunnel to make the holes where we planted the *ixim* seeds, knowing their chances for survival were slim. Also, it so happened in Salvador Allende that one week after sowing we discovered some of the *ixim* seedlings had been wrecked by a rabbit or by wireworms. Similarly, Juan, Elisabet and I spent several afternoons in the heat of the dry season removing fall armyworms from *ixim* plant buds with a little stick and then crushing them with our feet. More so, in a visit during the flowering phase, Don Chebo and I caught several grasshoppers and cutting ants red-handed, feasting on the leaves of the *ixim* plants.

As if this were not enough, when the cobs were ready in San Martín and we went to cut some, we found one of them that we liked had already been eaten or picked at on the tip by some parakeet or *peya*. Even worse, when we removed the husks to utilize the half that was good, we found a fat earworm. Something similar happened to Antonio when he performed the bending in Salvador Allende. He was forced to cut several good-sized cobs as they had been nibbled on by some badger, opossum or raccoon.

During harvesting I noticed as well that many cobs that could have been *mazorcas de primera* did not make it due to the sustained damage from birds, mammals and insects that like to eat them. One day in Pancha's kitchen, we wanted to use the cobs that had been stored for several months to prepare *tortillas* and *pozol*. When we removed their husks, a cloud of powder filled the air. The cobs had turned into dust because weevils and other beetles had already eaten them.

The fact that these and other animals inflicted all that damage on the *ixim* and its yield does not necessarily mean they are considered plagues that must be exterminated. Tzeltal peasants made this very clear to me. In some cases such as the agouti (*paca*) or in exceptional cases the wild boar, the fact that they like *ixim* cobs translates into the possibility to hunt for meat and supplement an otherwise quite monotonous diet. Thus, the *k'altik* not only provides maize, beans, pumpkins and vegetables but also meat. On the other hand, that wreckage or damage is considered a 'tribute' they have to pay for cultivating *ixim* in that area, where those animals live as well. To clarify this point, I believe it is important to refer to a tale they usually tell about some of those wild animals.

Tale of the Cosh¹⁰³ and the chambalantetik of the k'altik

They say that one day the Cosh went to slash his acahual with machete and hammock in hand. He had magical powers, so when he got to the acahual he hung his hammock and began slashing while he was lying down. He finished quite quickly. However, when he came back the next day, he found the stalks upright again, as if he had not slashed them. So he had to slash again. He had to repeat this activity several times, because every time he came back, the stalks were standing. Until one day, he decided to spy and see who was pulling them up. After several days of spying, he found a rat with no eyes. When he trapped her, however, the first thing the rat said to him was that she was not the one pulling up the stalks. But if he gave her two eyes, she would spy for him. The Cosh thought about this for a moment. He started to look for ocote (dry pine) sticks, which he found and burnt. The combustion produced two drops of resin that turned into the rat's eyes. The next day, when the Cosh got to the k'altik, the rat was waiting for him with the news that she had seen who had pulled up the stalks. She told him the paca, the badger, the wild boar, the roadrunner and the rabbit pulled up the stalks every time he slashed because the fruits of the stalks were their food. She said he could still catch them since they had not left the acahual yet. So the Cosh ran after them. The first ones he caught were the paca and the wild boar, which he grabbed by the tail. But their tails broke off as they tried to escape. That is why the paca and the wild boar's tails look like they were dismembered. Then the Cosh caught the badger, which he threw on the ground and landed on its nose. That is why the badger has a stop nose. He grabbed the roadrunner by the legs and flogged its chest on the ground. That is why the roadrunner complains of heartache

¹⁰³ The Tzeltal term *Cosh* means the youngest child in a family.

when it sings. Finally, he snatched the rabbit by the ears and pulled them. That is why it has such long ears. It is said that these animals never returned to pull up the slashed stalks again. However, some of them, like the paca and the badger, still come in to eat one or two cobs now and then as a tradeoff for not pulling up the stalks.

I cannot begin to estimate the amount of damage all these wild animals caused to the *k'altetik*. This would have required gathering data of damages inflicted during all the phases of the *ixim* cycle. However, it is important to highlight several considerations.

The first one is that even though more cobs were damaged by animals in the field in San Martín than in those of Salvador Allende, their damage was not major. In this sense, Romero *et al* (2006) who did a study on damages caused by wild vertebrates (among them raccoon, agouti, gray squirrel, gopher, mouse, parrot and woodpecker) in another area of the Lacandon Jungle reported that the average loss was 8.9% of the total yield. Márquez (1996:212) assessed losses by weevils to be 1% of the harvest yield. These losses increase when the cobs are in the storage where, according to peasants' estimates during the maize cultivation workshop of 2007, damages range between one and four *zontes* out of 30 (3 – 12 %). In fact, damage due to fungus is greater. Under favorable conditions, it produces losses of up to 40% (Márquez, 1996:211) or higher, as was the case in Salvador Allende where losses caused by fungus and rats altogether were as high as 90% in the summer cycle of 2006 as people indicated me when I was helping them writing the letter requesting the maize support to the Ocosingo Parish.

The second consideration is that, even though some control practices are implemented, they are sporadic. In most cases, they require an investment in time, which Tzeltal peasants do not have. Finally, the third consideration is about how the *chambalantetik* are valued culturally, which becomes clear in anecdotes like the one that was narrated above. The damage they inflict is interpreted as a kind of 'tribute' for sharing La Mera Selva with the animals because they played - and still play - a role in making the *k'altetik* cycle after cycle. They cause concern, but to a much lesser degree than the events Antonio referred to.

The incidents that occurred during the cultivation season

Antonio highlighted some incidents that occurred while we were cultivating the *k'altetik* in that spring-summer cycle of 2007. The first event was the beginning of the rainy season in 2007 (Section 4.2.5.) It came late, in the beginning of June. Peasants who performed early sowings at the beginning of April were not able to harvest anything at all. Such was the case of Don Lázaro, who lost his entire harvest and therefore had to obtain maize to eat and *ixim* seeds to sow during the winter cycle. At Sebastián's suggestion, Don Chebo and I gave him one *zonte* of the harvest of our Salvador Allende

k'altik. This ended up being his remuneration for helping us sow and harvest. Meanwhile, he obtained the *ixim* seeds from his youngest son Lazarín who, like the rest of us who had sown in May, did have a harvest.

The second incident was the series of evictions that happened in mid August. These affected both the *k'altetik* and those who cultivate them in different ways and degrees. The people who were evicted from San Manuel were the example of an extreme case, as they did not get the chance to bend, let alone harvest, their *k'altetik* - even though, according to those who did return to San Manuel, the *ixim* plants grew good cobs and it was a pity that they were left in the *k'altik*. So those cobs were used to feed the animals of the mountain, while Feliciano and Jacinta had to buy maize for themselves. Then there were those people who helped and accompanied the evicted. After so many meetings, they had to rearrange their activities and times. However, even more than the rearrangement of chores and timing, they were affected by the senselessness, hopelessness and abandonment they felt in the aftermath of the evictions. The third incident happened one week after the evictions. It was the arrival of strong northern winds. As described in Section 5.3.1, the winds toppled a number of trees and destroyed all the *ixim* plants in the fields of the Candelaria *Ejido*. The arrival of 'Lady Wind', as she is known locally, made several people on that *Ejido* lose a substantial amount of their harvest. Thus, they were forced to cultivate a winter cycle to meet their personal maize consumption needs. However, the rest of the *ixim* plants cultivated in the region during that cycle fared differently, like the tall and slim yellow maize variety of Don Chebo's *k'altik*, sown in early June. They were protected by the mountains around them. Besides, as Don Chebo alleged, the traps he placed for Lady Wind had worked. As Don Chebo's explained the working of the traps:

The wind (ik) is a woman who sometimes enters the k'altik to pull at the ixim plants. On some occasions, she only comes in to do evil. She just annoys pulling on plants that later straighten themselves up again. At times, she is the result of the evil eye, though, and that is when there are great losses. Sometimes she climbs the moel (hill) where the k'altik is located, and she only combs the plants. But sometimes she flattens them and leaves behind pure havoc. You never know from where she is going to come in, perhaps from the north, or the south, or the east or the west. The worst is when she jumps into the k'altik. In other words, she comes in from above and twirls around and around until she jumps out. You can expect all those things from Lady Wind. But I know there is a way to trap her. It's just a matter of inserting a very long pole on each corner of the k'altik, when the plants are in hay taj tek'ajel-sin (when the tassel appears) and tying a cross of dry sticks horizontally on their tips. That's the trap, because when Lady ik tries to come in, her hair gets trapped in the cross and that way she gets caught.

Although these incidents may seem unrelated because of their origin (climatic *versus* anthropogenic) they have one characteristic in common: uncertainty. This uncertainty has three different aspects.

Firstly, certain events are likely to occur in the region, but their occurrence is uncertain. That is to say, each year there is the uncertainty of whether the rainy season will begin early or late. Also, the threat of evictions looms in the daily lives of the people, but they are uncertain of when they may occur. Every year they know that Lady Wind will come in June and August. But they don't know how she will behave in each *k'altik*. This makes the people who cultivate and live there feel like the occurrence of those incidents is beyond their control. Except in the case they would stop cultivating *ixim* altogether.

Secondly, despite local strategies to forecast how much rainfall there will be each year (see Section 4.2.5), they are merely estimates. Like any weather forecast, sometimes they are precise, but sometimes they are not. Meanwhile, the evictions from the Lacandon Jungle cause speculation about when the next evictions will take place. This keeps people in a permanent state of alert and fear. In the last years, this has led to confrontations and division within the communities concerning which strategies to follow in the face of evictions. Likewise, Lady Wind's fickle and uncertain character makes it difficult to foresee where and how she is going to enter the *k'altetik*. Thus many Tzeltal peasants find it makes no sense to implement measures like putting up wind breaking barriers to stop her, or even traps to catch her.

The third aspect of uncertainty deals with the reactions of the people in this region to the events. One could hear comments like Daniel's, referring to the start of the rainy season: "There's nothing you can do, because a good yield depends on a good *temporal'*". Others say that one is sometimes lucky when the sowing date coincides with the start of the rainy season or when the *k'altik* was established outside of the area affected by Lady Wind that year. Yet others think that not much can be done against the evictions, as the government says one thing but does another, and there is no way to make it comply with its promises. The uncertainty with which these events appear before their eyes leaves them with only one option. As Don Eusebio put it, "All we can do is make the *k'altik*, because that's our job. But only destiny knows how the harvest is going to be".

6.3.3 "All we can do is make the *k'altik*"

Don Eusebio's statement that the only thing they can keep on doing is cultivate *ixim* in La Mera Selva is shared by the Tzeltal peasants who keep making their *k'altik* with each new cycle. However, not all people agree with his statement.

Maize and competitiveness

In Mexico, an estimated 67 percent of the approximately 3 million maize producers are considered low-income producers (Vega and Ramírez, 2004:24). Tzeltal peasants of this region definitely belong to this category. As opposed to others who find themselves in a transition phase towards a more entrepreneurial type of agriculture, they produce in zones that are defined as highly marginalized, with low or no agricultural potential. They use traditional technologies (like slash-and-burn and native seeds) that attain yields of 500 to 2,000 kg/ha” (ibid.). This means that the generic “white maize” they grow for their own consumption is not competitive (market wise) vis-à-vis the subsidized “white maize” that is imported from the United States (Keilbach, 2006).

Due to this lack of competitiveness Mexican government policy, which up to the nineteen eighties was a bimodal, protectionist policy,¹⁰⁴ later tried to end State tutelage and boost producers’ autonomy in relation to the comparative advantages of the international context (Isaac-Márquez *et al*, 2008:99). This change was the government’s response to several events, among them the loss of maize self-sufficiency in the late sixties and the debt crisis of 1982 (Gómez-Oliver, 1996). Thus in October of 2010, the highest representatives of the federal and State of Chiapas governments expressed that “maize for self-consumption does not generate income, causes deforestation and simultaneously the risk of landslides. Therefore, the sowing of fruit trees as a substitute for that grain is an excellent alternative (Redacción, 2010).” Thus, on a national level, the *Secretaría de Agricultura, Ganadería y Pesca* (Department of Agriculture, Livestock and Fisheries) is currently fostering the *Programa de Reconversión Productiva* (Production Conversion Program) which involves a comprehensive transformation of production activities and everything around them through the creation of competitive and sustainable *Sistemas Producto* (Product Systems) that contribute to the improvement of rural living standards (SAGARPA, 2010). Meanwhile, “on behalf of the 250 thousand families who live off maize cropping for personal-consumption” the *Secretaría del Campo* (Rural Department) of the Chiapas government is promoting the reconversion of “around 25 thousand hectares of low-yielding maize fields to forestry” (*Secretaria del Campo*, 2010). That campaign consists in handing out approximately 1,000 pesos (around 64 Euros), plants, and tools in exchange for not growing the maize. Such programs had already been fostered by several administrations to discourage Mexican peasants from growing maize. Nevertheless, peasants continue with this activity. Now let us look at the reasons of Tzeltal peasants to cultivate their *ixim*.

¹⁰⁴ The meaning of bimodal as given by Isaac-Marquéz *et al.*, (2008) is that Mexican agricultural policy during the first half of the twentieth century had two parallel objectives. On one hand it tried to modernize agribusiness, and on the other hand it fostered peasant farming as an instrument for political stability and social justice.

Peasants' motives for growing ixim

For several reasons Tzeltal peasants continue to grow *ixim* even though it is not a competitive practice.

Several times I heard peasants say, “there may not be beans, vegetables, sugar, salt and even money, which is a sad thing, but when there is no maize, sadness really kills us because we don’t have anything to eat”. There were a few times I shared a meal with them and they apologized because the bean harvest had not been good, or because they had not been able to buy salt or they had asked someone to bring them oil from Ocosingo and it had not arrived yet. Those were sad moments, especially when we only ate a few *tortillas* or drank a little *pozol* and my stomach, used to eating too much, actually asked me for more flavors, more food. Nonetheless, we were never out of *tortillas* and *pozol*. This means we were never short of maize, and I cannot imagine what we would have eaten had there been no maize.

After several stays with them during which I only ate maize, I took a few measures to that effect. One of them was bringing a variety of food in later visits. They received the food and distributed it amongst their relatives, neighbors and friends. So after a few days the food was gone, and we went back to eating *tortillas* and drinking *pozol*. Another measure was bringing vegetable seeds to them, which they were happy to sow and eat as soon as they were harvested. But they did not continue sowing them, since they needed someone to bring them the seeds from outside. So I ultimately realized that those actions were not going to solve anything. Above all, I learned that production for personal-consumption and its related food shortage problem are much more complex than the simple belief that everything will be solved by providing food, giving out seeds or having money to buy them.

I had another opportunity to confirm this. It was precisely the issue about support for the purchase of maize, addressed in Chapter 2. The poor harvest in Salvador Allende created a shortage of 176 *zontes*¹⁰⁵ to cover their need until the next harvest at the end of 2007. Thus they had to go out for help, which made me realize how elements that were not related to the shortage of maize earlier were now relevant to receiving support. Such was the case with government help, which became politically incorrect due to the internal conflicts of its peasant organization, the *ARIC UU ID* (see Section 2.3.2 of Chapter 2). It was also the case in the land ownership conflict and the peasants’ state of poverty, which implied the absence of property titles or any other object of value, or of a guarantee as collateral for a loan. On the other hand, the fact that Sebastián was the regional coordinator of God’s Word made access the Ocosingo Parish maize program easier. This program

¹⁰⁵ Each one of the ten families asked for the number of *zontes* they still needed. This quantity fluctuated between 6 and 30, but the amount most frequently needed was 20 *zontes*.

consisted in borrowing the requested maize quantity until the following harvest, at which time it was to be paid back in money or in kind. Ultimately, the absence of a road made everything difficult. For one, it meant an increase in local prices during times of shortage. But it also meant that people from Salvador Allende actually paid more for transportation than for the 8.7 tons they borrowed and received from the Ocosingo Parish. In the end they complained that it would have been easier to have the money to buy maize in nearby *Ejidos* Nueva Galilea or Plan de Guadalupe, the regional providers of the grain. Growing ixim was definitely better, in spite of the government's allegation that it is not a competitive activity. As Juan said to me "Even if the k'altik does not yield enough, it is better to buy the amount we are short of to cover the yearly need than to buy it all. Besides, it becomes harder to find the money for that as they pay us less and less for our livestock".

