

Copyright

by

Nancy Aurelia Preciado Rodríguez

2013

**The Thesis Committee for Nancy Aurelia Preciado Rodríguez
Certifies that this is the approved version of the following thesis:**

**Water Dispossession at the Llano en Llamas:
A Research Study by a Daughter of Mexican Farmworkers in the Land
of Her Consciousness**

**APPROVED BY
SUPERVISING COMMITTEE:**

Supervisor:

Rebecca M. Torres

Martha Menchaca

**Water Dispossession at the Llano en Llamas:
A Research Study by a Daughter of Mexican Farmworkers in the Land
of Her Consciousness**

by

Nancy Aurelia Preciado Rodríguez, B.A., B.A.

Thesis

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Master of Arts

The University of Texas at Austin

August 2013

Dedication

A los pueblos que viven en el
Llano en Llamas
y a sus futuras generaciones.

Acknowledgements

I do not have enough words to express the gratitude I feel toward the women, men, and children I came across at the Llano en Llamas. Thank you for giving me the opportunity to conduct this research, to listen to your stories and struggles and for allowing me to learn from you.

Thank you Dr. Rebecca Torres for your support, motivation, patience, and feedback that helped me clarify my arguments. Thank you Dr. Martha Menchaca for all your support and insightful conversations that also helped me develop this thesis. I am also extremely grateful to Dr. Charles R. Hale for the encouragement and invaluable support. Thank you all for challenging me to think about ways to conduct academic scholarship grounded in commitments to social justice.

I also would like to express my gratitude to the staff of LLILAS, especially to Steve Alvarez for all these years of support.

Thank you Jessica Rosalyn Osorio, Angela Tapia, and Myrna Garcia for the informal and formal contributions, for the support and the encouragement. I would also like to acknowledge the indispensable contribution of Vanessa Martinez and Lindsey Carte in the editing phase of this thesis.

Thanks to my family for challenging my notions about the Llano en Llamas, for making my research much more interesting and complex, and for walking along with me in this journey.

Finally, I would like to acknowledge that any strengths reflected in this thesis are attributed to the exchanges, reflections and conversations with all the above mentioned; its limitations and defects are my exclusive responsibility.

Abstract

Water Dispossession at the Llano en Llamas: A Research Study by a Daughter of Mexican Farmworkers in the Land of Her Consciousness

Nancy Aurelia Preciado Rodríguez, M.A.

The University of Texas at Austin, 2013

Supervisor: Rebecca M. Torres

In 1953, Juan Rulfo, one of the most important Latin American writers of the 20th century presents, *El Llano en Llamas* (Burning Plain), a collection of realistic short stories about rural life in the land of his childhood in Jalisco, Mexico. About 60 years after *El Llano en Llamas*, this daughter of Mexican *campesinos*, has also decided to write about the land of her childhood: the same *El Llano en Llamas*. This thesis examines the water dispossession experienced by agricultural laborers living in the municipalities of Tonaya, and San Gabriel, which are symbolically part of the *Llano en Llamas*. By focusing on a corporate socially responsible agricultural company and a mining company in the state of Jalisco, Mexico I argue that both projects of development are dispossessing the communities of their water sources. I also intend to illustrate that currently, the processes of dispossession use modes and logics of power rooted in colonialism.

Table of Contents

List of Tables	ix
List of Figures	x
Chapter 1: An Introduction to the Burning Plain	1
Chapter 2: Methodology and Theoretical Perspectives	6
Methodology	6
Summer 2011	7
Winter 2011-2012	9
Theoretical Perspectives	10
Chapter 3: Background: A Brief History of the Llano en Llamas	14
A Description the Municipalities of Tonaya and San Gabriel	14
Background on the Amula Province	19
The Dispossession of Resources	20
An Embodied Dispossession.....	21
The Effects of the Dispossession: Emergence of a Labor Force	22
The Hacienda System	24
Land Reform in the Llano en Llamas: A Violent Process	26
Background on Neoliberal Reforms: Institutionalized Dispossession.	27
Chapter 4: The Invernadero: Groundwater Dispossession	30
Protected Agriculture	30
Migrant Jornaleros: A Profile	35
Who are the Migrant Laborers in Bioparques de Occidente S.A. de C.V.?	36
Work and Wages	38
Education in the Invernaderos	40
Education and Child Labor	43
Migrant Housing	45
The Local Communities.....	51

Quality Tomatoes in a “Barren Waste Land”?	51
Groundwater Extraction: A Silent Dispossession.....	52
The Dispossession of Water in the Non-traditional Agriculture: Not an Isolated Case	61
Chapter 5: Mining Pollution and Dispossession in Tonaya.....	64
A View of Dispossession: A Brief History of Mining in Mexico	64
Dispossession through the Eyes of the Dispossessed	68
The Mexican Revolution: A Battle for Power	70
The Tonaya Mine Case: The Actors	76
The Mining Company Minera Metalúrgica Tapalpa	76
Affected Communities	80
CODEA/ Río Vivo Tonaya A.C.	82
The Accumulation: Who Benefits?.....	83
The Process of Dispossession	85
The Agreement: A Change in Land Use.....	85
‘Reserved Information’	87
Dispossession of the Communities	88
A Drop of Resistance	91
The Response	99
Chapter 6: Conclusion.....	102
Limitations and Future Research	105
References.....	108

List of Tables

Table 3.1. Haciendas in the Region of the Llano en Llamas, 1865-1900.....	24
Table 4.1. Municipalities Located on the Autlán Aquifer	53
Table 4.2. Public and Water Concessions on the Autlán Aquifer	60
Table 5.1. Financial Association of the Most Important Mexican Mines in 1978 and 2013.....	72
Table 5.2. Water Sources in the Municipality of Tonaya	82
Table 5.3. Cost of Minera Metalúrgica Tapalpa	85

List of Figures

Figure 1.1. The Llano en Llamas (The Burning Plain).....	1
Figure 3.1. The municipalities of Tonaya and San Gabriel	15
Figure 4.1. Protected Agriculture in Mexico	31
Figure 4.2. The Tomato Companies and Sites that were Observed and Visited by Author in the Region of El Llano en Llamas	33
Figure 4.3. Migrant Housing at the Invernadero.....	46
Figure 4.4. Migrant Housing.....	47
Figure 4.5. Outline of the Autlán Aquifer.....	52
Figure 4.6. Paragraph from CONAGUA’s Response to a request of information.....	57
Figure 5.1. The Location of the Mining Company	78
Figure 5.2. Local Map of the Communities in Tonaya.....	81

Chapter 1: An Introduction to the Burning Plain

The aim of this thesis is to examine what will be referred to as dispossession, or the appropriation of water occurring in the municipalities of Tonaya, and San Gabriel, which are located in Jalisco, Mexico, and are symbolically part of the Llano en Llamas (the Burning Plain; see Figure 1.1). By focusing on 1) A corporate socially responsible agricultural company and 2) A mining company, both in the state of Jalisco, Mexico, I argue that these development projects are dispossessing the communities of important water sources. I also illustrate that currently, the processes of dispossession use modes and logics of power rooted in colonialism. For this thesis, colonialism is understood as the concept that explains why the subalterns continue experiencing structures of domination, exploitation, and dispossession of their territory.