According to Juan, already for a few years they were being paid progressively less, instead of more, for the sale of a young bull. This contrasts with the rising prices of salt and other goods they needed to buy, as they were not produced locally. In addition to low livestock prices, buyers who herded cattle from the pastures of Mera Selva communities to livestock farms near Ocosingo paid peasants only after they had received money for their sale. The relative fall in bull prices has been related to several factors, among them a rise in import of cattle carcass from the United States (Chauvet, 1996:417). In itself, the price of young bulls from La Mera Selva was generally lower than in other parts of Mexico.¹⁰⁶ According to José Luis, a local cattle buyer, this was related to the absence of a road. The prices were so low because herding the cattle out of the jungle took several days and the animals lost weight and got sick on the way. By the time they got to the Ocosingo farms and delivered the animals, prices were haggled down quite a bit because of the shape the animals were in. That was the reason bull prices were low in this region. "But if we had a road," said José Luis, "we could transport cattle in trucks and negotiate better prices".

I heard these complaints about cattle prices from almost everyone who had cows. They continued to keep a few animals because they were a means to obtain money by selling them. Other goods they acquired money with were coffee and *Chamaedorea* fronds. Not many people sold coffee, though. As prices were low and transportation expenses were considerable, they had lost interest in tending to their coffee plantations. At the same time, the government ban on cutting *Chamaedorea* fronds made their sale an illegal activity, although it was frequently practiced during maize shortages. In the end, as Don Chebo once said to me, "At least cattle have legs to move with and in spite of the low prices the money we get is good enough to bail us out."

¹⁰⁶ In 2007 one kilogram of slaughter cattle (live animal) in La Mera Selva was 12 pesos, in Nayarit 18 and in Veracruz 22 pesos.

In other words, this income was not allocated to the purchase of maize for home consumption. Depending on this money to buy maize, their staple food, would be too risky. Sebastián explained,

“With prices for our cattle and coffee being so low, and with the hardships of getting the xaté (Chamaedorea fronds) out because it is illegal, it becomes hard to collect money. That’s why it is better to make the k’altik. We already have the land and we know how to work the k’altik. Besides, aren’t the tortillas and pozol that women prepare with all our different ixim seeds much tastier?”

Tortillas, pozol and different maize seeds bring back memories of meals associated with flavors and types of maize. They remind us of meanings that immerse us in the evocative dimension of the harvest. Meanings that strengthen maize cultivation and tell us more about the motives why *Tzeltal* peasants continue growing *ixim*.

6.4 THE EVOCATIVE DIMENSION OF HARVESTING

For finding maize meaning we should not think only on its cultivation that that end with the harvesting but we should include its preparation as food and consumption. This entails getting in the kitchen with Doña Mica, Juanita, Cata, Maruca, Pancha, Ernestina and Francisca, and joining them in their preparation of *tortillas* and *pozol*. Sit down at the table and listen to the stories the men tell about the *ixim* seeds they grow. We will find out that *ixim* is a life companion that is cultivated and cooked, but also one for whom rituals and festivities are organized.

6.4.1 *Tortillas* and *pozol*

Tortillas and *pozol* are the two main forms how *ixim* is eaten in this area. The *tortilla* is the daily bread for all of us who live in Mexico. Meanwhile, *pozol* is a typical drink from southeastern Mexico and Central America, mainly from the area where, many centuries ago, the Maya civilization flourished. Both *tortilla* and *pozol* were the basis of ancient Maya’s diets and they currently continue nourishing their descendants, the indigenous people of this area. They are the main ingredients in the five meals one ends up preparing daily in this region. *Tortillas* are eaten for breakfast, lunch, as a mid-afternoon snack and at dinner. *Pozol*, instead, is taken at midday and serves to nourish and to hydrate. They are so fundamental to the peasants’ diet that they are surprised to learn that other people live without *tortillas* or *pozol*.

Women and girls spend much of their day preparing them, and the process consists of several steps. First, the husks that protect the cob are broken and removed with the tip of a *machete* and then, using the same tip, the grains are separated from the rachis until there are no more kernels left on it (see Picture 6.4). The grains of several cobs, the amount needed for daily use, are

boiled in water and a little lime (see Picture 6.5). This cooking process is known in Mexico as *nixtamalization*. It improves the digestive quality of maize and serves to increase the availability of niacin and thus prevent a disease called pellagra.¹⁰⁷ Cooking time depends on what is being prepared, as *tortillas* require less time than *pozol*. When the kernels are cooked, they are left to rest a while. Then they wash and rub them to remove the hull from the seed. Subsequently they grind them in hand grinders, which they work by turning a handle (see Picture 6.6). They usually use two grinders: one to grind the kernels and another one for the paste that comes out of the first grinding. Many turns of the handle are thus required to transform the cooked kernels into the fine dough that both *pozol* and *tortillas* are prepared with.



Pic.6.4 Separating kernels from the cobs



Pic. 6.5 Cooking the kernels with lime



Pic 6.6 Grinding the kernels

To make *pozol*, large balls are made out of the fine dough and then wrapped in wild plantain leaves (*Heliconia spp.*) The following day, these balls are completely dissolved in water to be relished with a little salt and *chile* (hot pepper) or sugarcane syrup or chunks of *panela*, depending on each person's taste. But the one thing that nobody likes is *pozol* made of the commercial nixtamalized maize flour, as it makes a very watery, dull *pozol* that is hardly edible.

Transforming this fine dough into *tortillas* basically involves two steps. The first one is kneading small dough balls that are then flattened with the hands and a press until they have the shape of the thin circular disc typical of *tortillas* (Picture 6.7). These dough discs are placed on a *comal* (hot plate) heated over a wood burning fire. They are flipped over to cook both sides, until the thinnest side blows up like a bubble (Pictures 6.8 and 6.9). That is

¹⁰⁷ Pellagra is a disease caused by a dietary deficiency due to an inadequate intake or absorption of the B3 vitamin niacin, one of the compounds of the B-complex vitamins. For a long time it was associated in Europe and Africa with the consumption of maize, as the latter did not have the nixtamalization process and niacin was therefore not available. For further details on the relationship between Pellagra and maize see Warman (1995:149-167).

when the *tortillas* are ready to be taken off the hearth and eaten. They taste delicious, especially if cobs of native *ixim* types grown locally are used.



Pic. 6.7 Flattening the dough



Pic. 6.8 Flipping the *tortillas* on the hearth



Pic. 6.9 A *tortilla* ready to be eaten

6.4.2 The different *ixim* types

Numerous native *ixim* types - many more than the generic white maize - are cultivated, eaten and categorized with different names by Tzeltal peasants. The name of each type makes reference to characteristics by which they are identified, color being one of the most important ones. Thus, the *bac c'anal* is a maize type with small yellow kernels (Picture 6.10). The *niwac c'anal* also has yellow kernels but they are larger (Picture 6.11). On the other hand, the *bac sacwa* is a small white kernel maize type (Picture 6.12). The *chaparro* (short) type has white kernels but its plants are short (Picture 6.13). The purple-black kernels of the *ic'wa* type give it its name (Picture 6.14), and red husks and stalks give the *tsajal pat* type its name (Picture 6.15). Those are not the only attributes that make these types different. There are other distinctions that are associated with stories told by *Tzeltal* peasants about each one of them.



Pic. 6.10 *Bac c'anal ixim* of Don Jorge, Pichucalco



Pic. 6.11 *Niwac c'anal ixim* of Jerónimo, Amador Hernández



Pic. 6.12 *Bac sacwa ixim* of Don Manuel, Amador Hernández



Pic. 6.13 *Chaparro* of Juan, San Martín



Pic.6.14 *Ic'wa* of Manuel Turista, Amador Hernández



Pic.6.15 *Tsajal pat* of Mariano, Salvador Allende

Bac c'anal ixim*

Pic.6.16 Showing *bac c'anal ixim* cobs

Don Jorge of Pichucalco told me about his *bac c'anal ixim* while holding a conical-cylindrical shaped cob between his hands. He said to me that his family has cultivated this type of seed for a long time. "Since the times when my grandfather and my father were estate workers in Rancho Rosario. From there they took the seed to Garrucha, where also I began to sow it, until I came to live here in Pichucalco because of the shortage of land. I brought it all the way down here". According to him, "the *bac c'anal* is the one most grown here since it is one of the original maize types we brought with us when we came to live in La Mera Selva. It has endured all kinds of things, from diseases to you name it". Then he handed me a cob and said, "It's heavy, isn't it? This kind of maize is as heavy in the hands as it is on an empty stomach. Feel how hard and tightly closed the husks are on the bare tip. The husks and the tip protect the kernels. They last a long time in the *troje* because they are also hard."

*The majority of cobs named *bac c'anal ixim* by Tzeltal peasants were identified by Ortega-Paczka¹⁰⁸ (pers. comm., 2008) as crosses between the *Tepezintle* and the *Comiteco* races.

Bac sacwa ixim*


Manuel Clara from Amador Hernández told me that the *bac sacwa ixim* is the other original *ixim* type the first settlers came with to La Mera Selva. Therefore, like the *c'anal ixim*, its story is linked across with the stories of the people who grow it. Holding one of the conical shaped cobs with husks that extend beyond its tip, he said, "my grandfather used to sow this seed in Rancho Santa Rita, where he was an estate laborer. My father took it with him to Ejido Santa Carmen Pataté, where we lived for a while until we came here in search of land. It has been with the family since 1938". I took one of the cobs in my hands and tried to break the husks that protected it but they stuck too hard to the cob. He stated, "That's how the husks and the bare tip protect the kernels from going bad. It can be stored in the *troje* for a long time. I only sow it during the temporal next to my *c'anal*. It doesn't yield as much as the *c'anal* but my wife and I like the taste of the *tortillas* and *pozol* made with its fine dough better."





Pic. 6.17 Showing *bac sacwa ixim* cobs

*The *bac sacwa* cobs were identified by Ortega-Paczka (pers. comm., 2008) as a material belonging to the *Tepecintle* race with some type of *Cristalino*.

¹⁰⁸ Rafael Ortega-Paczka, researcher at the *Universidad Autónoma de Chapingo* (Autonomous University of Chapingo) has been a specialist on the subject of landraces in Mexico since 1967.

Chaparro (short)*	
	<p>Juan told me his father started cultivating his <i>chaparro</i> (short) maize when he went to live in San Martín with the his family in the early eighties. Then they took it with them when they all moved to Rancho Corozal during the nineties. Finally, in 2000, he and Pancha went back to live in San Martín. “They say that this maize is not originally from here,” he continued, “I am told that an <i>Ingeniero</i> from Tabasco who worked here brought it in. Its seeds resemble those of the improved varieties sold in Ocosingo”. I took one of his cobs wrapped in a few short husks that barely covered it. It was easy to break the husks and see the cylindrical shape with no tip. Its dull white, square, medium-sized kernels had gone bad because of the weevils that nest in it and feed off it. According to Juan “this <i>chaparro</i> maize goes bad quickly and therefore doesn’t last long when it’s stored in the <i>troje</i>.” “However,” he continued, “its plants are shorter than those of the <i>bac c’anal ixim</i> and <i>bac sacwa</i>. They yield faster and the wind doesn’t topple them. Their harvest is good during the winter cycle.” Pancha interrupted us abruptly to assert that the <i>chaparro</i> is the best type of maize for preparing <i>marquesote</i> (maize flour bread).</p>
<p>*Ortega-Paczka (pers. comm., 2008) identified the chaparro maize as the improved variety of INIFAP named <i>Tuxpeñito</i> which comes from the <i>Tuxpeño</i> race.</p>	

Niwac c’anal ixim*	
<p>Jerónimo from Amador Hernández thinks that the <i>niwac c’anal ixim</i> is one of the <i>ixim</i> types that are native to this area. He indicates that even though the kernels are yellow, the cobs are bigger and have no tips and the kernels are starchier, larger and squarer than those of the <i>c’anal ixim</i>. He points out it is different from the <i>chaparro</i> as its kernels are yellow and its plants taller. Don Eusebio does not agree with him since this type is not cultivated much. “Where did it come from and who brought it?” According to him, the <i>niwac c’anal ixim</i> is a result of the cross between <i>bac c’anal ixim</i> and <i>chaparro</i>. He says precisely those characteristics which distinguish it from both <i>c’anal</i> and <i>chaparro</i> are the outcome of their cross. He highlights that sometimes, when harvesting a <i>k’altik</i> of <i>bac c’anal ixim</i> a few cobs of the so-called <i>niwac c’anal ixim</i> are found.</p>	
<p>Pic. 6.19 Playing with a <i>niwac c’anal ixim</i> cob</p>	
<p>*Ortega-Paczka (pers. comm., 2008) identified Jerónimo’s <i>niwac c’anal ixim</i> as a cross between the <i>Tepecintle</i>, <i>Comiteco</i> and <i>Tuxpeño</i> races.</p>	

<i>Ic'wa*</i>		
<p>“I grow the <i>ic'wa</i>,” Manuel Turista told me, “because I really like the taste it gives to the <i>pozol</i> when I drink it with <i>panela</i>.” He commented that he sows a few rows of this type next to the <i>bac c'anal ixim</i> and the <i>sacwa</i> plants. “When you harvest you have to be careful to separate the cobs that have black kernels as these are the seeds for sowing during the following cycle. It requires more work, it doesn't like just any plot, and it doesn't yield a lot of cobs.”</p>		<p>That is why he only sows a little of it, just for the fun of eating purple <i>pozol</i> and <i>tortillas</i>. “Besides,” he added, “I don't want to lose the seed. It is very difficult to come by. Very few people grow it here. I got it from Don Doroteo of Pichucalco, who in turn asked Don Jacinto for it. There are not many of us who sow it. Don Doroteo mentioned to me he started to grow it because they told him it is used a lot as horse feed, and mine actually does like it a lot.”</p>
<p>Pic. 6.20 Playing with <i>ic'wa</i> cobs</p>		
<p>*The cobs of the <i>ic'wa</i> were identified by Ortega-Paczka (pers. comm., 2008) as stemming from the <i>Tepecintle</i> race or its cross with <i>Comiteco</i> and/or <i>Olotón</i>.</p>		

<i>Tsajal pat and tsajal ixim*</i>		
<p>“I have been growing the <i>tsajal pat</i> since I went to a meeting about the Salvador Allende landownership conflict in Ejido Nueva Palestina, three years ago,” Mariano told me. “I had almost arrived at the Ejido when I walked across a <i>k'altik</i> with plants that had red stalks and red <i>jojoch</i>. I liked them. Besides the color, the plants had strong and thick stalks that supported the weight of the stick bean plants they were holding up. I liked them so much that I cut two cobs with yellow kernels. I sowed them during the following temporal and when I did the harvest I noticed that some of the cobs came out with red kernels. These cobs are called <i>tsajal ixim</i>.”</p>		<p>He continued saying that the <i>tsajal pat</i> “is grown very little around here, because even if you sow all red seeds the cobs you harvest will have yellow kernels. But there is always an occasional <i>tsajal ixim</i> cob here and there.” Don Abelardo explained why. Because the <i>tsajal ixim</i> has its Tzeltal story: <i>They say that when God was creating the world he started to bleed from the nose and he used a cob to dry his nose. Thus, the cob was painted with God's blood and it retained its red color. And that is why, even if the red maize is not sown, it always emerges to keep us company.</i></p>
<p>Pic. 6.21 Showing <i>tsajal pat</i> cobs</p>		
<p>My comadre Manuela uses them to prepare a remedy that heals kidney problems. It is an ancient remedy from our ancestors.”</p>		
<p>*The <i>tsajal pat</i> and the <i>tsajal ixim</i> cobs were identified by Ortega-Paczka (pers. comm., 2008) as stemming from the <i>Tepecintle</i> race.</p>		

Many of the morphological and agronomic distinctions between each one of the six types of *ixim* cultivated in the region (appreciated by scholars of maize diversity (Bellon, 1996)) are found in other maize types. This means that distinctive attributes of one maize type are found in some of the cobs of another type. The foregoing is caused by practices such as sowing different types of *ixim* next to each other (very common between *bac c'anal ixim* and the *chaparro* type) and the frequent exchange and renewal of native seeds (especially when buying maize for consumption purposes). It is also caused by maize's cross-pollination, so its varieties are characterized by maintaining great genetic diversity (Ortega-Paczka, 2007). Meanwhile, other boundaries are violated. These boundaries are related to stories and how, within those stories, morphological/agronomic characteristics are intertwined with attributes and preferred uses, family stories and mythological tales. They take us by the hand and lead us to the meaning maize has in the lives of people who dwell in La Mera Selva.