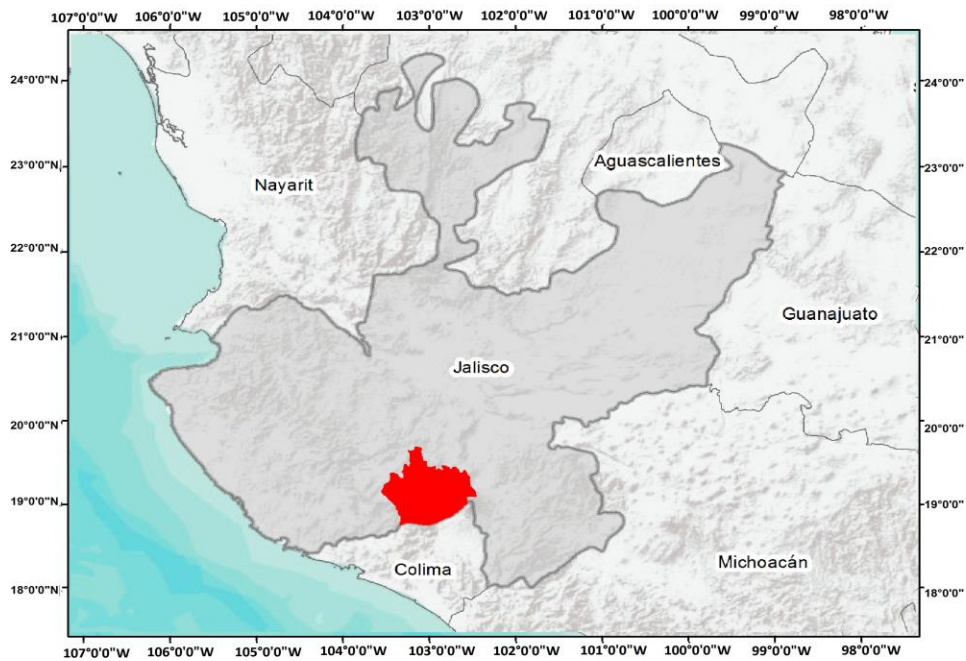


Figure 1.1. The Llano en Llamas (The Burning Plain). (Map by Vincent Clause 2013).

This region is well-known to anyone who has read the literary work of Juan Rulfo, one of the most important Latin American writers of the 20th century who in 1953, published *El Llano en Llamas* (The Burning Plain), a collection of realistic short stories about rural life in Jalisco, Mexico, the land of his childhood. The Llano en Llamas is Rulfo's imagined landscape of the region commonly known as El Llano Grande (The Big Plain), which is geographically situated in the state of Jalisco and includes the municipalities of San Gabriel (Venustiano Carranza), Tonaya, Tuxcacuesco, Tolimán, and Zapotitlán. Rulfo portrayed this region as a *comal caliente* (hot griddle), due to the lack of rainwater and desert-like conditions, or in his own words:

So they've given us this land. And in this sizzling frying pan they want us to plant some kind of seeds to see if something will take root and come up. But nothing will come up here. Not even buzzards. You see them out here once in a while, very high, flying fast, trying to get away as soon as possible from this hard white earth. ... You talk here and the words get hot in your mouth with the heat from outside, and they dry up on your tongue until they take your breath away... A big fat drop of water falls, making a hole in the earth and leaving a mark like spit. It's the only one that falls. We wait for others to fall and we roll our eyes looking for them. But there are no others.... And the drop of water which fell here by mistake, is gobbled up by the thirsty earth (Rulfo 1995, 10-12)

Furthermore, the *cerros* (highlands) that surround the region, which include the Colima Volcano and the Sierra de Tapalpa make it feel as if it is a "little desert between the coast and the mountains" (Zárate Hernández 1997, 26). For my *abuelitas* and *abuelitos* (ancestors), the territory was magical and populated by *ánimas* (spirits) whose mission it was to protect its hidden treasures. For myself, as well as for many locals who participated in this research, those hidden treasures are not the typical, gold, coins, etc., but rather something even more precious: water.

These stories explain that the only way to have access to such treasures is by selling your soul to the devil or making pacts with the *ánimas*. The highlands, they say,

are covered with caves that hold treasures protected by spirits. The ancestors also talk about the Petacal Cerro, an enchanted area in the highlands that is home to a surreal city with immense treasures that only opens its doors during Good Friday. They also narrate stories like that of the “Ojo de Agua de Coatlanillo” (The Coatlanillo Spring), where the mouth of a spring is covered by a rock that if removed will immediately flood the whole region. These two narratives illustrate well the reality of the landscape. The region of the Llano en Llamas is a mere desert on the surface, but holds abundant groundwater. While historically there has been very little investment in the region, as technology advances, this area is suddenly becoming attractive for agricultural and mining investment.

Although the description of the region is important, Rulfo’s short story also illustrates the life of the *campesino* (peasant) in the region. For example, he captures the happiness of a *campesino* felt after land redistribution that occurred after the Mexican Revolution in 1910. During this time of social uprising, the nation regained ownership of its territory and natural resources, and redistributed the land to the campesinos (peasantry) (Hart 1997). The revolution was of extreme significance to the peasantry since it shocked the accumulation process of immense landholdings by foreign and local elites, allowing peasants to regain control of their land and labor. However, Rulfo also captures a glimpse of colonialism and the subsequent sadness experienced by the campesino due to the ‘*tierras malas*’ (bad lands) that were distributed to him. The experience of this campesino is important because it provides the description of the dark side, which is often left out of historical accounts, and which represents an open wound that remains and continues tearing under the concept of modernity.

I highlight this symbolic representation of the territory because 60 years after Rulfo’s *El Llano en Llamas*, this daughter of *campesinos ejidatarios* (communal

farmers), has also decided to write about the land of her childhood: *El Llano en Llamas*. I was born in this territory surrounded by caves and magical spaces that contain immense treasures protected by demons and spirits, but also in a desert-like region where a good harvest is dependent on rain water. In this region, accessing the ‘hidden treasures,’ which I argue is water, depends on making deals with the devil or acquiring the investment necessary to extract it. In this thesis I describe not the deals with the devil but rather how two companies are dispossessing the people from their water sources. In order to accomplish this, I focus on a corporate socially responsible agricultural company (Bioparques de Occidente S.A. de C.V.) that produces greenhouse tomatoes for export, and also on a mining conflict in the municipality of Tonaya.

The argument that I make is three-fold. First, it requires the recognition that colonialism in the region has not ended, that the structures of oppression and exploitation continue to dehumanize the people of the region through jobs that treat them as commodities. Second, I describe how the consequences of living under the structures of colonialism facilitate the entry of modern development projects that continue colonizing people and nature, creating a vicious cycle of oppression and injustice. This type of development project is posited by the State as the only development alternative. Consequently, laws are changed to ensure companies full access to natural resources, such as water, via a process of privatization. Third, I argue that this process of privatization acts as a mechanism that dispossesses the ejidatarios and campesinos of their social patrimonies, such as water, human rights and land. The privatization of water in this sense is a dispossession that requires access to land and the neglect of people’s right to water.

The remaining chapters are organized as follows: Chapter 2 outlines the methodology used to conduct this research and describes the theoretical perspectives that

frame this thesis, which are based on Harvey's concepts of "accumulation by dispossession" and on the theory of colonialism (Barajas 2009; González Casanova (1969) 1980; Moreno Nahuelpán et al. 2012; Rivera Cusicanqui 2010b). In Chapter 3, I provide a background history on the Llano en Llamas to illustrate how exploitation, oppression and domination have continued despite Mexico's liberation movements and how more recently those processes that maintain people in a state of subordination are embedded in neoliberalism. In Chapter 4, I describe the importance of the protective agriculture in Mexico, which leads to a discussion on a corporate, socially responsible agricultural company, and the implications for migrant agricultural workers living and working under a socially responsible company. I also argue that locals in the desert-like region of the Llano en Llamas are experiencing the dispossession of their underground water sources.