6.4.3 Stories about maize as a life companion

Don Chebo (see Picture 6.22) told me three stories that illustrates how maize is a life companion. These stories are about the origin of his *bac c'anal ixim*. In the first one, he talks about his father Don Sebastián who was an estate laborer working and living in Rancho Santa Rita, in the Ocosingo Valleys. When he abandoned the ranch, he took with him two cobs of the *ixim* he had been growing there and cultivated them as a free man when he finally got his own land. Later, when Don Chebo married Doña Mica, his father gave him some of these cobs. Handing them to him, he said, "Cultivate this *ixim* well, and you shall never starve". In the second story, Don Chebo told me his parents died when he was only a baby. Don Sebastián had been murdered and his mother died of sorrow. Thus he was left an orphan and raised by his godparents who lived in what today is known as *Ejido Santa Carmen Pataté*. It was his godfather who taught him how to make the *k'altik* and who gave him the seed. As Don Chebo said, "My *c'anal* was the one to accompany me when I came to live in Salvador Allende. I harvested so many cobs that soon thereafter I was able to bring my entire family over here because there was food." In the third story, Don Chebo's father, Don Sebastián, appears again. According to the story, after being an estate laborer, Don Sebastián worked as livestock trader. On one of his many journeys to deliver livestock to a farm close to Comitán he passed through some *k'altetik*. In one of them "there were some beautiful *ixim* plants, and in the midst of them a woman, equally as beautiful, was working." Don Sebastián asked the woman about the *k'altik* and she tried to make him fall in love with her, even though he told her he had a wife and children. Then, in the middle of their conversation, she took his hands and looked him in the eyes. She told him he had the hands of a person who knew how to take good care of *ixim*, and that

was why she would give him two of her cobs as a gift. She harvested them, and when she gave them to him she warned him that this was a special kind of *ixim*. Every time it was sown on a different place it got married to the field and the hand that was looking after it. Besides, she added, Don Sebastián would know that the plants of this *ixim* were happy in their marriage if plants with two ears of maize started to appear on the *k'altik* (commonly called *cuateras* or bearing twins). “Two are needed to get married and two are the ears that grow on the plant,” stated Don Chebo. “So, when I came to live in Salvador Allende, my father gave me the seed. The first year I sowed it here a lot of plants grew two cobs. The *k'altik* looked happy and my *c'anal ixim* married this land”.



Pic. 6.22 Don Chebo with his *bac c'anal ixim*¹⁰⁹

Sebastian told me a story that makes evident how *ixim* was already present when the ancestors started to make the *k'altik*:

“According to our ancestors, when the ancient natives started slashing the plants on the Montaña to do the k'altik, the trunks of the trees wept every time they were cut. They also started burying ixim seeds in Mother Earth, but she screamed every time she was poked with the dibble stick. So over and over again, they thought about how to silence all this weeping, all this screaming...And amongst themselves they found out that what they needed to do was make offerings to the Montaña, make offerings to Mother Earth, and this way, ask them for permission to make their k'altik. As they found out, not only did they have to ask for permission, but they also had to thank Mother Earth and the Montaña for their food, thank them for life. And it occurred to the ancestors that if they shared their food and drink with Mother Earth and the Montaña they would understand that they are slashed and poked to grow food for them. And that is how our meal in the k'altik was born, when we all go

¹⁰⁹ Ortega-Paczka (pers. comm., 2008) identified Don Chebo's *bac c'anal ixim* as a cross between the *Comiteco* and the *Tepecentle* races.

visit the k'altik and bring our food, our drink, our tobacco, our music, our prayers and our company to the Montaña and to Mother Earth".

Don Chebo and Sebastián's stories illustrate how *ixim* has been a life companion from the times of their ancient ancestors to their grandparents and parents' times. A very special companion that looks after them but also needs to be well looked after. It is a companion that rejoices and marries the land and the peasant who cultivates it. Lastly, it is a companion that participates in petition and thanksgiving rituals.

6.4.4 The petition and thanksgiving ritual in Salvador Allende

After we harvested in December we held the *Smajtantesel* ritual as it is called in Tzeltal that means the meal in the *k'altik*. The idea of holding the ritual started during a visit to the *k'altik* in August. Juanita, Don Chebo's youngest daughter, said since the plants were doing so well, why didn't we hold this ritual for them, to make sure they gave good cobs. When we had returned home, we spoke with Don Chebo and Doña Mica, who agreed and said we had to get some things. Doña Mica made a list of items we needed for the ritual, which included cigarettes, cocoa, *pox* (sugarcane alcohol), incense and candles. She would be in charge of the maize and the chicken. We would carry out the ritual in December, two days after the harvest.

A few days before the ritual, a community meeting was held in which Don Chebo, contradicting what he had agreed with Sebastián beforehand, invited everyone to participate in it. It was decided in this meeting that he and Don Lázaro, being the eldest, act as *principales*.¹¹⁰ At the same time, we agreed to call Vicente and his musicians to play during the ceremony. Finally, we decided to have the food at home since Doña Mica could not walk all the way to where the *k'altik* was located.

Very early on the day of the *Smajtantesel* Doña Mica and Juanita killed a chicken and took out its heart and blood. Then they cooked it to obtain stock. Meanwhile, as they did every morning, they ground the *nixtamal* to make *tortillas*. They made four small *tortillas* of the four colors that represent the directions of the universe (yellow, white, black, and red). They also prepared some *atole*¹¹¹ and separated the *asiento*¹¹². They extracted the seeds from the cocoa fruit, which they later ground and stirred in water to make chocolate juice. Having gathered all the ingredients for the ritual, all we had to wait for was the musicians.

¹¹⁰ *Principales* are elder persons of the community who are in charge of the ritual.

¹¹¹ *Atole* (Mexican Spanish from Nahuatl *atollī*) is a traditional maize-based Mexican and Central American (where it is known as *atol*) hot drink.

¹¹² *Asiento* appears during *atole* preparation when it is strained.

Once they had arrived, we started our walk to the *k'altik*. Don Chebo went in front with the musicians and me. Behind us went Don Lázaro with María, Micaela, Nicolasa and Juanita, who carried all the things we needed (see Picture 6.23). Juanita carried the fired coal grill. Felish and Antonio walked in the back. When we got there, the first thing Don Chebo and Don Lázaro did was look for a place to hold the ritual. They found one in the middle of the *k'altik* that was cleaned. In the meantime, Felish and Antonio looked for flexible sticks, which they then buried to form an arch. They decorated the top of the arch with palm leaves (Picture 6.24) and Don Chebo decorated the lower part with marigolds (*Tagetes erecta*). Centered in front of the arch, Don Chebo started to dig a round hole with his *machete*. Then he placed three candles between the hole and the arch and lit them. In the meantime, Juanita covered the altar and the hole with smoke, and the other women put down the ingredients next to the altar. When he had finished digging the hole, Don Lázaro poured each one of those ingredients in it. He started with the chicken blood and heart, the chicken stock, the *atole*, the *asiento*, the *tortillas* broken in halves, the chocolate juice, the salt, the cigarettes and finally a small glass of *pox* (Picture 6.25). Felish distributed the rest of the *pox* to all of us in several rounds. At the same time, Vicente and his musicians played songs in Tzeltal in which they thanked God, and those who knew the songs accompanied them in their singing. There was a pause in the songs, when Don Lázaro and Don Chebo thanked Mother Earth for the harvest of this and the other *k'altetik* in Salvador Allende and they asked for a good harvest in the following cycle. This was accompanied by Christian prayers, like the Our Father, Hail Mary and Glory Be. At the end of the prayers, Don Lázaro closed the hole with a stone that he covered with soil. Vicente and the musicians continued with their songs while Felish continued giving out the *pox*. After having listened to the songs for some time, we all went back home to get ready for the *ixim* festivities.



Pic. 6.23 Walking towards the *k'altik*



Pic. 6.24 Antonio putting up the altar



Pic. 6.25 Don Lázaro feeding Mother Earth

6.4.5 The *ixim* festivities

In the end, *ixim* is also a companion to be celebrated. Thus in San Martín as in Salvador Allende we organized festivities in its honor. These were the last activities we performed related to *ixim* cultivation during the temporal season of 2007. As evocation is an imaginative re-creation in which persons form mental images of things and events, this last part of the evocative dimension of harvest performance is presented by pictures. Pictures of the *ixim* festivities will not only tell thousand words but also will recall memories and emotions.



The festivities began when we started preparing for them.

Setting up the altars and offerings where we were going to pray, and decorating them with newly harvested cobs.

Festivities in San Martín



Pic. 6.26 Juan decorating the altar with the harvested cobs

Festivities in Salvador Allende



Pic. 6.27 Don Chebo, Don Lázaro and Antonio preparing the offering

Building the spaces where we were going to dance and eat

Festivities in San Martín



Pic.6.28 Juan, Pedro and Jerónimo building the roof

Festivities in Salvador Allende



Pic. 6.29 Antonio and Don Chebo building the table

Preparing the food we were going to share with the guests

Festivities in San Martín



Pic. 6.30 Paquita and Celestina cooking the boar

Festivities in Salvador Allende



Pic. 6.31 Manuela and Juanita preparing the chicken

Making many, many *tortillas* out of our newly harvested maize

Festivities in San Martín



Pic. 6.32 Doña Dorotea helps making *tortillas*

Festivities in Salvador Allende



Pic. 6.33 Mari making her assigned lot of *tortillas*

The festivities continued when the guests arrived and together:

We relished the food accompanied by tasty *tortillas*

Festivities in San Martín



Pic.6.34 Hilario and Cirilo eating boar with *tortilla*

Festivities in Salvador Allende



Pic. 6.35 Dining on cookies and coffee

We prayed to give thanks for the harvest and to ask for another cultivation cycle

Festivities in San Martín



Pic. 6.36 Juan, X'tunel of Pichucalco, and Don Pepe directing prayers

Festivities in Salvador Allende



Pic. 6.37 Praying in the San José chapel

Finally the festivities ended but the party was not over as we enjoyed each other's company

Festivities in San Martín



Pic. 6.38 Women and children of Pichucalco enjoying the feast

Festivities in Salvador Allende



Pic. 6.39 People of Salvador Allende enjoying the feast

We listened to the musicians play melodies

Festivities in San Martín



Pic. 6.40 Jerónimo and his musical marimba from Amador Hernández

Festivities in Salvador Allende



Pic. 6.41 Vicente and his musicians from Pichucalco

That made our feet dance and our faces smile

Fiesta en San Martín



Pic. 6.42 Dancing with José Luis

Fiesta en Salvador Allende



Pic. 6.43 Dancing with Don Chebo



6.5 CONCLUSION

During the early morning hours of the day that we had the *ixim* festivities in San Martín, before the sun had even risen, we heard Jerónimo and his musicians play the traditional *Mañanitas* that are heard all over Mexico when it is someone's birthday. . When I heard the popular melody, I smiled inside and asked myself how many years, or centuries or millennia *ixim* had been present in La Mera Selva. Many years had passed since the nineteen sixties, when Tzeltal peasants first came to make life in this region and began cultivating their fields. It actually had to be centuries, as the Tzeltal laborers who worked in the *monterías* (mahogany logging camps) cutting mahogany trees near the Perlas River in the nineteenth century, and the original Lacandon people who lived in the nearby Miramar Lagoon during the eighteenth and seventeenth centuries already made their *k'altetik*. It might even have been millennia, considering that there are ancient Maya ruins at only a few kilometers away from San Martín. Florescano (2000) asserts that maize has been present in the lives of the Mesoamerican peoples and their descendants, the current indigenous peoples at least 5,000 years . According to this author, those peoples have been using tools such as rituals, verbal stories and “the practice of sowing, irrigating, weeding, protecting, harvesting and storing maize...” (Florescano 2000: 25) up to this time, creating the millennial link between peasant and *milpa*, between human beings and the land that feeds them. With the Tzeltales, descendants of the Maya culture, this has its beginning in the myth that makes yellow and white maize the flesh and blood of humanity and which continues through daily practices that make *ixim* their life companion.

I remember *ixim* being present during the countless minutes of those joyous festivities in San Martín. From the moment the sun rose to the moment we decorated the altar with our newly harvested cobs, along with Juan and the others (Picture 6.27), to the moments during which, with Pancha and other women, we transformed our harvest into delicious *tortillas* (Picture 6.33). Or after midday, when the guests arrived and told their stories, problems and tales about *ixim* while they ate boar using *tortillas* as spoons (Picture 6.35). Many minutes went by that afternoon while, in front of the altar, we gave thanks for the harvest of the last *k'altik* and called for a future one (Picture 6.37). After the prayers, our ears listened to the songs that made our feet dance all night long (Picture 6.43; 6.44) while our bodies profited from the maize we had eaten to renew our blood and flesh. Into the early hours of the morning, when the musicians gave way to the nocturnal melodies of the place, we took some minutes before falling asleep to evoke this life experience, while among all the odors, we recognized that of maize through our perspiration.

I recall the day of festivities in Salvador Allende also in a different way. *Ixim* certainly accompanied us too from early morning when we put up the offerings (Picture 6.28) until midnight. However, during those last minutes before falling asleep, remembering the festivities, another feeling became dominant: a feeling of rupture in the community. It had first emerged in the form of tension with Doña Mica's illness in June of 2007 (Section 5.2.7), but it started to be felt more strongly in August, when Jacinta was evicted and we were confronted with different opinions on what to do should we be evicted (Section 3.5.2.). Confrontations that continued between Sebastián and Lázaro with regard to what Feliciano and Jacinta should do after they were evicted (Section 5.4.1) and became more frequent in the face of Salvador Allende's uncertain future. This rupture became more evident in December. Sebastián was dismissed by the community from the position he held as supervisor of religious affairs and therefore decided not to partake in the *Smajtantesel* in my *k'altik*. In fact everyone's contribution and assistance in the festivity was a commitment in which we all participated with little motivation. Later on, during the ritual of the springs in May of 2008, this rupture became irreparable. Thus the feeling of senselessness to continue fighting to stay on their land took hold of most people. That process culminated in November of 2009, when the community of Salvador Allende disintegrated, as seven out of its ten families left (Section 2.3.5).