In Chapter 5, I discuss the mining conflict in Tonaya, Jalisco. I first present a brief discussion of the history of mining and mining legislation in order to describe the process of dispossession and its rootedness in colonialism. Second, I illustrate the struggle of the communities to stop the dispossession of water sources, showing how environmental, economic, and social costs are transferred to the local communities with impunity. Finally, I expose the violent response of the mining company and the government to reduce or stop community resistance. Then, in Chapter 6, I provide a conclusion, also discussing limitations and future research directions.

Chapter 2: Methodology and Theoretical Perspectives

Methodology

The field research for this thesis was conducted during summer 2011 (10 weeks), and winter 2011-2012 (4 weeks). In this thesis I sought to answer the following questions: 1) What facilitated the introduction of mining and the agro-industry in the region? 2) How did the companies acquire resources such as water and land? 3) What has been the response of the communities as they experience uneven development? To answer these questions, I employed an ethnographic and qualitative multi-methods approach, which consisted primarily of in-depth interviews with campesinos, mostly ejidatarios and migrant laborers, in the municipalities of Tonaya, and San Gabriel, and also conducted a short survey in the municipality of Tuxcacuesco. In total, I conducted 23 in-depth, semi-structured interviews with female and male local community members and seasonal migrant agricultural workers (both children and adults). I also conducted three interviews with local public officials, and 20 surveys, which I ultimately did not include because they were not statistically significant. All participants were chosen using a snowball (word-of-mouth) sampling technique, which relies on the use of community networks to meet participants who then suggest to researchers other potential participants (Babbie 2008). Due to research-participant confidentiality agreements, most of my participants will remain anonymous throughout this thesis.

In general, I explored topics on traditional agriculture, international and internal migration, employment, and environmental devastation, as well as perspectives of the two modernity projects, the local economy, health, and land tenure (i.e. land ownership/rental). The following two sections provide details regarding the research I conducted during the summer and winter sessions.

Summer 2011

I began my research in my native community of Tonaya, Jalisco, Mexico. Due in large part to questions of accessibility, I first conducted a small pilot study with my nuclear and extended family. Questions in the pilot study covered the following themes: traditional agriculture, migration, perceptions on tomato greenhouse producers, and the current struggles of campesinos. My family network also suggested other ejidatario participants in the community of Tonaya and in the community of El Paso.

During the same summer, I also conducted interviews in Tonaya with the few workers who were employed at the two greenhouses. These participants were suggested by friends who resided in my community of Tonaya. Eventually, by using the snowball method, I was able to enter the *albergues*, (migrant housing camps) owned by the company Bioparques De Occidente to conduct in-depth interviews with the *jornaleros*, or migrant agricultural laborers. At the migrant housing camps I conducted 1-2-hour interviews with jornalero families. The questions were open-ended, covering themes of migration, family history, their native community living conditions, contract labor practices, education, wages, child and labor exploitation, and health, working and living conditions in the albergue. Due to the fact that I had limited access to the jornalero families, observations documented in field notes also played a significant role in this research, as will be related in following chapters. All of my participants were requested to be recorded; however, most of my participants in migrant housing refused to be recorded and therefore, written notes were taken.

During the time I was conducting interviews, I was also teaching a small course on survey methods with a youth group of about 20 students in my local community of Tonaya. The purpose of the course was to train the students how to conduct and analyze a survey, with the hopes of recruiting some of them to assist me in my own survey.

However, said potential assistants ended up not being used for this research for reasons explained below.

The participants I interviewed in Tonaya reported that the company Desert Glory no longer had an albergue on-site, and that most of the migrant workers were housed in the communities of El Platanar and San Miguel. A visit to the company confirmed that there was no visible albergue on-site. This changed the dynamic of my study since it eliminated the possibility of on-site research, and I had to find alternative ways to reach the migrant laborers and locals.

Thus, I chose to employ a survey in order to gather local community views on the greenhouses and to obtain a greater number of interviews with migrant workers who rented in the local community. At around this time my research was interrupted due to unforeseen health circumstances and I was only able to obtain 20 surveys, which are not included since they are not statistically significant.

While I was conducting research, a major event occurred in my community of Tonaya: the discovery that the mining company Minera Metalúrgica Tapalpa S.A. de C.V. was responsible for polluting the local river. I learned about the pollution through a community gathering and felt that as a researcher, I had the responsibility to document and analyze the mining conflict. In essence, this conflict determined the focus of this research. As a member of the community of Tonaya, I began to find out more information about the conflict. As I reflected on my research, I realized that I was looking at the dispossession of social patrimonies in the Llano en Llamas. I therefore decided to include the mining conflict in my findings in order to describe how dispossession was affecting agricultural residents. The inclusion of the mining conflict forced me to limit my research to only one greenhouse company and so I chose the more emblematic of the two: Bioparques de Occidente S.A. de C.V., due to its size and workforce.

Winter 2011-2012

I returned to the region during the month of December, in 2011 and half the month of January, 2012 in order to carry out further field research. During this time, I conducted interviews with local elected representatives in the municipalities of San Gabriel and Tonaya. Again, I employed the snowball method. I decided to use this method because it was the fastest way to gain people's trust, due to the fact that I was recommend by someone they knew. The method also allowed me to reach those most affected by the environmental pollution, community members from Santa Gertrudis and El Alpizahuatl.

I also submitted requests for information from the municipal government, state environmental organization, and other organizations, such as the Commission for the Defense of Water (CODEA, its acronym in Spanish), as well as the Ayuquila River Integrated Watershed Management (JIRA, its acronym in Spanish), a public decentralized body integrated by ten municipalities that provides technical and managerial assistance, and environmental programs and projects. In addition, the interviews were focused on work history, water pollution, water access, health, economic and human rights concerns, perspectives on mining activity, and the mining conflict. During this time, I was also conducting interviews with campesinos in the municipality of San Gabriel about traditional agriculture, migration, employment, land tenure and use, environmental degradation, and their perspectives on the company Bioparques de Occidente S.A. De C.V.

However, I also draw from my own personal experience and knowledge in this area. I am the daughter of ejidatarios. I worked the ejido land alongside my family throughout my entire childhood until our migration to the U.S. In the U.S., most of my family is employed as farmworkers. The primary reason I include my personal

experience is because it is the basis of my interest in conducting research in the region. As I visited my community Tonaya, I began to notice the transformation of the Llano en Llamas: we were no longer harvesting corn, people were renting their plots to the modern agave industry, and the massive tomatoes greenhouses appeared to be transforming entire communities. I was curious as to the impacts of such industry, and I specifically wanted to know how they were affecting my native town of Tonaya, Jalisco.

As I began asking about the greenhouses, I realized that only a small number of the people in Tonaya were employed in the greenhouses, and that the majority of the people in Tonaya were employed by the various *mezcaleras* (agave companies) in the agave industry. As I was determined to find out about the tomato greenhouses, I decided to expand my research into other communities that are part of the municipality of San Gabriel, which is also part of the Llano en Llamas. While doing research in my home community Tonaya, I was well-known by community members and finding interview participants was much easier. But, as I expanded research to other communities, relationships with potential participants were much more distant and in those instances I did feel like an outsider.

Theoretical Perspectives

David Harvey's (2003) concept of accumulation by dispossession is an important framework for understanding world capitalism and modernity projects' predatory modes. This concept describes the process by which people, in all parts of the world, are dispossessed from their social patrimonies (i.e. land, water, rights) in order to satisfy the insatiable system of capital accumulation. More specifically, Harvey sees this concept embedded in Marx's description of "primitive accumulation." The processes described by Harvey include:

The commodification and privatization of land; the forceful expulsion of peasant populations; the conversion of various forms of communal property rights (common, collective, state, etc.) to private property rights; the suppression of rights to the commons; the commodification of labour power. The suppression of alternative [I]ndigenous forms of production and consumption; colonial, neo-colonial, and imperial processes of appropriation of assets (including natural resources). (145)

In Harvey's description of Marx's 'primitive accumulation' the processes of appropriation of assets appear to have a colonial history. However, Harvey indicates that the new political economic doctrine known as neoliberalism is traceable to the 1930s, a time in which there was radical opposition against any form of State intervention. For Harvey, neoliberalism is an economic and political practice at the national and international level that promotes privatization of property rights, deregulation, market liberalization through foreign investment, free trade, and the reduction of State intervention in social programs. Furthermore, Harvey illustrates that the neoliberal doctrine became apparent in the 1970s due to a crisis of over-accumulation that positioned the neoliberal doctrine as the alternative to state-centered frameworks (Harvey 2003).

I concur with scholars who indicate that Harvey's "accumulation by dispossession" is a useful concept for understanding the activities of modern development projects (i.e. mining) (Bebbington and Humphreys 2009; Garibay et al. 2011), but must add that as an insider/outsider researcher the theory of "accumulation by dispossession" helped me to explain the dispossession of water in the region, but did not explain the campesinos's status of subordination that facilitates such process. By reflecting on the concept of colonialism and the theory of accumulation by dispossession, I have come to understand that Mexico is a colonial state with a neoliberal model that maintains the peasant in a state of inferiority and inequality.

Therefore, in this reflection I provide a definition of colonialism that has helped me to understand more of this historic process of subordination. Colonialism for the purpose of this thesis is understood as a comprehensive project of domination in which the colonizer appropriates the land, labor, and resources, violently imposes their dominion over the political, economic, and cultural, privileging the colonizers over the colonized subjects (Barajas 2009; González Casanova (1969) 1980; Moreno Nahuelpán et al. 2012; Rivera Cusicanqui 2010b). However, I must add that there are many ways to reflect on colonialism (i.e. coloniality of power, colonial horizons, modernity/coloniality, internal colonialism, interactive colonization, postcolonial, neocolonial, etc). I do not intend to delve into each of these, but rather to illustrate how dispossession plays a role in the subordination of the subaltern and vice-versa.

The dominant belief in many disciplines is that colonialism was a historic period marked by the conquest of the Spanish in America that ended after independence. It assumes that colonial structures of violence, domination, exploitation and appropriation were eliminated by the formation of the new State. However, contrary to this belief, colonialism continued restructuring internally within the State; this is the concept of internal colonialism developed by Mexican sociologist Pablo González Casanova in his book *Sociología de la explotación* (1969) 1980.

For González Casanova (1969) 1980, internal colonialism is the condition that develops after processes of independence or liberation, in which the nation develops a system of internal oppression and exploitation. Silvia Rivera Cusicanqui is a Bolivian sociologist who by analyzing Bolivian historic processes of domination sees colonialism as a “horizonte colonial” (colonial horizon) of three cycles: 1) The colonial horizon, 2) The liberal, and 3) The populist. She further defines internal colonialism as a form of domination that is not just an internal structure but an internalized structure (Rivera

Cusicanqui 2010a). In other words, the subaltern through an inferiority complex feels as if he has no right to reclaim.

Mexico's colonial state and more specifically the internal elite facilitated the entry of the neoliberal economic model for which dispossession also plays a huge role. For Harvey, dispossession is capital's way of overcoming crises of over accumulation. This dispossession is primarily done through privatization of nationalized industries or public goods such as water (Harvey 2003). However, the dispossession of water can take other forms, for example, contamination that also removes water from the public sphere by making it unsuitable for public use. Along these lines, Geographer Tom Perreault examines mine-related water in the Huanuni River Valley in Bolivia, putting forth the concept of dispossession by accumulation, an inversion of Harvey's accumulation by dispossession, in order to explain how water dispossession occurs. Perreault (2012) suggests that water contamination dispossession happens through three processes of accumulation: accumulation of toxic sediments; accumulation of water and water rights; and accumulation of land as the spatial footprint that grows over time (ibid). For Perreault, accumulation is not the driving force that necessitates dispossession as it is for Harvey, but rather the accumulation that causes the dispossession. In the case of water dispossession in the Llano en LLamas, these two concepts are complementary. In other words, the concept of Perreault and that of Harvey both illustrate a dispossession based on uneven power relations that continues reproducing itself, further affecting the livelihoods of the most marginalized.

Chapter 3: Background: A Brief History of the Llano en Llamas

To write about dispossession in the region of the Llano en Llamas is to talk about the continuation of colonial structures of government and violence that are both rooted in colonial history and constantly reformulating themselves. It is to talk about the continuation of relationships based on fear dispossession, and exploitation that facilitate the creation of a constant labor force. Writing about colonialism and “accumulation by dispossession” (Harvey 2003) forced me to analyze how we, the people of the Llano en Llamas, and in particular the people of the municipalities of Tonaya and San Gabriel were colonized, and then to figure out how colonialism continues to affect the region today. The following passages are structured in the following matter: 1) Identification of the study area and general description of the municipalities of Tonaya and San Gabriel, 2) Background of colonialism in the region, and 3) Background of neoliberal reforms.

A Description the Municipalities of Tonaya and San Gabriel

In this section I provide a general description of the communities in which I conducted research, based on municipal reports and interviews with their inhabitants (see Figure 3.1 for location). The population of the municipality of Tonaya is 5,557 inhabitants, who reside in 23 different communities within the municipality (Cerón Núñez 2010). The municipality San Gabriel has a population of 15,310 divided amongst 70 communities (Guzmán Mora 2013).

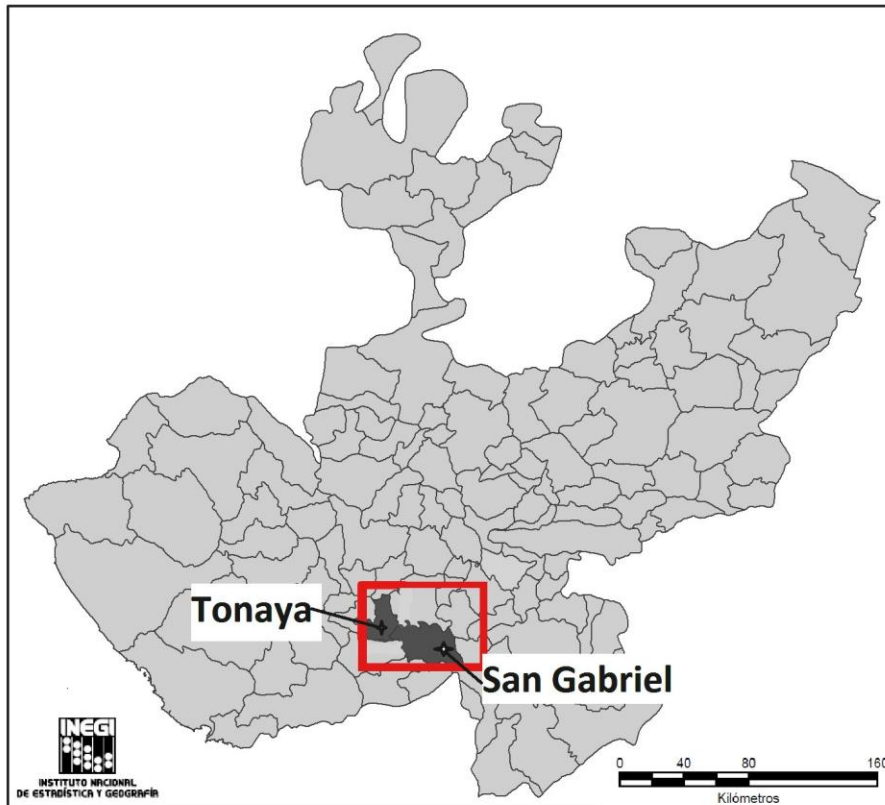


Figure 3.1. The municipalities of Tonaya and San Gabriel. (Map adapted from INEGI 2013).