This sense and senselessness are present in the daily reflections and invocations of Tzeltal peasants. By means of the different dimension that this facet of performance brought, we could realize that they value their harvest according to all the events of *milpa* and life that happened during the cultivation cycle and they make allowances for all the uncertainties they have to face. But they also hear the agronomic and economic evaluations of *ingenieras* of the harvest based on a comparison of their yields with others. Meanwhile, like other Mexican peasants, they have to fight government policies that rate their maize production as insufficient and uncompetitive, even though their drive to cultivate *ixim* is of a different nature. Their justifications sound reasonable to those who experience the shortage of maize or the difficulty of obtaining money, like they do. Yet they are not good reasons for many others who do not share their reality. The motives and meanings that tie *ixim* as a crop to *ixim* as a source of food in the form of *tortillas* and *pozol*, to *ixim* as a life companion through the local cultivars of *ixim*, the rituals and festivities, are even less well understood and respected. All these motives, feelings, justifications, drivers and values that conform the different dimensions of harvest play an important role to continue with the making of *milpa* and life in La Mera Selva.

CHAPTER 7

CONCLUSION

We have arrived at the end of this testimony about the performance of land preparation, sowing, weeding, bending and harvesting by Don Chebo, Juan, and other Tzeltal peasants, and my involvement with it in during the rainy season of 2007. After reading the previous chapters narrating all the particularities and intricacies of each performance, in this conclusion, we will answer the three questions that I presented during the introduction of this book. The first question considers how Tzeltal peasants interweave maize farming practices with other living activities. The second question reflects about the life situation of Tzeltal peasants and their *milpa*. Finally, the third question is on how the concept of performance and the metaphor of juggling make this thesis different from other scientific works.

7.1 THE PERFORMANCE OF MAKING *MILPA* AND LIFE

The first question is, how Tzeltal peasants make *milpa* while making their lives in La Mera Selva? The answer to this question is that they made it by integrating maize cultivation practices in their daily life situation through different juggling performances. I contemplate on the application of a tailor-made definition of performance that shows different facets and the use of the metaphor of juggling to join these facets. The juggling represents a multi-tasking performance in which maize cultivation practices become balls that are thrown into the air alternately with balls representing other life activities. During the performance, these practices are affected by and in turn affect other life activities. Each chapter deals with a specific facet of performance which tell us about the particularities and intricacies of how the Tzeltal peasants cultivate maize and how this is integrated with their lives.

In the introductory chapter Don Eusebio and Don Chebo taught us that cultivating maize is so closely interwoven with living that when they talk about making the *k'altik* they consider it a life experience that makes them Tzeltal peasants. For them as indigenous peasants, maize is their life companion, and by making their *milpa*, they shape their way of living. Maize, *milpa* and life come together in such a way that talking about them is entering into the debates about the situation of indigenous peasants and maize in Mexico. This situation is reflected in each of the performances of their maize cultivation practices. In chapter two we learned more about this everyday life situation of the peasants through the events that happened

from 2006 until 2008. Apart from the description of the conflictive life situation in which maize is cultivated, some of these events showed how maize, *milpa* and life were linked. The incident about the maize that contracted ‘AIDS’ is an example. Don Chebo changed our focus from maize breeding to maize cultivation problems. Later, Sebastián and other residents of Salvador Allende shared with us their problem of maize shortage. They taught us that for them, maize agronomic problems are connected with maize consumption. This same link between maize, *milpa* and life also appeared in the episode about the *ixim* festivities and the ritual of the springs. Although maize was not the protagonist of this story, people associated their decision to stay or abandon this region with continuing or stopping to make their *k’altik*. The subsequent chapters present the different performances to show how and why farming and living are interlocked. Performance appeared in its different facets exploring the various connections between cultivation practices like land preparation, sowing, weeding, bending and harvesting, and life situations expressed on social contexts, circumstances, events and meanings.

Each chapter described a different connection and therefore a different facet of performance. In the third chapter, Tzeltal peasants prepared their land responding not only to their agronomic context but also to their political one. In the fourth chapter they arrived at a sowing date by negotiating with their environmental, technological and social circumstances. In the fifth chapter, they delegated and postponed weeding and bending to engage in other life events. Finally, the sixth chapter described how they interpreted the physical, reflective and evocative dimensions of the harvest that together shape the value maize has for them, and the meaning it give to their lives.

These different facets of performance produced different forms of the juggling metaphor. To perform land preparation, the peasants had to play with the political land conflict and with the agronomic characteristics of the field to be cultivated. In the sowing performance, they skillfully alternate the sowing date with other practices and activities that conform their environmental, technological and social circumstances. Performing weeding and bending implied using juggling strategies (like putting balls on hold or passing them on to others in order) to deal with the illness of a relative, the effects of evictions or a trip to Tabasco. The juggling metaphor of the harvest performance brought them thoughts and memories about the meaning of maize and the sense or senselessness of continuing to make *milpa* and make life in their current dwelling.

This juggling became even more specific when I made my own two *k’altitetik* in San Martín with Juan, and in Salvador Allende with Don Chebo and the other inhabitants. For instance, both *k’altetik* were prepared by practicing slash-and-mulch (SM) in an area where the political context makes slash-and-burn (SB) a destructive practice that justifies the evictions and SM is

strategically adopted as an eco-friendly practice to avoid evictions. However, Juan and Don Chebo differently played with the political and agronomic circumstances. Juan was able to match them in such a way that SM appeared favourable both in an agronomical and political way. On the contrary, in Salvador Allende, we aligned to the political arguments and performed SM, despite the agronomic considerations that asked for burning.

Both sowing performances on my *k'altitetik* were the product of negotiations. In San Martín the negotiation focused mainly on how Juan managed the technological circumstance. In Salvador Allende, however, it was mostly the social factors, like the commitments of the sowers to their relatives, friends, regional organizations and institutions, that shaped the negotiation. The differences between the performances of weeding and bending were along these lines too. Although these practices were performed in both *k'altitetik*, in San Martín Juan and I performed them almost on time without major setbacks. The same cannot be said of Salvador Allende. We performed weeding and bending by delegating the former to Lencho because of Doña Mica's illness and the latter to Antonio because of a trip to Tabasco. The harvest performances on both sites were alike because maize has similar values and meanings in Juan and Don Chebo's lives. However, the juggling with the sense and senselessness of making *milpa* and making life, ended in the disintegration of the Salvador Allende community.

Some readers may have compared both *k'altitetik* by focusing only on the "setbacks" in Don Chebo's life during this cultivation season as opposed to Juan's uncomplicated performance. For me, however, both of their performances were opportunities to identify the different ways in which Tzeltal peasants integrate their maize farming into their living by looking at the situated and particularized nature of their actions.

7.2 THE SITUATION OF TZELTAL PEASANTS AND THEIR *MILPA*

Let's continue now with the second question, what do these different performances show about the life situation of Tzeltal peasants and their *milpa*? Due to their own problematic history and to the controversy surrounding the region where they live, these indigenous peasants occupy a central place in the national debates on indigenous peasants and the situation of maize in *milpa* agriculture. Don Chebo, Juan and others were the ones who engaged me in this debate in the first place, when we were farming and I let myself become affected by their daily concerns. It was from them and their day-to-day lives that I knew about their situation, in a different way from the literature that discusses indigenous peasants and their *milpa* from a macro perspective.

In Chapter 2, I started describing situations of their lives, as I knew them from walking the path of the research process. It began with my first visit to the area when my impressions were still based on assumptions, and I thought of this place as a natural paradise, believing promoters understood me, and thinking that I could relate with Tzeltal peasants in a friendly and easy way. Months later, during my second visit, I realized that these impressions were wrong, as I reflected on the complexity and isolation that characterize this area and the conflictive political dynamics of the people living there. However, it was in the next fifteen months of fieldwork, living with them and sharing some difficult episodes that I got involved into their daily problems and concerns.

These daily concerns show the difficulties of the peasants with maize production, consumption and supply. They also deal with internal conflicts within their peasant organizations due to disagreements on how their organizations should interact with other actors, such as the government or social movements, as was clear from the confrontational meeting of *ARIC UU ID* in El Chorro. In the meeting of that organization, of which Don Chebo and Juan were members, the confrontation of different interaction strategies expressed the internal polarization among the peasants of this area. The event of Don Chebo and Juan's visit to my house in Mexico City showed their daily problems in another way. It evidenced the differences in availability of material goods, basic services and infrastructure for the people in that remote area as compared to me in Mexico City. Jacinta's violent eviction from her farm, Rancho San Manuel, highlighted their historical dispute about landownership and the uncertainty and fragility of their permanence there. Finally, the *ixim* festivities and the ritual of the springs appeared to be a prelude of the final disintegration of Salvador Allende. The prevailing conversation during these celebrations was about their daily dilemma between accepting government compensation to abandon their land or rejecting it and continuing to fight to stay in this conflictive region.

Each of these events and episodes played a key role in this thesis as they became part of the facets of the performance of maize cultivation practices by becoming their contexts, circumstances, events and meanings. They also showed the difficult relationship that Tzeltal peasants had with other actors. For instance, the political context of land preparation is constituted by the landownership conflict together with threat of an eviction (as Jacinta's one) and the controversial position that SB play in the debate about how to reconcile conservation and agricultural production. These events and episodes also described the complex relation between Tzeltal peasants and environmental and agrarian governmental institutions. The performance of sowing included social commitments with peasants' organizations and the Catholic Church, and showed how busy their social life is. I further have

illustrated how these organisations help peasants confront their problems of education, maize supply and land ownership.

Doña Mica's illness, which led to delegating the weeding, provided an example of the deficient health services and the limited communication infrastructure in the region. It also allowed reflection upon the historical relationship between the Tzeltal people and their former lords who are now airplane pilots and members of regional elites. The visit to Tabasco, for which we had to delegate the bending, was another opportunity to discuss restrictions like lack of infrastructure, equipment and tools. The bending performance created an occasion to discuss the relationship between NGO fieldworkers as broker-suppliers and Tzeltal peasants as promoter-receivers. The bending was delayed because of the local meetings that were organized after the evictions, where internal confrontations and disagreements prevailed. The latter evidenced again the tense relationships between people living in the same community/region who shared the same concerns and problems. The maize harvests were measured and valued based on the problems that arose during its cultivation cycle, from agronomical to those concerning their livelihood, like procuring maize to eat or earning money from selling products. Moreover, the reflection on the harvest as a performance brought forth arguments that other actors like governmental agencies use to underline the senselessness of Tzeltal peasants to continue making their *milpa* in that area.

All these make the issue of marginalization and poverty very much present throughout this thesis. Sections 1.2.3 and 1.4.1 discusses a lower human development index and a higher index of marginalization of the maize growing peasants, including the Tzeltal. We could easily qualify them as poor and vulnerable, and their life situation as unjust. But I have chosen to stay closer to the way the Tzeltal peasants perceive their situation (Section 2.4.2). They have their own terms for it: remembering the government's threat to stop investments for basic services and infrastructure if they stayed in La Mera Selva, Sebastián said, "We will always be screwed". This was neither the first nor the last time I heard them using this term, referring to both their own lives as well as to the conditions of their maize fields. Of course this is a colloquial term. In English, it means to be cheated or swindled. It can also be used as vulgar slang to talk about sexual intercourse. In Mexico the Spanish word *joder*, from which this translation comes, has more meanings, including to be spoiled or damaged (Gómez de Silva, 2001), to be ruined, poor or sick. It could also mean to be annoyed or to be in big trouble. It is commonly used in informal conversations in relational and referential senses. The relational sense applies when someone or something is screwed by a person, situation or disease. The referential sense applies when someone feels screwed for being deprived of something that for others is easier to obtain. The term is not commonly used in formal settings,

especially not in scientific works. However, it has been linked by others to the indigenous and the peasant condition. Vilcatoma (2009; 2) defines *indio* as “the status of being screwed” and includes other terms like subaltern, poor, illiterate, peasant, with native language and dependency, as synonyms. He also indicates that indigenous problems are situational because they appear and they are maintained by social, cultural and political relations. In his classic anthropological study “*Los Indios de México*” (*The Mexican Indians*) Fernando Benitez narrated his dialogue with a *mazateco* (an indigenous person) who told him that *gente de razón*¹¹³ or rich people always want to keep indigenous people screwed by stealing their language, their land and their food (Benitez, 1998:120). We can find more references to this term in literature where writers narrate in detail these relations that represent “being screwed” within specific life situations, using references and including feelings and even some wisdom. Benedetti, in his story: “*The birthday of Juan Manuel*” writes: “*el mundo es jodido pero remediamente injusto*” (Benedetti, 2000:33) which means the world is screwed but there is remedy for injustice.

In this sense, the term “to be screwed” unveils the relation that stays disguised in other more academically elaborated concepts like vulnerability and injustice. Several of the episodes and events I would otherwise be called: problems, conflicts, concerns, confrontations, restrictions and dilemmas, cover up certain aspects of this perception and feeling of Tzeltal peasants of their interaction with other actors such as the government, regional elites and NGOs. “To be screwed” thus becomes more illustrative, accessible and meaningful than neutral terms like poor, marginal, vulnerable or unjust. When Sebastián used the expression in a dramatic moment while we were waiting for the small plain on Salvador Allende’s airstrip, this was a moment full of feelings of frustration, resentment and powerlessness, and other examples are given in Chapter 3, about Jacinta’s eviction when feelings of insecurity, fear, sadness, confusion, pain, courage, and senselessness are added.

My purpose of evoking these local perceptions and feelings about their situation, is to show that they form part of the different facets of performance. Moreover, this purpose is also to start recognizing that Tzeltal peasants have been trying to change their life situation in several ways. They came together to form social organizations and movements that fight for basic rights like land, food, health, education and fair trade (Section 1.2.3). However, after several decades of existence people who participate in these movements are still lacking these basic rights and services. As this

¹¹³ *Gente de razón* (people of reason) is a category used in Mexico during the time the country was a Spanish Colony. It refers to the Spanish, their descendants and the offspring of Spaniards with Indians (mestizos) versus *la gente de costumbre* (people of custom) or savages, meaning indigenous people (Bartolomé, 2004:46-47).

thesis has shown, they are also fighting by juggling the making of their *k'altik* and their life in La Mera Selva, like other indigenous peasants do in other parts of Mexico. Although these efforts have helped to bring the debate about indigenous people and maize farming to a national level, this has not always resulted in an improvement of their situation, as this testimony shows. It has not been enough to improve the situation of the Tzeltal peasants, because the problem is in our relationship with them. Therefore, I am urging us to change too. With 'us' I am referring to the airplane pilots and the other members of the regional society from Chiapas who maintain the values and hatred that justify their feudal relationships with indigenous peasants. They have to start a conversation in which they discuss their historical injuries some of them related with landownership (as was the case with Captain Poncho see section 5.2.9). I am also referring to changes needed in the aggressive acts of government personnel such as violent evictions or programs that underestimate the value of peasants' agriculture and life. They need to think, beforehand, about the impact of these actions on their relationship with a part of Mexican society to whom we are all historically indebted. I am also thinking of all of us who arrive at the idea of helping indigenous peasants with good intentions, with resources, but especially with certain prejudices, as I did myself at the start. Finally, I am considering all people who, like the Tzeltal peasants themselves, make use of maize every day. Maize feeds the world due to the qualities it has developed, also through the practices of indigenous farmers. I hope that reading this life testimony about the performance of maize cultivation in La Mera Selva motivates to question existing general assumptions about maize, *milpa* and indigenous peasant life.