In order to maintain the anonymity of my participants, I will not disclose the name of the communities in San Gabriel where I conducted my research. To reference them, I will say the communities of the municipality of San Gabriel. I do, however, provide the name of the communities of Tonaya since those communities are publicly known due to the mining conflict in the region. Nevertheless, I maintain the anonymity of my participants.

Overall, both greater communities have high levels of marginalization that, according to municipal reports is due to low productivity caused by lack of employment opportunities, soil erosion, and environmental devastation. Consequently, the low standards of living have pushed the population to migrate to other places in search of

better opportunities (Cerón Núñez 2010; Guzmán Mora 2013). Indeed, migration is evident in the region, as evidenced by my visit to one of the ejidos, which was mainly composed of older women who were either widows or their husbands and sons were in the U.S. I too am a member of one of those rural families that have migrated to the United States as a result of lack of opportunities, and almost everyone I visited has been in the United States or has a family member living there.

The rural residents that remain in the region indicated that their economic endeavors are primarily dedicated to cattle ranching and agriculture. To a certain extent, migration to the United States has helped lessen the shock created by the neoliberal restructuring of the agricultural sector since it provides some type of economic support to invest in agriculture. However, the support has not been enough, as my participants shared that investing in their parcels has become expensive due to the costs of the inputs, such as seeds, fertilizers, labor, etc. One of my participants who is in a cooperative that keeps track of the money invested in each hectare shared the following,

The harvest right now is costing us \$9,000 pesos [about \$736 USD] per hectare and in order to make something, we need at least two tons to be produced...so we are praying to God to send the water.¹(Personal Interview with rural resident in Tonaya 2011; my translation)

Most of the campesinos in the region also participate in cattle ranching. However, having cattle requires year-round access to pastures and during the dry season it costs about \$5,000 pesos (\$410 USD) for 15 to 20 hectares of pasture, or in some places 500 pesos per cattle head (Personal Interview with cattle rancher in Tonaya 2011). As indicated by some of my participants, the ejidos are adjusting, and in some ejidos the

¹ “Pues ahorita me está costando la hectárea de siembra, cuesta, de yo esperar que Dios nos mande el agua y que todo salga bien a 9,000 pesos la hectárea...ay hijole de la mañana y para sacar necesitamos que perdido con dos toneladas que salgan este año por hectárea” (Personal Interview with rural resident in Tonaya 2011).

communal land is used to provide pastures to cattle (Anonymous, cattle rancher in San Gabriel, 2011). The rural residents shared that some cattle ranchers have land but no water, and they have to carry water to the cattle. If they have water wells, water is pumped to *pipas* (water tanks) and emptied in *bebederos* (drinking troughs). If they do not have water, then they carry it from the river. However, for those who are older or physically incapable of carrying water, the alternative is to rent their parcels, as indicated by one of my female participants “the majority rents their parcels, some do invest in the harvest, but very few”² (Anonymous, rural resident in San Gabriel 2011; my translation).

The majority of the rural residents in the region, especially those who lack access to water are renting their parcels, mostly to the tequila or agave industries. My participants indicated that those who get involved in land sales are mostly those residing in the United States. For those who remain in the communities, renting their parcels to the tequila industry is a more economically viable option than harvesting, as illustrated in the following statement:

From the harvest you don't make a lot, for example I have two parcels, one is 11 hectares and the other 12 so in reality 23 hectares, and I don't make 40,000 pesos [\$3,284 USD] from harvesting corn... In renting they pay you \$2,300 pesos [\$189 USD] per hectare.³ (Personal Interview with rural resident in San Gabriel 2011; my translation)

Not all ejidatarios have 23 hectares; on average; they have 8 hectares of land for harvest (Personal Interview with farmer in Tonaya 2011). In the areas where there is less access to water, the agricultural residents tend to rent their plots to the agave industry; however, those who live in the regions that are closest to the sierra indicated that:

² “La mayoría renta sus parcelas, algunos sí invierten en la cosecha, pero muy pocos” (Personal Interview with rural resident in San Gabriel 2011).

³ “Pues de la cosecha no se saca mucho. Mire por ejemplo yo tengo dos parcelitas una es de once y la otra de 12 pues en realidad son 23 hectáreas y entonces me dan más de \$40,000 pesos, de maíz no los saco, libres. Y aquí es libre... Nos están pagando por la rentada a \$2,300 por hectárea.” (Personal interview with rural resident in San Gabriel 2011).

Here, no one wants the mezcal [agave plant]; they do offer good money but, take a look at the devastation of the land and the forest. If a tree is at about 100 feet from the mezcal with the liquids that they are spraying, it dies. Even if the tree is a meter thick, it dies because those liquids are to prevent any type of plague, so nothing grows around the mezcal, and also for a speedy harvest.⁴ (Personal Interview with rural resident in Santa Gertrudis 2011; my translation)

Although the mezcal was a traditional crop in the area, the modernization of the industry has changed traditional process of producing mezcal. Now, more chemical substances and modern processes are used to eliminate plagues. These processes are happening in Tonaya, where the tequila industry is predominant. There are seven distilling companies in the municipality: Almoloyan, Dos Gallos, el Roble, Costeño, Tonayan, Mezcalito and Tres Coronas (Gerritsen et al. 2010; Tonaya registry 2011). Most of the people in the municipality of Tonaya are employed in the distilling companies. It is also important to note that for some of my participants who decided to produce agave on their own and thus, did not enter into a rental agreement it is difficult to sell the agave plants. The industry pays very low prices for the agave plant. According to my participants, the agave industry was only offering to pay 70 cents per kilo. On average, an agave plant is about 35 kilos. Thus, at 70 cents per kilo, a grown agave plant would be worth about \$24.50 pesos or the equivalent of \$2 dollars. Thus, for many residents it is not economically feasible to grow their own agave. According to my participants, in the communities of San Gabriel, where water is a scarce resource about 70 percent of the rural residents are renting hectares of land to the agave industry. As we can see, to be a campesino and survive in this region is very difficult. But, this difficulty has a history that started with colonization of the region.

⁴ “Aquí nadie quiso mezcal porque sí ofrecen un dinerito pero y a viendo el destrozo con la tierra y con el bosque. Porque si dejan un árbol a cien metros de donde está plantado el mezcal y con los líquidos que van tirando, de muchos años se muere. A un esté de un metro de grosor se muere por lo fuerte que son los líquidos, esos líquidos son para retener todo tipo de plaga. Para que no le nazca nada al mezcal y que pronto este de cosecha.” (Personal Interview with rural resident in Santa Gertrudis 2011).

Background on the Amula Province

A brief description of Mexican history, beginning with colonization by the Spanish illustrates the origins of colonialism and how it continues restructuring itself in the region. More than 500 years ago, what is now known as the region of the Llano en Llamas was an Indigenous⁵ zone known as the Provincia de Amula (Amula Province) (Sauer 1948; Zárate Hernández 1997). Around the 1540s, the Amula Province was comprised of about 24 *pueblos*, or villages, which included Tonaya as the head *pueblo* of Tuscacuesco and San Gabriel as the head *pueblo* of Zapotitlan (Sauer 1948). A head *pueblo* is equivalent to a municipality that includes many communities. At the time of the conquest, the people of Amula belonged to the province or *reino* of Michoacán and paid tribute to the lord of Michoacán, who was known as Cazonzi (Tzintzíncha Tangaxoan II) or Don Francisco in his Christian name (Escobar Olmedo 1997; Sauer 1948). Although, the province was primarily ethnically Tarascan, the non-Tarascan provinces were Tamazula, Zapotlan, Tuxpan, Amula and Tuxcacuesco (Sauer 1948; Zárate Hernández 1997).

This area became a focal point of exploration after the fall of Tenochtitlán, when Hernán Cortes began sending expeditions for expansion westward towards what is now Colima, Michoacán and Jalisco in search of new sources of wealth (Sauer 1948). Some of the known conquistadors that explored this westward region were Parrillas, Montañó, Cristobal de Olid, Gonzalo de Sandoval, Juan Alvarez Chico and Alonso de Avalos. All of these conquistadors, including Francisco Cortes de Buena Aventura abandoned their

⁵ The words “Black” and “Indigenous” have been capitalized just as the dominant grammatical language capitalizes “European” and “American” when referring to specific peoples. Capitalizing Black and Indigenous is a symbol of empowerment. Here it also used to resist the colonizer’s language which is a mode of cultural domination and internalized colonization on the “Other”.

*encomiendas*⁶ and simply left the region (Arevalo Vargas 1979; Sauer 1948). Nuño De Guzman, a Spanish conquistador, raided the territory around 1529, claiming it for the Spanish crown, and indicating that he saw no trace of Spanish dominion (Arevalo Vargas 1979). For the most part, the Indigenous people in this territory did not violently resist the conquest by the Spanish; in fact, they welcomed them as guests (Arevalo Vargas 1979; Ortiz García n.d.; Sauer 1948). However, more than being welcoming hosts, it was a decision to surrender peacefully that was agreed upon by Cazonsi's cabinet or *consejo* after they saw Cuauhtémoc distraught and Mexico City destroyed (Escobar Olmedo 1997).

The Dispossession of Resources

As colonized subjects, the people that lived in the provinces of Amula, Zapotlán and Tuspa were forced to provide the Spanish with tributes such as food and animals, and also with slaves for the maintenance and exploration of mines (Reynoso 1961; Zárate Hernández 1997). However, the sacrifices made by the people in the provinces were not enough to satisfy the Spanish thirst for accumulation and more violent processes were used to dispossess people from their resources. This is illustrated by Bartolomé de Las Casas, a priest and Indigenous rights advocate, in his brief account about the destruction of the Indies:

They put him in fetters and tied his hands to a plank which ran the full length of his body; they then lit a brazier under the soles of his feet and had a lad with a hyssop filled with oil sprinkle them from time to time to ensure a nice even roasting. On one side of the hapless victim stood one tormentor holding an armed crossbow pointed at his heart, while on the other stood a second holding a wild dog which constantly snapped at him and which would have torn him to pieces in the twinkling of an eye. They went on torturing him in this way, trying to get him to

⁶ An *encomienda* was how Spanish conquistadors distributed Indian towns to other Spaniards. The distribution was made in the form of a grant that included the tribute of Indians and their labor, and in return the Spanish were to care for the Indians (Meyer, Sherman and Deeds 2007).

reveal the whereabouts of the gold and silver he was supposed to possess. (Griffin 1992, 65)

The account by Bartolomé de Las Casas describes a violent process of dispossession that is founded on the dehumanization of the Indigenous lord of Michoacán. The action appears to be an attempt at creating fear in the Indigenous people so that they will surrender mineral resources such as gold and silver. In this sense, the relationship that emerges between the Spanish and the Indigenous people is based on a system of fear, dispossession, domination and exploitation.

An Embodied Dispossession

Colonization was not only based on the dispossession of resources such as gold, silver, and land, it was also an embodied dispossession. Specifically, dispossession included human flesh, which is exemplified by the drastic decrease of the native population. The region was very well populated, but the population significantly decreased due to diseases brought by the Spaniards, causing many deaths, and causing others to flee (Acuña 1988). In fact, some scholars argue that the pueblo of San Gabriel was founded by Indigenous migrants fleeing from the original pueblo of Amula, originally located by the slopes of the Colima volcano (Acuña 1988; Sauer 1948). However, Guzmán Mora refutes this claim and attributes this specific migration to an eruption of the Colima volcano (Guzmán Mora 2013), and Bartolomé de Las Casas attributes the significant reduction of the natives not only to the diseases brought by the conquistadors but also due to looting of towns and villages. Regardless, it is undeniable that the arrival of the Spanish was devastating for Indigenous populations in the region not only due to the diseases they brought, but also due to the harsh treatment they inflicted on native peoples:

It is said that this man was directly responsible for the looting and destruction of eight hundred towns and villages throughout the kingdom of Jalisco and that it was because of his harsh treatment that the local people, seeing all around them perish under the Spanish yoke, were driven to despair and, fleeing into the mountains, finally began to offer a measure of organized resistance, killing a handful of their oppressors, as in all justice they were fully entitled to do. As they were subjected to more and yet more injustice by Spaniards passing through the region on their way to tyrannize other provinces (or, as they would put it, 'explore' them), many fortified themselves in certain mountain redoubts, although even there they were prey to the ferocious assaults which have ravaged and all but depopulated the entire province and which have occasioned the deaths of countless innocents. (Griffin 1992, 65)

The embodied dispossession in all of Mexico made it easier for the colonizers to claim Indigenous lands, as there were large extensions of land left that could be claimed. The vast amounts of lands they began to claim soon took the form of large estates, or haciendas devoted to agricultural products and livestock (Meyer, Sherman and Deeds 2007). In other words, it is at this point in history where we begin to see how dispossession of resources and this embodied dispossession are used as a way for the colonizer to acquire new possessions. Although labor was lost in the embodied dispossession, the colonial system finds ways to create a new labor force.

The Effects of the Dispossession: Emergence of a Labor Force

Another important aspect of colonialism is the creation of a labor force. Around 1542, the Spanish crown prohibited the use of Indians as slaves in the Nuevas Leyes (new laws). It is believed that two aspects that influenced such changes were the ideas of freedom and humane treatment for Indians proposed by Indigenous advocates such as Bartolomé de Las Casas, as well as the high mortality rates in the Indigenous population that significantly affected the tributary system from which the Spaniards were benefiting (Florescano 1980).

The colonial system responded to the limitations placed on the once free Indigenous workforce by allowing the importation of African slaves (Florescano 1980). While there are few details about the region's African peoples in written histories, one can conclude that they were brought as slaves after the decline of the Indigenous population (ibid). Towards the end of the seventeenth century, the population of the province of Amula included 124 Spaniards, 55 Indigenous, 113 *mulatos* and 78 *castas* (Olveda 1980). This data indicates that in Amula there was an increased presence of *mulatos* and *castas*, whose population was larger than the Indigenous population.

The work of historian Isabel González Sánchez (1980) provides a panorama of how dispossession facilitated the creation of a labor force in Mexico. González Sánchez indicates two ways in which workers were employed: 1) A system of debt that forced the population to work, and 2) The recruitment of additional labor by *mayordomos* who would recruit workers in nearby towns or from far away locations. Furthermore, by analyzing the work of Fray Agustín de Morfi, González Sánchez identifies the following forms of dispossession used on the Indigenous people: 1) The invasion of the territory in order to obtain their natural resources such as water and animals, 2) Violent expulsions from their territories, and 3) The attraction of a new population to work on the haciendas or estates (ibid). In addition to the exploitation of the Indigenous slaves, and African slaves, the colonial regime also benefited from the *naborias*, or descendants of free slaves who provided voluntary labor in exchange for some type of salary (Florescano 1980). As we can see, colonization was creating the foundation of their labor force; a mix of Black, Indigenous, and Europeans.