7.3 WHAT DISTINGUISHES THIS BOOK

Now it is the turn to reflect about what makes this book different from others scientific works talking about maize, *milpa* and indigenous peasants life. As I asserted in the introduction this difference rest on what the concept of performance and the metaphor of juggling seek to capture when they interweave farming and living.

In the first place, their use means to create points of intersection between phenomena that are of importance in the studies of different natural and social science disciplines through the detailed narration of the specific situation in which maize cultivation practices were carried out. For instance, to perform land preparation we placed the agronomic details of each field and of slash-and-mulch alongside the political particularities of the land conflict, of Jacinta's eviction and of the environmental debate on slash-and-mulch *versus* slash-and-burn. Sowing was performed in the moment in which environmental conditions matched the technological peculiarities of

their farm management and coincided with the social, specifically labor needs and commitments. Performing the weeding and bending implied integrating the agronomic practices with social events that were related to problems of transportation, lack of education, health care and other basic services and infrastructure that do not exist in this region. Finally, in the performance of harvesting, agronomic, statistical, economic, anthropological and even philosophical reflections and evocations arose.

This combination of phenomena and their interaction as described with the metaphor of juggling is not present in other works, as far I am aware. They focus on maize and/or indigenous peasants from a particular discipline and are in-depth studies of, for example, maize eco-physiology (Andrade *et al.*, 1996), Mexican maize production (Vega y Ramírez, 2004:24), indigenous people situation (Bonfil, 2005) and Tzeltal peasants' history (Vos, de, 2004; Legorreta, 2008). Although they present a partial vision, they are, like other monothematic and mono-disciplinary documents cited in the different chapters of this book, useful inputs and enriching support to the various elements of the performances that I describe in my study.

None of the publications I have read that consider several disciplines and proposes integrated concepts bring together farming with living as the juggling performances do. With the use of the concept agroecosystem they study the *milpa*, and with the concept livelihood they look at indigenous peasants life. With different integrated concepts (a system for the field or farm, a livelihood for the household and performance for the action) all these studies are reactions against mono-disciplinary approaches. However, applications of these concepts in, for example, agroecosystem analysis¹¹⁴ (Conway, 1984) and sustainable rural livelihood¹¹⁵ (Scoones, 1998) have broken these integrated concepts into thematic pieces and into causal relationships. Although these concepts have brought new insights about the complexity of farming and of living they had confronted the challenge of disciplinary borders and the limits of causal relations. An example is the long-term study of the *milpa* agroecosystem in Yucatán (México) by Hernández-Xolocotzi *et al* (1995), which generated important information to

¹¹⁴ The agroecosystem analysis of Conway consists in: 1. Defining the boundaries of a hierarchical system; 2. Undertaking a pattern analysis in terms of space, time, flows and decisions; 3. Determining properties like productivity, stability, sustainability and equitability. This analysis has been criticized (Lightfoot, 2000) with questions such as: what is in the system and what stays out? Why a hierarchical system? Why those terms (mainly ecological) and not others?

¹¹⁵ Scoones (1998) proposed a framework of analysis conformed by context, resources, institutional process, strategies and outcomes. Each one of them is divided in a group of topics like history or climate, groups as natural capital, processes as agricultural intensification and indicators like reduced poverty. These approaches "were often dismissed as too complex and soon not compatible with real-world challenges and decision-making processes" (Scoones, 2009:181).

understand the soil, fallow and forest management of shifting cultivation and peasants' economy and strategies. The challenge to generate an integrated understanding of the *milpa* agroecosystem dynamic in Yucatan is pending. The same happened with the study of Marqu ez (1996) about peasant agriculture and technological change of maize in Las Ca nadas where La Mera Selva is located. With a methodology that combined a historical reconstruction with a maize production system approach, he arrived at a general diagnosis about the maize production in this region and a general proposal for technological change. In both diagnosis and proposal, he separated the technological part from the social and political one, simplifying the complexity of everyday cultivation. Instead, the different facets of the juggling performances were used in this thesis to maintain the links that Tzeltal peasants identify between the phenomena that are of interest to different disciplines and exist for each situated and particularized cultivation practice and life experience. These links were not only causal but also casual because both types of relationships constitute daily life moments.

Secondly, juggling performance and its different facets made this thesis different because they made it possible to see the unexpected associations that performers create during the juggling performance. I understand "unexpected associations" as confrontations between the performers' *a priori* expectations/assumptions *versus a posteriori* new connections and learning. In this way I include a reflexive process based on new insights about the action as performance. The performances described in the previous chapters represent mainly two types of confrontations and new insights. There were my own *a priori* expectations as a crop scientist about maize cultivation practices as opposed to my *a posteriori* understanding of connections that Tzeltal peasants established between cultivating maize and making life. Each chapter was about confrontations that made me think of cultivation practices not only as agronomic activities but also as political, social and cultural actions.

The second type of confrontations was more specific and by means of the different facets of performance, allowed me to question thematic assumptions that I accepted beforehand without questioning as a result of my learning about different sociological approaches. Inspired by works in political ecology (Dove 1983; O'Brien, 2002) in the first facet of performance, I was able to see SB and SM as complementary variants to prepare land in agronomic and political arenas. There was also the case of the sowing date. First, I supposed that the moment of sowing was defined by average environmental conditions. But later with the second facet of performance I experienced that the sowing date was the result of the juggling of changeable weather and sequential and seasonal management activities, and people's availability and time after social commitments were met. The realization that sowing was negotiated was possible with the influences of farming

systems studies like the one by Richards (1986).

With the help of peasant studies (Warman, 1985; Scott, 2009), the third facet of performance with weeding and bending became an opportunity to think of delegation and postponement as peasant strategies. This made it possible to question other more specific assumptions about maize cultivation. The first assumption I came to question was that weeding is a control practice and is performed as an action that gives maize plants an advantage over other growing plants. The second assumption was that maize plants are only a phenotypic expression of genotype, and I did not realize that they are also a reflection of a farmer's life situation. The third assumption that I now question is the image of the appropriate maize plant structure as a short and high yielding plant, and not as a plant type that responds a particular cultivation management. Harvesting came with another performance facet that gave me new insights into old assumptions having in mind what Barkin (2007) and Florescano (2000) wrote about indigenous peasants. One of these insights was that growing maize is not only to be evaluated based on yields, but that it should also include our reflection of the farmers' particular situation in cultivating their fields in a specific social, historical, political-economic and natural environment. Another insight related yield to the motives of peasants in La Mera Selva to continue cultivating maize, which go from problems of maize and money shortage to the role of maize as a crop, food and life companion.

I got involved in these confrontations because since the beginning I had decided to let myself "be affected" by the Tzeltal peasants, their maize cultivation and their living (Section 1. 3.2). In this way my principal objective was describing the rich but complex moments I shared with Tzeltal peasants and I was permeable to different theoretical approaches that allowed me to describe how farming and living is for these peasants.

Thirdly, this thesis is different due to the different facets of performance that are used. A performative definition of this concept is needed because each cultivation cycle and each farming practice is situated and, therefore, different. Thus, with a specific facet of the performance I describe the details and the intricacies of a particular practice within a specific farming and living situation, which were not possible with a general definition of performance. For instance, the combination of specific situations that occurred in the rainy season of 2007 in Salvador Allende, like the illness of Doña Mica, the eviction of Jacinta, the visit to Tabasco, defined the facet of the weeding and bending performance in that season. This performative attribute of this concept distances performance from others that focus on action and actors. This distance is part of the reason, already exposed in Section 2.4.3, why I favored performance over concepts like practice, enactment or assemblage. Practice has commonly been linked to the identification of general and common trends of action. This is not the case of

performance, which adapts its definition to the particularities and intricacies of a specific life experience with the use of facets. Enactment has been used to show the contradictions in the multiple crafting of objects, identities and realities. Similarly, assemblage was proposed to understand action as the association of diverse agencies. Instead of unreeling multiplicity and diversity, with the facets of performance we followed how specific agencies (performers like sowers or harvesters) concretized cultivation practices by their particular association with other actors in form of responses (Chapter 3), negotiations (Chapter 4), delegations and postponements (Chapter 5), and reflections and evocations (Chapter 6).

The other implication of narrating these experiences is the inclusion of feelings. The inclusion of feelings in scientific documents is not common, especially not in studies looking for objectivity by maintaining a distance between researcher and subject/object of research. The messiness of feelings is not an issue of science but of arts and life. I, however, appreciate studying the messiness of life (Law, 2006:2), and the need to consider feelings at the risk that my manuscript is considered biased and my description a romanticization of Tzeltal peasants farming and living. Nevertheless, I consider that describing the presence of feelings in the different performances of maize cultivation practices brought new insights to understand the relation between farming and living. This description was also part of the creative effort I carried out to make this thesis accessible to a broader audience and not only to scholars. Therefore, I decided to use a testimonial style in which I have the position of witness, to recount my life experience of making *k'altik* in this region. Narration became the dominant technique to craft this book, which is complemented by other styles like tables and figures that are based on quantitative and qualitative data obtained through measurements and interviews. Scientific references played the role of echoing other life experiences, most of them scientific ones. In this way, performance became a concept that sought to capture the lessons of this joint experience, and I found juggling as a metaphor of life. Juggling captures all the coordination skills and creative art that we need to live. It is a familiar metaphor, especially when we are engaged in several things at the same time, as we are not only farmers or scientists, but also daughters, mothers, sons, friends, etc. It is a metaphor that, in lieu of distancing researcher from researched, attempts to bring them closer, to the point where they call each other by their names and nicknames. From this point, in which minds can exchange ideas, eyes can observe facial expressions, ears can recognize voice tones and hearts can perceive feelings, we can start a good conversation. From this testimonial conversation, one can find not only knowledge but also wisdom from the Tzeltal peasants' juggling performances of making *milpa* and making life in La Mera Selva.

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APPENDIX

Appendix 1.1 Map locating the Region Cañadas Ocosingo-Altamirano within the Lacandon Jungle, within Chiapas State and within Mexico



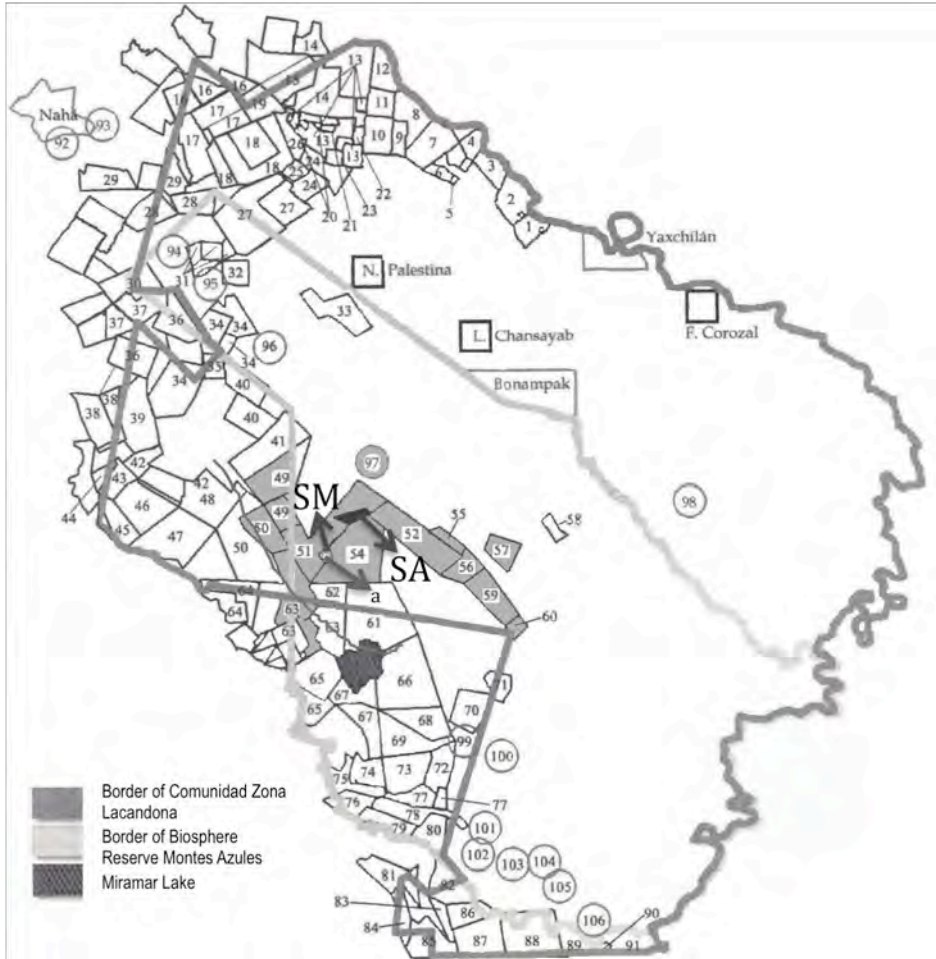
Modified from Leyva y Ascencio (2002:44)

Appendix 1.2 Map locating the Micro-Region Amador within the Region Cañadas Ocosingo-Altamirano



Modified from Leyva y Ascencio (2002:117)

Appendix 2.1 Map locating the communities of La Mera Selva within all the settlements established in the Lacandon Jungle



CODE	COMMUNITY
SA	Salvador Allende
SM	San Martín
a	San Gabriel
49	Plan de Guadalupe
50	El Guanal
51	Amador Hernández
54	Pichualco

CODE	COMMUNITY
52	Candelaria
55	Corozal
57	El Buen Samaritano
59	San Gregorio
60	San Antonio Miramar
63	San Quintín
97	San Manuel

Modified from Ascencio (2008:165)

Appendix 3.1 *Comunicqué against the evictions that was written in Salvador Allende*

*Rancho Salvador Allende, Ocosingo Chiapas
A 20 de agosto de 2007*

Comunicado a compañeros de la Otra Campaña y de la ARIC-I y D, defensores de derechos humanos, organizaciones no gubernamentales, organizaciones sociales, observadores y sociedad civil estatales, nacionales e internacionales.

Los días 18 y 19 de agosto del presente año se desalojaron ilegal y violentamente los poblados de San Manuel y El Buen Samaritano que han estado viviendo durante diez años en la Reserva de la Biosfera Montes Azules. Estos desalojos fueron realizados sin previo notificación ni aviso y en el caso de San Manuel sin previo contacto de las autoridades competentes (CONANP y SRA) de que su situación fuera irregular. En estos desalojos en los que mujeres y niños fueron separados de sus esposos (que se encontraban fuera de las comunidades en ese momento), se destrozaron ventanas y puertas de casas, se destruyeron potreros, se robaron dinero y en Buen Samaritano personas de Palestina sacaron ganado en presencia de los militares. Aun más grave no dejaron que la gente desalojada se llevara sus pertenencias (por lo menos ropa) ni papeles de identificación.

Lo anterior es hasta el momento lo que nosotros sabemos. En estos momentos otras poblaciones irregulares de las que formamos parte (algunas en proceso de negociación desde hace más de veinte años), estamos asustados de que en cualquier momento nos puedan desalojar sin previo aviso. Escuchamos y vemos helicópteros pasando muy bajo y los niños se ponen a llorar o salen huyendo a la montaña porque piensan que nos puede ocurrir lo mismo. No podemos ir a trabajar a la milpa, ni dormir por estar pendientes.

Hasta la fecha no sabemos qué paso con los desalojados, dónde están, y si se encuentran bien. Sus familiares, esposos hermanos y padres no tenemos ninguna noticia de ellos.