The Hacienda System

Mexico gained independence from Spain during the second decade of the 1800's, but according to Hart (1997), the peasants failed to acquire political control and the national elites, the Conservatives and the Liberals debated over the control of the new State. Both groups were made up of strong *hacendados*. The Conservatives, who were the first to rule in Mexico, ruled defending their colonial privileges, which meant that they continued dispossessing the lower communal peasantry from their lands. The Liberals defended individual interests and were also hostile to the communal peasantry. Both groups' main interests were the restoration of the haciendas and the dispossession of the communal peasantry (ibid). In the region of the Llano en Llamas, the system of dispossession was also experienced through haciendas, or large landholding owned by the local elite. Between 1865 and 1900, it is estimated that about 20 haciendas existed in the region (Morett 1990; Zárate Hernández 1997). The following Table 3.1 illustrates the haciendas in the Llano en Llamas between 1865 and 1900; for some, total hectares owned are included.

Table 3.1. Haciendas in the Region of the Llano en Llamas, 1865-1900

Haciendas in San Gabriel	Haciendas in Tolimán	Haciendas in Tonaya	Haciendas in Tuxcacuesco
San Gabriel	Tolimán	Tonaya	Tuxcacuesco
Telcampana	San Pedro Toxin	Amacuatitlan (1,700 ha)	Chachahuatlan
Totolimismpa	La Salada	Apulco (1,183 ha)	Zenzontla
El Jazmin (30,000 ha)	Petacal	San Buenaventura (1,132 ha)	Platanar
La Saucedá	Primera Agua	El Refugio(1,086 ha)	San Miguel
La Mesa	El Sauz	Cuatlancillo(1,074 ha)	
		El Paso (738 ha)	

Source: Adapted from Morett 1990, 15; Ortiz García n.d., 48-49.

The biggest haciendas in terms of employed workers, cattle and territory were the haciendas of El Jazmin, owned by Jose Manzano, the Telcampana, owned by Jacinto Cortina and the hacienda of Apulco, owned by Carlos Vizcaino (Zárate Hernández 1997). The hacienda El Jazmin of approximately 30,000 ha was made up of land for production, houses of the *peones* (workers), and also of entire villages of Indigenous origin such as Apango, Huizichi, and Copala, amongst others (ibid). The hacendados, or agricultural estate owners, in addition to possessing large extensions of territory also employed a system of political power and control. For example, Jacinto Cortina who owned the hacienda of Totolimispa was also an influential congressman during this time (Zepeda Castañeda 2005).

One of the main characteristics of the haciendas in the Llano en Llamas was that they attracted *peones* (peons) who were in need of work. The workers were primarily from the more impoverished zones in the sierra, people from La Cruz, La Yerbabuena from the Municipality of Tapalpa, from Zapotitlán, and even people from Michoacán (Zárate Hernández 1997). This type of labor recruitment emerged from the colonial period, when the Indigenous population decreased and the colonizers brought African slaves. This process was formalized under labor recruiters who brought workers from various places. It is a process that is still seen today in the greenhouses of the Llano en Llamas, as will be described in Chapter 4. Furthermore, as a result of labor migration to the haciendas many new communities and ranchos were created, such as the communities of Telcampana, La Croix, El Jazmin, San Isidro, and the Guadalupe, and ranchos like El Tepozal, San Miguel, Alista, El Platanar, Los Gonzales, and Los Garcias. At the haciendas, employees worked shifts longer than 12 hours, and the hacienda provided them with housing, food, and clothing. The women in the haciendas taught the children

how to read and write. The people who decided to live in the hacienda did so because they had yearlong employment; otherwise, they would have to struggle with the long dry seasons and an unpredictable harvest (Zárate Hernández 1997). Overall, in Mexico the haciendas involved the seizure of land from peasant villages, in some places the villages accommodated to the new ways, but in others there were constant peasant uprisings disputing the land seizures, and eventually such political unrest led to the 1910 Mexican Revolution (Hart 1997).

Land Reform in the Llano en Llamas: A Violent Process

In addition to putting an end to the hacienda system, the Mexican Revolution (1910) brought about one of the most important achievements for campesinos: the land reform reflected in Article 27 of the Mexican Constitution. This gave the State legal power to confiscate territory and redistribute the land among landless peasants. However, this process was by no means simple, especially for the campesinos. In the region of the Llano en Llamas many did not want to register to obtain land because of possible repercussions from the church that was anti-agrarian, and also from the hacienda owners who would publicly “hang agrarian leaders with a sack of dirt”⁷ (Zárate Hernández 1997, 101; my translation). In fact, my father has shared the story my grandfather would tell him about how the church would excommunicate peasants if they became *agraristas* or obtained land. Nonetheless, scholars report that the 1930s and 1940s saw the largest land redistribution in the region. In Tonaya, 6,913.00 hectares were distributed, benefiting about 581 ejidatarios and 23,287.32 hectares were distributed in San Gabriel benefiting about 1553 ejidatarios (Ortiz García n.d.; Zárate Hernández 1997).

⁷ “colgaban con un costal de tierra a los líderes agraristas” (Zárate Hernández 1997, 101).

However, the land redistribution in the area benefited mostly private individuals since they were the ones who received land that had access to most rivers and sources for irrigation (Zárate Hernández 1997). Still, even if the land was not close to the river and was mostly mountainous rather than flat, the benefits of having some sort of autonomy by having a piece of land where one could grow crops for the family was incalculable. But, sometimes it was not enough and for many campesinos all over Mexico, like my uncles, harvesting became more and more difficult, forcing many of them to migrate to the United States under the Bracero program of 1942 (Barajas 2009). The difficulties for campesinos, especially the ejidos intensified as the neoliberal project restructured the agricultural sector.

Background on Neoliberal Reforms: Institutionalized Dispossession

After Mexico suffered the peso crisis of the 1980s, the World Bank stepped in to assist in sectorial adjustment loans (SECALS) in areas such as agriculture, trade, export promotion, and privatization, and other project loans, which created international policy networks. The General Agreement on Tariffs and Trade (GATT) in 1986 and the North American Free Trade Agreement (NAFTA) in 1994 were significant in reducing tariffs and trading barriers important for the implementation of neoliberal reforms. In addition, subsidies for agricultural producers were drastically reduced and programs like Banrural that provided farmers with safety nets were repealed (Pastor and Wise 1997).

In 1999, the National Company for Popular Subsistence (CONASUPO) was eliminated. CONASUPO was a parastatal trading enterprise that regulated the basic staple market, protected low-income producers by allowing them to make a living from their production activities, and provided low-income consumers access to basic foods (Yunez-Naude 2003). However, it was under the Carlos Salinas de Gortari presidency

that politically sensitive sectors of Mexico, such as telecommunications, mining, banks and agriculture were privatized. The most aggressive and controversial reform was to Article 27 of the Mexican Constitution, which eliminated many guarantees that were fought for during the Mexican Revolution, such as the right to petition for collective landholdings (ejidos), and the legal right to hold land titles and therefore, the potential ability to sell, rent, or form joint ventures with foreign and domestic agribusinesses.

Ejidos were encouraged to enter the Program for the Certification of Ejido Land Right (PROCEDE), which is the instrument that grants individual property certificates to ejidatarios. While studies indicate that land rentals have increased, this increase indicates that more ejidatarios are not selling land, but it also suggests that harvesting on one's own land has become more difficult and so renting is seen as a good alternative. It is unknown as to whether the privatization of land is due to certification; however, most scholars do agree that there have been mixed results in land rentals (Assies 2008; De Ita 2006; Perramond 2008).