Por lo anterior les pedimos a todos que intervengan:

- a. Demandando información al gobierno sobre los desalojados y que permita la comunicación con sus familiares y su liberación inmediata*
- b. Demandando al gobierno una solución justa (sin presiones por tener personas encerradas ilegalmente) y favorable para los pobladores de San Manuel y el Buen Samaritano*
- c. Viniendo a la región Candelaria como observadores y como defensores de derechos humanos para que sean testigos y voz de los abusos del gobierno*
- d. Demandando al gobierno evitar el uso de desalojos violentos como éstos para las otras comunidades irregulares y que en lugar de ellos dialogue y negocie con nosotros que al final de cuentas también somos mexicanos*

Appendix 3.2 Communiqué against the evictions from ARIC UU ID

Boletín de prensa de la ARIC-UU-ID

Ocosingo, a 20 de agosto de 2007

*C. FELIPE CALDERÓN HINOJOSA
PRESIDENTE DE LA REPÚBLICA
A LAS AUTORIDADES FEDERALES
A LAS AUTORIDADES DEL GOBIERNO DEL ESTADO DE CHIAPAS
A LAS ORGANIZACIONES DE LA SOCIEDAD CIVIL
A LAS ORGANIZACIONES INDÍGENAS Y CAMPESINAS*

Ante la preocupante situación de desalojo de comunidades indígenas acontecido los días 18 y 19 de este mes en la cuenca del río negro de la Región de los Montes Azules, la organización social Asociación Rural de Interés Colectivo Unión de Uniones Independiente y Democrática (ARIC UU ID) desea decir su palabra:

1) Nos preocupa la situación actual que se vive en la región de los Montes Azules por la tensión, incertidumbre e inseguridad producidas por el desalojo y desplazamiento de los poblados: San Manuel y El Buen Samaritano.

2) Como ARIC UU ID respetamos el proceso de negociación que mantenemos en la mesa de negociación agraria-ambiental y pedimos respeto hacia nuestra organización y a las comunidades que representamos para la resolución de la regularización de los poblados: San Antonio Miramar, Nuevo San Gregorio, Ranchería Corozal, Salvador Allende y Guadalupe Tepeyac.

3) Como parte de este proceso de negociación, y dados los últimos acontecimientos, queremos pedir una confirmación pública y escrita de parte de las autoridades competentes que manifieste:

Que la resolución de la actual situación de los 5 poblados de la ARIC UU ID se va a hacer efectiva en la mesa de negociación en la que participa la ARIC UU ID.

Que se garantice la seguridad de las personas y familias de los cinco poblados y de la región.

4) La ARIC UU ID apuesta por la vía del diálogo e interlocución y no acepta otras formas de acción que vulneran y ofenden a la población y que puedan suscitar otro tipo de reacciones. Por ello, en el marco de la defensa del derecho a la tierra y al territorio de los pueblos indígenas y de acuerdo con los artículos 13-19 del Convenio 169 de la OIT, ratificado por México en el año 1991 (Ley Suprema de la Unión), ratificamos nuestra posición de defensa y respeto a la mesa de negociación.

ATENTAMENTE

*MIGUEL VAZQUEZ JIMENEZ
PRESIDENTE ARIC ID*

*MANUEL DE JESUS BALLINAS JIMENEZ
SECRETARIO ARIC ID*

*BENJAMIN HERNANDEZ SOLIS
TESORERO ARIC ID*

*FRANCISCO MENDOZA JIMENEZ
COMISIÓN AGRARIA*

*JORGE ELISEO PEREZ LORENZO
PRESIDENTE UNIÓN DE EJIDOS*

*DIEGO LORENZO JIMENEZ
TESORERO DE LA UNIÓN DE EJIDOS*

<http://zapateando.wordpress.com/2007/08/21/comunicados-sobre-desalojos-en-montes-azules-recibidos-por-el-fayba/>

Appendix 3.3 *Comunicué against the evictions from EZLN*

*CARACOL:
MADRE DE LOS CARACOLES DEL
MAR DE NUESTROS SUEÑOS.*

*Al pueblo de México
A los pueblos del mundo*

A los compañeros y compañeras

Adherentes de la Otra Campaña en México

A los compañeros y compañeras de la Zetza Internacional.

1.- Denunciamos públicamente de lo que esta haciendo Felipe Calderón Hinojosa, gobierno de los ricos de México y a Juan Sábines Guerrero Gobernador de los terratenientes y paramilitares de chiapas.

2.- El 18 de agosto del 2007 en eso de las 11 de la mañana y 12 del día, del día sábado llegaron 6 helicópteros para desalojar a los poblados de San Manuel y el poblado de Buen Samaritano. Por el delito que los acusan que están destruyendo las montañas de reserva ecológica de los montes azules.

3.- En el poblado San Manuel llegaron violentamente sin darles tiempo de nada amenazándolos con sus armas a las mujeres y a los niños y niñas obligándolos a los hombres de subir en sus helicópteros todos los que es encontraban en la población.

4.- Mientras estaban obligándolos a subir en los helicópteros de los policías Estatal y policías Federal, que se calculan que llegaron como 90 elementos de las corporaciones policíacas, inmediatamente se organizaron en 2 grupos, un grupo se encargo a destruir las humildes casas del pueblo de San Manuel, dejando totalmente destruida y robando las pocas pertenencias que hay mientras el otro grupo obligándoles a subir en sus helicópteros.

5.- Estos tipos de acciones así lo mismo hicieron en el poblado Buen Samaritano que hasta el momento sabemos que en total llevaron 7 personas de las cuales no sabemos sus nombres.

6.- Presentamos la lista de los que llevaron en el Poblado San Manuel: Dominga Cruz Hernández de 28 años, Fermina Ruiz Jiménez de 16 años, Mario López Gómez de 50 años, Nicolás Hernández Toledo de 40 años, Feliciano López Hernández de 20 años, Margarita López Hernández de 19 años, Juan López Gómez de 45 años, Tomás López Gómez de 50 años, Romelia de 27 años, Jacinta Jiménez Clara de 34 años, Lázaro Ruiz Jiménez de 18 años, María Ruiz Jiménez de 14 años, Micaela Ruiz Jiménez de 13 años, Juana Jiménez Ruiz de 11 años, Manuela Ruiz Jiménez de 9 años, Francisca Ruiz Jiménez de 7 años, Eusebio Ruiz Jiménez de 4 años, Mario Ruiz Jiménez de 1 año, Jacinto Jiménez Cruz de 10 años, Domingo Jiménez Cruz de 10 años, Micaela Jiménez Cruz de 8 años, Nicolás Jiménez Cruz de 5 años, Francisca Jiménez Cruz de 2 años, Nicolasa López Ruiz de 10 meses, Manuel López Hernández de 4 años, Mario López López de 2 años, Nicolasa López López de 5 meses, Darinel García de 10 años, Sebastián García de 6 años, Heriberto García de 8 años, Fidencio García de 3 años y otro niño de 1 año

Todas esas personas, hombres, mujeres y niños no sabemos de sus paraderos y los maltratos que han sufrido, sus condiciones físicas en que se encuentran ahora.

7.- Por eso hemos podido comunicar con los compañeros y compañeras defensores de los derechos humanos Fray Bartolomé de las Casas que hiciera el trabajo difícil de

localizar a los detenidos y las detenidas sabiendo también que nuestros hermanos y hermanas defensores de los derechos humanos que sufrirán malos tratos, agresiones por parte del mal gobierno tanto estatal como federal. Pero sabemos que sus trabajos del Centro de Derechos Humanos Fray Bartolomé de las Casas si lo harán como lo han demostrado muchas veces, sobretodo porque no sabemos sus paraderos de nuestros hermanos y hermanas.

8.- Sabemos que el mal gobierno estatal y federal están por realizar los mismos desalojos en los poblados Salvador Allende y Nuevo Corozal porque viven en la tierra donde la trabajan para poder vivir.

9.- Exigimos su inmediata libertad a todos y todas los detenidos y detenidas porque totalmente no tienen culpabilidad, la tierra la trabajan y la cuidan para poder vivir como seres humanos. En cambio el gobierno y los ricos y el gobernador de los terratenientes y paramilitares la tierra la quieren para convertir en mercancía, es decir para venderla a los empresarios nacionales y trasnacionales, por eso los estorban los que trabajan y cuidan la tierra, es decir, los campesinos e indígenas.

Por eso seguiremos diciendo para siempre: la tierra es de quien la trabaja, no para venderla como una mercancía.

Nosotros, los que trabajamos la tierra es nuestra madre porque en ella vivimos y en ella nos alimentamos, por eso nuestros hermanos y hermanas desalojados y detenidos y desaparecidos no tienen nada de culpabilidad. Por eso exigimos su libertad inmediata e incondicional.

Es toda nuestra palabra.

ATENTAMENTE

*MANDAR OBEDECIENDO
JUNTA DE BUEN GOBIERNO
HACIA LA ESPERANZA*

SAUL; ABEL; TANIA; NICODEMO; RAÚL

<http://enlace Zapatista.ezln.org.mx/denuncias/795>

Appendix 3.4 CONANP Press Release about the evictions (2007)



AT'N JEFE DE INFORMACIÓN Y/O REPORTERO DE LA FUENTE

Comunicado de Prensa

México D. F., 19 de agosto de 2007

**EN ATENCIÓN A UNA DENUNCIA DE LA COMUNIDAD LACANDONA, LA
AUTORIDAD RECUPERA PREDIOS INVADIDOS EN LA RESERVA DE LA
BIOSFERA MONTES AZULES**

- Se procedió al desalojo de los invasores; conforme a lo que establece la ley y en pleno respeto a los derechos humanos.
- Estos grupos tenían en posesión alrededor de 1,500 hectáreas que fueron afectadas por actividades ganaderas

El día de hoy concluyó un operativo de desalojo de tres asentamientos irregulares que, desde hace aproximadamente siete años, mantenían un grupo de familias dentro de la Reserva de la Biosfera Montes Azules sobre una superficie de 1,500 hectáreas de tierra de gran valor ambiental en donde tenían cerca de 200 cabezas de ganado.

La extensión recuperada se encuentra severamente desmontada debido a que la actividad que se realizaba en esos sitios era principalmente ganadera; por ello, la Secretaría de Medio Ambiente y Recursos Naturales (Semarnat), a través de la Comisión Nacional de Áreas Naturales Protegidas (Conanp), llevará a cabo en las próximas semanas acciones de recuperación para reducir las afectaciones.

En el operativo, que inició ayer, fueron desalojadas más de 40 personas (entre hombres, mujeres y niños) y se logró el aseguramiento de 3 rifles calibre 22, una pistola, 2 motosierras, machetes y ejemplares de la fauna silvestre.

Una vez que concluyó el desalojo tomaron posesión del lugar 15 guardaparques de la Conanp, 2 inspectores de la Procuraduría Federal de Protección al Ambiente (Profepa) y elementos de las fuerzas policíacas estatales. Los guardaparques llevarán a cabo labores para deshabilitar las casas que se habían construido, erradicación de especies vegetales introducidas (árboles frutales, milpas y zacate) y acciones de reforestación, para lo cual se cuenta ya con 50 mil plantas locales.

Los varones adultos se encuentran en calidad de presentados ante la Fiscalía General del Estado por los delitos de despojo, posesión de armas, posesión de fauna y otros que resulten de las investigaciones. Las mujeres y los infantes fueron trasladados al Centro Regional para la Atención de Emergencias y Desastres, operado por Protección Civil del estado.

Las familias invasoras cuidaban ganado propiedad de personas que no habitaban en la zona, sino en la ciudad de Comitán. Los predios desalojados son los de El Buen

Samaritano (invadido en 1999), Nuevo Salvador Allende (en 2001) y El Innominado (en 2006, donde se asentaron ilegalmente luego de que concertaron su salida de otro punto de la reserva, por lo cual recibieron 250 mil pesos); ninguno de los grupos allí asentados contaba con antecedentes agrarios.

Este hecho ocurre en seguimiento a la denuncia que realizó la comunidad Lacandona (dueña legítima de los terrenos afectados) ante la Fiscalía General del Estado y la Profepa por los delitos de despojo y daño ambiental.

El operativo para la recuperación de estos predios fue coordinado por la Secretaría de Gobierno de Chiapas y contó con la participación de la Secretaría de Seguridad Pública del Estado, la Fiscalía General del Estado, la Procuraduría General de la República, así como personal de la Semarnat, la Conanp y la Profepa. Se contó también con el apoyo de la Armada de México.

Cabe destacar que en repetidas ocasiones se instó a los invasores (a través de la Mesa Agraria-Ambiental Interinstitucional para la Selva Lacandona y Montes Azules) a desocupar los predios de forma voluntaria, pero de manera sistemática se negaron a salir del área para ser reubicados fuera de la Reserva de la Biosfera.

Dichas negociaciones se mantuvieron hasta el pasado 28 de noviembre de 2006, periodo durante el cual se logró la reubicación de varios asentamientos que se encontraban en la zona y que eran incluso más numerosos. Una vez concluido el proceso agrario y tras la negativa de estas familias a ser reubicadas, se procedió al desalojo conforme a lo que establece la ley y en pleno respeto al Estado de Derechos Humanos.

La Mesa Agraria que dialogó con los invasores está representada por la Secretaría de Gobierno del estado de Chiapas y participan también el Instituto de Historia Natural y Ecología del gobierno del estado, y las secretarías del Campo, de Salud y de Obras Públicas de Chiapas. Por la parte federal participan las Secretarías de la Reforma Agraria, de Medio Ambiente y Recursos Naturales, y de Salud, así como por la Conanp y la Procuraduría General de la República.

La Reserva de la Biosfera Montes Azules fue decretada en enero de 1978 por el gobierno federal, abarcando una superficie de 331,200 hectáreas. Constituye la mayor extensión de selva perennifolia del país; su conservación es vital para mantener la biodiversidad y servicios ambientales en la región de la Selva Lacandona como captura de agua y conservación de especies de flora y fauna.

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Para mayor información de la Reserva de la Biosfera Montes Azules,
http://www.conanp.gob.mx/emp/pagina.php?id_emp=9

Appendix 3.5 SRA Press Release about Salvador Allende voluntary evictions (2009)

Noviembre 12, 2009

LA SRA RESARCIO 306 HECTÁREAS A LA COMUNIDAD ZONA LACANDONA

Contenido

- **Un grupo de 13 familias del poblado Salvador Allende dejaron la superficie que tenían ocupada de forma irregular desde hace más de 30 años**
- **La región es considerada como una de las áreas biológicamente más importantes del estado**

A través del diálogo y la concertación promovida por la Secretaría de la Reforma Agraria (SRA), un grupo de 13 familias del poblado Salvador Allende, en la Comunidad Zona Lacandona, desocuparon y entregaron de manera voluntaria 306 hectáreas que venían usufructuando desde hace más de 30 años de forma irregular.

Las tierras son parte de la Reserva de la Biosfera Montes Azules en Chiapas y fueron resarcidas a la Comunidad Zona Lacandona, la cual tiene reconocidas y tituladas 614 mil hectáreas desde el año de 1972.

Las familias se establecieron en la década de los 70 en la región denominada "Cuenca del Río Negro" y habían solicitado la regularización de la superficie ocupada, lo cual no es posible porque la legislación ambiental prohíbe la regularización de asentamientos humanos en Áreas Naturales Protegidas como es el caso de la Reserva de Montes Azules.

Dicha ocupación irregular representaba un riesgo de enfrentamiento entre la Comunidad Zona Lacandona y los habitantes del poblado Salvador Allende, por lo que desde el año 2003 se llevaron a cabo pláticas en el marco del Programa de Atención Integral a los Bienes Comunales Zona Lacandona y a la Reserva de la Biosfera Montes Azules.

En las negociaciones se acordó que el conflicto agrario y social en la zona fuera atendido por el Programa de Atención a Conflictos Sociales en el Medio Rural (Cosomer) de la SRA, a fin de encontrar una resolución pacífica y consensuada.

La SRA invirtió recursos federales por 3 millones 65 mil pesos, los cuales fueron entregados como contraprestación a las 13 familias tzeltales a cambio de desalojar las 306 hectáreas y entregarlas a sus propietarios, es decir a la Comunidad Zona Lacandona.

El convenio, mediante el cual se solucionó el conflicto, compromete al grupo de familias a respetar la propiedad y posesión de la superficie que estuvo en controversia, a no originar nuevas ocupaciones irregulares y a no realizar actos que pudieran originar enfrentamientos.

La SRA mantiene pláticas con otras tres familias que permanecen en Salvador Allende para que desocupen 70 hectáreas y que la Cuenca del Río Negro, considerada como una de las regiones biológicamente más importantes dentro de la Reserva de la Biosfera Montes Azules, quede libre de asentamientos humanos irregulares.

Con la solución de 181 conflictos agrarios en la región, la SRA ha regularizado más de 165 mil 861 hectáreas en la Zona Lacandona y en la Reserva de la Biosfera Montes Azules en beneficio de más de 2 mil 622 familias indígenas.

La Secretaría reitera su compromiso de encontrar soluciones a los conflictos sociales en el medio rural de Chiapas y del resto del país, mediante el diálogo, el consenso y por las vías institucionales y legales.

Galería

Appendix 6.1 Animals that affect maize in La Mera Selva

TZELTAL NAME	ENGLISH NAME	SCIENTIFIC NAME	MAIZE PHASE (see figure in Chapter 3)	PRACTICE
<i>Ch'ó</i>	Rat	<i>Rattus rattus</i>	<i>Sit'emix</i>	Burn, Okko insecticide
<i>Yax echej</i>	Lizard			Burn, insecticide
<i>Xanich</i>	Ant	<i>Atta spp.</i>		Burn, insecticide
<i>Me'el</i>	Raccoon	<i>Procyon lotor</i>		
<i>Chanul ixim</i>	Fall Armyworm	<i>Spodoptera frugiperda</i>	<i>Jol acamil - X muc lajan</i>	Remove with a stick and crush
<i>Culuc</i>	Grasshopper	<i>Melanoplus spp.</i>	<i>Sloch snich - ajan</i>	
<i>Tsisim</i>	Cutting Ant			
<i>Yol</i>	Peya	<i>Cyanocorax morio</i>	<i>Hay ta jij - hay ta ajan</i>	Stick with plastic on the tip
<i>Puxuch</i>	Parakeet	<i>Amazona spp</i>	<i>Hay ta jij - hay ta ajan</i>	Stick with plastic on the tip
<i>Jwan chilico o ical mut</i>	Blackbird		<i>Hay ta ajan</i>	
<i>Chanul sin</i>	Earworm	<i>Heliothis zea</i>	<i>Hay ta ajan</i>	
<i>Me'el</i>	Raccoon	<i>Procyon lotor</i>	<i>Hay ta ajan</i>	Hunt
<i>Cojtom</i>	Badger	<i>Nasua Larica</i>	<i>Hay ta ajan - Hay ta ixim</i>	Hunt
<i>Carpintero like in Spanish</i>	Woodpecker	<i>Dryocopus lineatus</i>	<i>Hay ta ajan - Hay ta ixim</i>	
<i>Chuch'</i>	Squirrel	<i>Sciurus aureogaster</i>	<i>Hay ta ajan - troje</i>	
<i>Waximal chitam</i>	Collared Pecary	<i>Tayassu pecari</i>	<i>Hay ta ixim</i>	Hunt
<i>Jalau</i>	Paca	<i>Agouti paca</i>	<i>Hay ta ixim</i>	Hunt
<i>Jo ch'ol</i>	Weevil-Beetle	<i>Sitophilus zeamais</i>	<i>Hay ta ixim - troje</i>	Bending during new moon
<i>Ba</i>	Gopher	<i>Orthogeomys hispidus</i>		
<i>Colom</i>	Scarab Beetle	<i>Phyllophaga spp.</i>		As fishing Bait

Source: Fieldwork notes; Nations and Nigh (1980); Romero *et al.* (2006)

SUMMARY

This PhD thesis describes how Tzeltal peasants make milpa in the heart of the Lacandon Jungle. It is based on my experience of performing the different practices that constitute cultivating maize during the rainy season of 2007 with Don Chebo, Juan and other Tzeltal peasants. Based on this testimonial experience, I argue that Tzeltal peasants make *milpa* by alternating maize cultivation practices with other activities in their life as if they were conducting different juggling performances. The performances of land preparation, sowing, weeding, bending and harvesting therefore become windows through which we can see how, while they make their *milpa*, these indigenous peasants make life in the Lacandon Jungle.

The Introduction (Ch. 1) is a presentation, a justification and an explanation of this thesis. The presentation illustrates the theme and argument that making *milpa* means interweaving maize and life through the different performances of cultivation practices. The theme and the argument were based on a lesson I learned from the Tzeltal peasants, with whom I shared 15 months of my life in the place where they live and which they call La Mera Selva. Secondly, the introduction portrays the justification to read this book. It points out the importance of maize as a companion of humankind. It then addresses the relevance of making *milpa* and the situation of indigenous peasants in Mexico. It highlights the central place Tzeltal peasants of La Mera Selva have in national debates around maize and indigenous peasants. Thirdly, the introduction is an explanation of the elements that characterize this thesis as a life-witnessing, trans-disciplinary, action-oriented research. It explains the central concept, performance, and proposes a tailor-made definition for it. At the same time, it exhibits other elements that distinguish this scientific work from others. Finally, the different chapters are introduced, showing how each of them represents a different facet of the performance of maize cultivation practices that I carried out together with my two case study companions, Don Chebo in Rancho Salvador Allende, and Juan in Rancho San Martín, during the rainy season of 2007.

Chapter 2 addresses the life experience that produce this thesis. It narrates my doctoral research process which was shaped step by step by the particularities and intricacies that arose in the course of it. The purpose of describing this process is to explicitly reveal what brought me to write this thesis, and not a different one, as a result of various negotiations with companions, theoretical approaches, methodological tools, life episodes, feelings, reflections and memories. This entire negotiation became the journey of the research process I traveled through in three stages. The first

stage is about the beginning of the journey and describes how I met my travel companions and how we jointly created the theoretical and practical conditions to experience the following stage. The second stage is about my fieldwork in La Mera Selva with Don Chebo, Juan and other Tzeltal peasants. I tell the story of the life events I experienced with them, which ultimately affected the course of my research process. I also indicate how, at the end of this stage, all these life events were captured in the making of *milpa*, which is the topic of this thesis. The third stage of the research process covers the end of the journey. I invoke the three moments of the writing stage when I developed the various drafts of this thesis. All the stages and phases constitute the context and methodology of the research process in which this PhD thesis was created.

Chapter 3 exhibits the first facet of performance as a situated and particularized action through land preparation, in which Tzeltal peasants respond to the particularities and complexities of their agronomical and political context. These circumstances are important to explain how and why they choose between slash-and-burn (SB) and slash-and-mulch (SM) as two variants to prepare their land for sowing, as they are threatened by evictions due to a historical landownership and land management conflict. SB is considered by the government as a destructive activity that justifies eviction, while SM is used as a political strategy by the farmers to avoid it. Tzeltal peasants choose between the two variants considering both political and agronomic contexts. In this chapter I first describe the intricacies of the historic landownership conflict, then I narrate the agricultural peculiarities of the land preparation performance in 2007 with Juan in San Martin, and with Don Chebo in Salvador Allende. Reflections on the selection of SM in Salvador Allende subsequently leads us to Jacinta's violent eviction. In this incident Jacinta, Don Chebo's daughter, together with her whole family and other peasants, were violently evicted by a police operation and accused of dispossession and environmental damage took place in August 2007. It gives another perspective about the impact of the landownership conflict through Jacinta's and my testimonies about these evictions. Bearing the evictions in mind, the chapter picks up the choice between SB and SM and focuses on their agronomical and political intricacies and particularities. The end of the chapter is based on the information presented beforehand, and answers the question of how SB justifies evictions and how SM becomes a strategy to avoid them.

Chapter 4 develops the second facet of performance as a situated and particularized action through sowing, in which the peasants negotiate the sowing date with their *milpa* and life circumstance. These negotiations refer to coincidences, adjustments and agreements they make with their environmental, technological and social circumstances. First, they calculate the sowing to coincide with the environmental circumstance that defines two

maize sowing seasons per year. This is determined by annual rain and temperature dynamics in this region along with the particular requirements of maize plants. Secondly, they adjust the time to sow maize to the times of other practices and activities in the maize field and other the management of other areas. Practices such as sowing beans, cutting sugarcane and weeding the pasture constitute their technological circumstance. Commitments shape their social circumstance, in which they agree on the time and the help required for sowing. These involve participating in regional festivals, where they reach out to their relatives and friends who help them sow. The commitments also entail participating in activities planned by their peasant organizations or religious institutions who help them face problems like the lack of education, landownership or maize supply. All those considerations lead to the conclusion that Tzeltal peasants integrate the maize sowing date into their game of juggling the environmental, technological and social circumstances that constitute their life.

Chapter 5 uses the third facet of performance, in which the practices of weeding and bending are carried out in order to protect maize plants and cobs. These are situated actions that are postponed or delegated in order to deal with the everyday problems in the life of the peasants. Therefore, I narrate the details of the performances that form a staggering chronological account of events that caused them to be postponed or delegated. Thus, in June, the illness of Doña Mica, Don Chebo's wife, prompted us to delegate weeding in the Salvador Allende *milpa*. In September, the effects of the evictions that had happened in August delayed the bending in San Martín. In October, Doña Mica's surgery and then our visit to Tabasco organized by *CETAMEX* got in the way of bending in the Salvador Allende, which ended up being delegated to someone else. The chapter ends with Don Chebo's late bending performance as a response to the cumulative effect of delays caused by a series of problematic events. On the one hand, this account proves that these practices are flexible in a variety of ways and that maize cultivation is adaptable to marginal management conditions. On the other hand, the events illustrate the everyday problems concerning health, infrastructure and land tenure, and they convey to us their intricacy and permanency. At the same time, the events support the conclusion that, even though they displace weeding and bending temporarily, there is an assurance that in the long run those practices will continue to be implemented. From that point of view, delegating or postponing cultivation practices is part of peasants' strategies to deal with everyday problems.

Chapter 6 describes the last facet of performance through the three dimensions of harvesting. Here, the physical dimension of the harvest is the point of departure from which the harvester enters reflective and evocative dimensions, in which he confronts the dilemma of the sense *versus* the senselessness of making *milpa* in this region. Thus, the detailed account of

the physical dimension of harvesting illustrates how Tzeltal peasants go about removing cobs from maize plants, classifying and preparing them for transportation to the storage. It tells us about the amount of cobs harvested, which constitutes the basic information needed to access the reflective dimension of the harvest. The latter shows how they assess everything that happened during the cultivation cycle in lieu of only evaluating maize output from an agronomical point of view. Meanwhile, it explains how the shortages of maize and money that make they can hardly cover their basic needs are for them more important reasons to continue cultivating maize than competitiveness on the market. However, more motives become apparent in the evocative dimension of the harvest, where thoughts are fortified by meanings. In that dimension, maize is not only a crop, but also food in the form of *tortillas* and *pozol*. Here, the Tzeltal tell stories about the different types of seeds, and we read about tales, rituals and festivities in which maize is an active participant. All of this underscores the meaning of maize in the lives of the Tzeltal peasants as a life companion.

The concluding Chapter 7 consists of the final reflections of this PhD thesis on answering the three questions that I presented during the introduction of this thesis. The first question is, how do Tzeltal peasants make *milpa* while making their lives in La Mera Selva? As I highlight in this section the answer to this question relies in the performance concept and the juggling metaphor. They show how maize cultivation practices are not only agricultural activities but also political, social and cultural actions. The second question is, what do these different performances show about the life situation of the Tzeltal peasants and their *milpa*? The answer brings us to the difficult events and episodes that affected the performances of maize cultivation practices in 2007 and to the complicated relationship that these peasants have with other actors such as government personnel, regional traders, NGO fieldworkers and even amongst themselves. It brings us also to the colloquial term “to be screwed” that Tzeltal peasants use to refer to their situation. The last question is about what the concept of performance with its juggling metaphor captures, and distinguishes this thesis from other works about maize, *milpa* and life of indigenous peasants. The first distinction lies in how this concept and this metaphor constructed the link between farming and living; and how it is different from other mono-disciplines and multi-disciplinary efforts. The second distinction is related to what emerges from focusing on these “unexpected associations” as a reflexive way to achieve new insights. The last distinction is that performance and juggling attempt to capture particular life experiences considering the messiness of life. That is why feelings are present to bring the reader closer to the life experience of making *milpa* and making life in La Mera Selva.

RESUMEN

Esta tesis describe cómo los campesinos tzeltales hacen milpa en el corazón de la Selva Lacandona. Se basa en la experiencia que viví ejecutando las diferentes prácticas que conforman el cultivo de maíz durante el ciclo de temporal de 2007 junto con Don Chebo, Juan y otros campesinos tzeltales. Con base en esta experiencia argumento que ellos hacen milpa, intercalando las prácticas de cultivo del maíz entre otras actividades de vida, mediante diferentes ejecuciones de malabarismo. Por lo que las ejecuciones de la preparación del terreno, de la siembra, del deshierbe, de la dobla y de la cosecha se convierten en ventanas que nos permiten conocer como estos campesinos indígenas al hacer su milpa, hacen vida en la Selva Lacandona

La introducción o capítulo primero es una presentación, justificación y explicación de esta tesis. La presentación expone el tema y el argumento de que maíz y vida se alternan al hacer la milpa por medio de las diversas ejecuciones de las prácticas de cultivo. Este tema fue selección y este argumento fue enseñanza que aprendí de los campesinos tzeltales con los que compartí quince meses de nuestras vidas en el lugar donde viven y al que llaman la Mera Selva. En segundo lugar, la introducción justifica la lectura de este libro. Esta justificación habla primero sobre la importancia del maíz compañero de la humanidad. También aborda la relevancia de la milpa y los campesinos indígenas que la cultivan en México. Asimismo resalta el lugar importante que ocupan de los campesinos tzeltales de la Mera Selva en debates de nacionales sobre los indígenas y el maíz. En tercer lugar esta introducción es una explicación de los elementos que caracterizan a éste como una investigación vivencial y tran-disciplinaria enfocada en la acción. Se explica también el concepto principal *performance*-ejecución y se propone una definición hecha a la medida conformada por cuatro facetas. Al mismo tiempo se dan a conocer otros elementos que distinguen a éste de otros trabajos científicos. Finalmente se introducen los diferentes capítulos que lo conforman y que ilustran cada una de las facetas de este concepto mediante las ejecuciones de las prácticas de cultivo del maíz que llevé a cabo con mis dos estudios de caso, Don Chebo en su Rancho Salvador Allende y Juan en su Rancho San Martín durante el ciclo de temporal de 2007.

El capítulo segundo aborda la experiencia de vida de la que surge esta tesis. Es la narración de mi proceso de investigación doctoral que paso a paso se fue haciendo por las particularidades y complejidades de su propio recorrido. El propósito de describir este proceso es hacer explícito los cómo y los porqués que me llevaron a escribir este libro y no otros; como resultado de diversas negociaciones con acompañantes, acercamientos teóricos, herramientas metodológicas, episodios de vida, sentimientos, reflexiones y evocaciones. Todas estas negociaciones se convirtieron en el proceso de investigación que caminé en tres etapas. La primera etapa, llamada el inicio de la caminata, es

una descripción de cómo conocí a mis compañeros de andar y como juntos creamos las condiciones teóricas y prácticas para experimentar la fase de campo. La segunda etapa aborda mi trabajo de campo en la Mera Selva junto con Don Chebo, Juan y otros campesinos tzeltales. Hago un recuento de los episodios de vida que viví con ellos y que terminaron afectando el curso del proceso de investigación. Indico también como al final de esta etapa, todos estos episodios de vida quedaron capturados en el hacer la milpa, tema de esta tesis. En la tercera etapa, el final del recorrido, evocó las tres fases de la escritura de las numerosas versiones y borradores de este libro. Todas estas etapas y fases constituyen el contexto y la metodología del proceso de investigación del cual surge esta tesis.

El capítulo tercero expone por medio de la preparación del terreno, la primera faceta del concepto de *performance-ejecución* como una acción situada y particularizada con la que los campesinos tzeltales responden a las particularidades y complejidades de sus contextos agronómico y político. Estos contextos son importantes para explicar cómo y porqué ellos escogen entre la roza-tumba y quema (RTQ) y la roza-pica (RP) para preparar sus terrenos. Terrenos que están amenazados por desalojos debido a un conflicto histórico de propiedad y manejo de la tierra. La RTQ es considerada por el gobierno una actividad destructiva que justifica desalojos, mientras que la roza-pica (RP) es usada por los campesinos como una estrategia política que los evita. Estos campesinos seleccionan entre estas dos variantes considerando sus contextos agronómicos y políticos. Por lo que primero describo las complejidades del conflicto histórico de propiedad y después narro los detalles agronómicos de la ejecución de la preparación del terreno que llevé a cabo con Juan y Don Chebo en 2007. Las reflexiones que surgen de la selección de la RP en Salvador Allende llevan a narrar el desalojo violento de Jacinta. Es el testimonio de este evento en que Jacinta, hija de Don Chebo, junto con su familia y otras familias campesinas fueron violentamente desalojadas en agosto de 2007, el que ilustra la magnitud del conflicto de propiedad. Teniendo en mente este desalojo, el capítulo finalmente discute la selección entre RTQ y la RP y se enfoca en sus complejidades y particularidades agronómicas y políticas. El final de este capítulo, se basa en la información antes expuesta para responder a las preguntas de cómo la RTQ justifica desalojos y como la RP se convierte en una estrategia campesina para evitarlos.

El capítulo cuarto desarrolla por medio de la siembra, la segunda faceta del concepto de *performance* como una acción situada y particularizada en la que los campesinos tzeltales negocian la fecha de siembra con sus circunstancias de milpa y de vida. Estas negociaciones se refieren a las coincidencias, ajustes y acuerdos que ellos hacen con sus circunstancias ambiental, tecnológica y social. En primer lugar ellos hacen coincidir la siembra con las circunstancias ambientales que definen dos ciclos de siembra del maíz durante el año. En segundo lugar ellos ajustan el tiempo para sembrar maíz con los demás

tiempos de las prácticas y actividades de la milpa y de sus demás espacios de aprovechamiento. Ya que dichas prácticas como la siembra del frijol y el corte de la caña y el chaporreo del potrero conforman su circunstancia tecnológica. Los compromisos sociales moldean su circunstancia social en la que acuerdan el tiempo y la ayuda requeridos para sembrar. Son compromisos para participar en fiestas regionales en los que estrechan sus relaciones sociales con parientes y amigos que los ayudan a sembrar. También están comprometidos a participar en actividades organizadas por sus organizaciones campesinas o instituciones religiosas que los apoyan a confrontar problemas como la falta de educación, el conflicto de tierra o el suministro de maíz. Todas estas consideraciones alimentan la conclusión de que los campesinos tzeltales integran la fecha de siembra del maíz a su malabarismo de jugar con las circunstancias ambientales, tecnológicas y sociales que conforman su vida.

El cuarto capítulo aprovecha la ejecución de los chaporreo y las doblas, para abordar otra faceta de este concepto. En esta faceta las ejecuciones de estas prácticas de protección de las plantas y mazorcas del maíz, son acciones situadas que se posponen o delegan para en su lugar lidiar con eventos problemáticos cotidianos en la vida de los campesinos tzeltales. Por lo que en este capítulo narro detalles de estas ejecuciones que se intercalan por medio de un recuento cronológico, con los eventos que las pospusieron o delegaron. Así en junio la enfermedad de la esposa de Don Chebo, Doña Mica hizo que delegáramos el chaporreo de la milpa en Salvador Allende. Durante septiembre los efectos de los desalojos acaecidos en agosto retrasaron la dobla en San Martín. En octubre primero la operación de Doña Mica y después la visita a Tabasco organizada por CETAMEX se interpusieron en la dobla de la milpa en Salvador Allende que se terminó delegándola. Este recuento termina con la dobla atrasada ejecutada por Don Chebo que responde al efecto acumulativo de retrasados por una serie de eventos problemáticos. Todo esto muestra, por una parte, que estas prácticas son flexibles en diversas formas y que el cultivo del maíz es adaptable a condiciones de manejo marginales. Por otra parte, los eventos ilustran problemas cotidianos de salud, infraestructura y propiedad de la tierra y nos hablan de su complejidad y permanencia. Asimismo alimentan la conclusión de que aún cuando en el momento estos eventos desplazan chaporreos y doblas, a la larga aseguran que ambas prácticas se sigan implementando. Desde este punto de vista, posponer o delegar prácticas de cultivo se convierten en trucos que los campesinos utilizan como estrategias para confrontar sus problemas cotidianos.

El quinto capítulo describe la última faceta de performance de mediante las tres dimensiones de la cosecha. En esta faceta la dimensión física del juego de pelotas es el punto de partida por el que el malabarista-cosechador entre en las dimensiones reflexivas y evocativas de la cosecha en las que juega con el dilema entre el sentido *versus* el sinsentido de hacer la milpa en esta región. Así se detalla la dimensión física de la cosecha en la que los campesinos

tzeltales desprenden las mazorcas de las plantas de maíz, las clasifican y las preparan para transportarlas a la troje. Esta dimensión permite conocer la cantidad de mazorcas cosechadas, información básica para entrar en la siguiente dimensión de la cosecha. La dimensión reflexiva, por su parte, muestra como ellos valoran todo lo que pasó durante el ciclo de cultivo en lugar de sólo evaluar agrónomicamente el rendimiento del maíz. Asimismo explica cómo la falta de maíz y el dinero que apenas cubre apuros, son razones más importantes que la competitividad, para que los campesinos tzeltales sigan cultivando maíz. Motivos tan importantes como las que hace evidentes la dimensión evocativa de la cosecha, en donde los pensamientos se fortalecen con sentimientos y significados. En esta dimensión el maíz no sólo es cultivo sino también alimento en forma de tortillas y pozol. Es también dimensión donde se escuchan las historias que cuentan los campesinos tzeltales sobre sus diferentes tipos de semillas y se conocen relatos, rituales y fiestas en los que participa el maíz. Todo esto lleva a la pensar que el sentido que tiene el maíz en la vida de los campesinos tzeltales es de compañero de vida.

La conclusión está constituida por las reflexiones finales de esta tesis. Estas reflexiones se enfocan en responder las tres preguntas que expuse en la introducción. La primera pregunta es, ¿cómo los campesinos tzeltales hacen milpa mientras hacen vida en la Mera Selva? La respuesta a esta pregunta subyace en el concepto de *performance-ejecución* y la metáfora de malabarismo. Estas muestran como las prácticas de cultivo no sólo son actividades agrícolas sino también acciones políticas, sociales y culturales. La segunda pregunta es, ¿qué es lo que estas diferentes ejecuciones muestran sobre la situación de milpa y vida de los campesinos tzeltaleses. Su respuesta nos lleva a los problemáticos eventos y episodios que no sólo afectaron las diferentes ejecuciones de las prácticas de cultivo en 2007, sino que también mostraron las complicadas relaciones entre los estos campesinos y otros actores como son el gobierno, organizaciones no gubernamentales y comerciantes regionales. También nos lleva a discutir al término coloquial “estar jodido” que utilizan los campesinos tzeltales para referirse a su situación de vida. Finalmente la última pregunta es ¿qué captura el concepto *performance* y la metáfora de malabarismo que diferencia esta tesis de otros documentos que hablan sobre el maíz, la milpa y la vida de los campesinos indígenas? Su respuesta está conformada por tres elementos que la distinguen. La primera distinción destaca la forma en que dicho concepto y metáfora relacionan agricultura y vida y como es diferente a otros trabajos mono y multidisciplinarios. La segunda distinción aparece al enfocarse en “asociaciones inesperadas” como una forma reflexiva de alcanzar nuevo entendimiento. La última distinción se refiere al hecho de que tanto *performance-ejecución* como malabarismo buscan capturar experiencias considerando la complejidad de la vida. Es por ello que hay sentimientos presentes en este texto para acercar al lector a la experiencia de vida que implica hacer milpa en la Mera Selva.

ACKNOWLEDGMENT

In this long PhD journey there were several times when I felt lonely and I had the impression that I was walking alone. However, now that is the moment to acknowledge all those who joined me in this trip I recognize this as a collective effort in which I had learned how company can be so diverse that there is more names than space to thank. But let me try to recall them.

In first place there was this type of company that appeared when joined decisions were taken to bring me into new worlds. Names as Conny Almekinders and Angel Roldán appeared in my mind, as they were the ones that opened me the front doors to the worlds of Wageningen University and of La Mera Selva. To both of them a deep thanks because they started the long chain of trusting and deciding in favour on me. Others like Gerard Verschoor, Eusebio Jimenéz (Don Chebo) and Juan Gómez not only opened doors and windows but also showed me the small details of their worlds. To the three of them I am grateful because they not only shared with me their time but also their knowledge and wisdom. To all of them I thank because from them I learned about their everyday lives not only as supervisor/researchers, indigenous peasants and NGO workers but also as human beings with so many problems as passions and aspirations.

In second place, there was other type of company that occurred less frequently but that became crucial for this journey. This was the case of Leontine Visser who I thank for our rich talks and for all her practical support. It is also the case of Paul Richards, Don Eusebio, Anton Zeven, Jan de Vos, Sebastián Jimenéz, Ramón Mariaca, Jenneke van Vliet, Mariano Ruiz, Gemma van der Haar and Jesus Cuevas. Our conversations helped me in the reflections that shaped this research process as a life experience. This is similar with Flor Camacho, Donato Scarafino and Mieke Kuitjers who expended their eyes and their minds reading and commenting drafts from the different chapters. In a more practical way I thank Anneke Ritche (who helped me in the English translation and the edition of this manuscript), Chío (who designed with me the beautiful cover) and to Mieke (who made the precious textile-art of the cover back). I am also grateful with the Consejo Nacional de Ciencia y Tecnología (CONACYT), Ford Foundation and Fundación Camacho who facilitated the financial support to walk this long journey. I also want to recognize the support of Jos, Inge and Annelies in all the administrative matters of this PhD process.

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The last type of company is the one that you meet in one moment of your life and decides to stay with you for a long, long time. For this type of company to say thanks is senseless and it is better to recognize that you are a lucky person to have them in your life. This type company arrives with life friends. Friends as the ones that I met during my previous life journeys and that were present in this PhD experience. The emails, chats and visits of friends like Alina, Pibe, Fragroso, Juan, Erika, Gracia, Maria, Kythzia, Carmen, Donald, Miguel Angel, Felipe, Yadira, Tere, Alberto and Ramón were warm hugs that made this journey more enjoyable. It is also the case of family with whom one has not only a blood tight but also a shared past, present and future history. They have not only the key information of your life but also the magic to make you feel part of something bigger. Mama, Flor, Ray, Beto, Javier, Marina, Lorena, Jesus, María, Luis and Adriana you have that magic. This is also the situation with persons who are not physical present but that make you company. The memories of my father, my grandmothers and Don Esteban were a special source of motivation. As special as the inspiration that life has been bringing me with gifts such as discret dutch sunrises, relaxing prohibited lakes, inspiring flute melodies and maize company. To all of them I acknowledge, as they have been an important part of this collective effort and of who I become after this long journey.

CURRICULUM VITAE

Tania Carolina Camacho Villa was born in Mexico City. In this city she grew up surrounded by a humanistic environment created by many lawyers and elementary school teachers in her family. She studied at *Universidad Autónoma Chapingo* where she learned about natural sciences by studying the bachelor on Crop Sciences. There she had the opportunity to meet the various and contrasting realities that constitute rural life in Mexico. During the last years of her studies she became interested on plant genetic resources (with special attention to maize conservation) and she got involved in some projects about on farm conservation. She made her internship in the Maize Seedbank of the Wellhausen-Anderson Plant Genetic Resources Centre of the International Maize and Wheat Improvement Centre (CIMMYT) and there she learned about *ex situ* conservation. After finishing her career she continued working on this topic by participating in the project “Strengthening the Scientific Basis of *in situ* Conservation of Agricultural Biodiversity” implemented by *Centro de Investigación y Estudios Avanzados del Instituto Politécnico Nacional* in Yucatan. There she met traditional Mayan farmers that made her become interested not only on maize diversity but also in the people who cultivate it.

During some years she moved from research activities to governmental actions by working in the *Secretaría del Medio Ambiente y Recursos Naturales* (Minister of Environment in Mexico) and gained experiences on environment and natural resources policies. However she came back to her old topic by studying a Master of Science on Conservation and Utilization of Plant Genetic Resources in the University of Birmingham, United Kingdom. Her master research project in the United Kingdom was an opportunity to rethink this topic and to confirm the importance of small-scale and indigenous peasants who cultivate crop diversity. After she finished her master studies she came back to Mexico and she participated on NGOs’ efforts to conserve crop diversity in different parts of the country. During this period the opportunity to undertake a PhD on the Social Sciences Department of Wageningen University was concretized. This PhD thesis is one of the first fruits of what she expects to be a fruitful and enjoyable journey as a trans-disciplinary, life-witnessing researcher.

Annex to statement
Name Tania Carolina Camacho Villa
PhD candidate, Wageningen School of Social
Sciences (WASS)
Completed Training and Supervision Plan



Wageningen School
of Social Sciences

	Name of the activity	Department/Institute	Year	ECTS*
A) Project related competences				
	WUR Course: RSO-30806 The Sociology of Farming and Rural life	RSO, WUR	2005	6
	WUR Course: COM-21306 Innovation Management and Cross-Disciplinary Design	COM, WUR	2005	6
	8 th International Agroecology Short Course, University of California (UC)	University of California, Santa Cruz	2007	3
	“Vida haciendo vida, haciendo milpa en la Mera Selva” in Seminario “Los maíces nativos como patrimonio cultural”	Dirección de Etnología y Antropología Social, INAH México	2011	1
B) General research related competences				
	CERES Orientation Program	CERES, Utrecht	2006	5
	CERES presentation tutorials	CERES, Hilversum	2006	5
	Advanced Research Seminars	RDS, WUR	2005-2010	4
	Advanced Research Seminars	TAD, WUR	2005-2010	4
C) Career related competences/personal development				
	Facilitator: Methods, Techniques and Data Analysis of Field Research	RDS, WUR	2010	2
	Total			36