Some argue that the 1992 reform “did not result in massive privatization, as some had expected, or in the emergence of a vibrant land market” (Assies 2008, 59), while others urge that “mapping of *ejido* boundaries or plots does not translate into privatization per se, and that such measures have legally formalized informal practices, such as the leasing of communal farm plots” (Perramond 2008, 357). In order to lessen the neoliberal shock (i.e. elimination of state subsidies, large-scale privatization, reduction of tariff and trading barriers, etc.), the Salinas administration did implement the Direct Support to the Countryside Program (PROCAMPO) in 1993, a direct cash transfer program based on the production of crops that was created to increase productivity (Pastor and Wise 1997). Unfortunately, the program PROCAMPO has been insufficient in assisting farmers to increase productivity, and in some regions in the Yucatan

peninsula it has contributed to deforestation (Klepeis and Vanice 2003). As illustrated above, the neoliberal reforms are a form of dispossession that is primarily focused on large scale privatization, and reduction of State subsidies, tariffs and trading barriers that mostly benefit foreign investors.

In this chapter, I provided a current description of municipalities of Tonaya and San Gabriel, which are the focus of this study. I also provided background information on colonialism, beginning with the Amula Province, and focusing on two types of dispossession: that of resources, and an embodied dispossession. I discussed how these two forms of dispossession facilitated the emergence of a labor force, and describe the continuation of colonial modes in the haciendas and in response to land reform in the region. I finished this discussion with a background on neoliberal reforms.

Chapter 4: The Invernadero: Groundwater Dispossession

In this chapter, I aim to describe how water dispossession is happening in the municipality of San Gabriel through the uneven access to groundwater that favors agribusiness over the communities. I will use the terms *invernaderos*, greenhouses, and protective agriculture interchangeably in this chapter. The greenhouse company that I describe is recognized to be a socially responsible corporation. In order to illustrate how corporate social responsibility uses similar forms of domination, as in the hacienda system, I provide a profile of migrant laborers who are the company's main labor force. I have organized this chapter into three main sections in order to understand who the migrant laborers are and their importance in deconstructing the corporate social responsibility discourse—a process that facilitates the “accumulation by dispossession,” and to understand the communities from whom groundwater sources are silently being dispossessed. I begin this chapter by providing a brief contextual background of the importance of protective agriculture in Mexico and in the export market. Then, I provide a description of the company Bioparques de Occidente and their introduction into the region of the Llano en Llamas. Finally, I provide a profile of migrant laborers and discuss the dispossession of groundwater sources in the communities.

Protected Agriculture

The *agricultura protegida*, or protected agriculture is defined by Mexico's Ministry of Agriculture, Livestock, Rural Development, Fisheries, and Food (SAGARPA) as agriculture “that is done under certain methods of production that help exert some degree of control over the various environmental factors, thereby reducing the

constraints that bad climate conditions cause on crops”⁸ (Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación [SAGARPA] 2012; my translation). Protected agriculture is simply a broad term that encompasses agriculture that is done in shade houses, in padded floors or in greenhouses with various levels of technology (Servicio de Información Agroalimentaria y Pesquera [SIAP] 2010). Mexico’s Ministry of Agriculture reports that the main crop produced under this agricultural system is tomato, which accounts for 70 percent of this type of production. However, the diversification of crops is also increasing, as seen in Figure 4.1. (SAGARPA 2012).

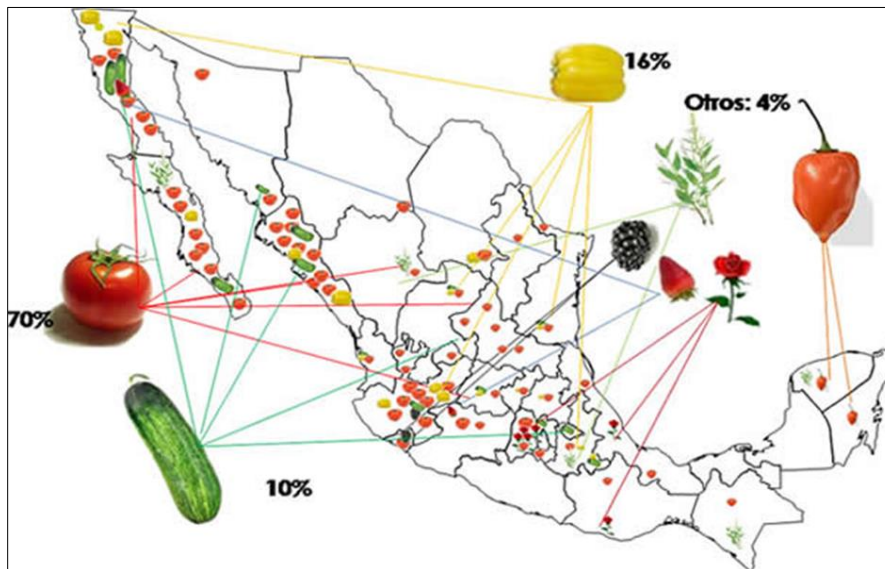


Figure 4.1. Protected Agriculture in Mexico. (SAGARPA 2012, n.p.).

SAGARPA also indicates that this type of agriculture is better for production since it produces five times more tomatoes than in open field production, achieves an average of 77 percent saving on water, and produces about eight direct jobs per hectare.

⁸ “La agricultura protegida es aquella que se realiza bajo métodos de producción que ayudan a ejercer determinado grado de control sobre los diversos factores del medio ambiente. Permitiendo con ello minimizar las restricciones que las malas condiciones climáticas ocasionan en los cultivos” (SAGARPA 2012).

For these reasons the Mexican government is investing and providing economic support to this type of agriculture. According to SAGARPA, in Mexico there are about 20 thousand hectares of protected agriculture, out of which about 12,000 are for greenhouse production (SAGARPA 2012). Protected agriculture in Mexico has been steadily growing since 2001. According to the Mexican Association of Protected Horticulture (AMHPAC, its acronym in Spanish), greenhouse production under protected agriculture makes it possible to grow crops the entire year (n.d.).

Protected agriculture is not only important to Mexico. This type of agriculture has also been taken up in the United States, with the fresh tomato market accounting for approximately 71 percent of U.S. import of greenhouse tomatoes. According to the United States Department of Agriculture (USDA), Canada appeared to dominate the market until 2006 when Mexico became a strong competitor; and Canada now accounts for only 27 percent of greenhouse tomato imports (USDA 2012).

In the Llano en Llamas the two most prominent tomato invernaderos are the Bioparques de Occidente S.A. de C.V. and Desert Glory (see Figure 4.2). I decided to focus my research on the company Bioparques de Occidente S.A. de C.V. since it is more emblematic of non-traditional agriculture in that it has a bigger territorial expansion and workforce. In its 2009 and 2011 sustainability reports, the company Desert Glory reported owning 113 hectares of land in the municipality of Tuxcacuesco and employing between 1,000 and 1,400 employees (NatureSweet Tomatoes 2009a; 2011b). While, according to 2001 municipal records, Bioparques de Occidente S.A. de C.V. has 188 hectares of purchased ejido land, in their promotional video they indicate owning a total of 220 hectares of land for tomato production (Kaliroy Institutional Video n.d., 2:34). Bioparques has approximately 2,400 seasonal employees to whom the company intends to offer full-time employment (International Finance Corporation: World Bank Group

2007). Although, it would be beneficial to do research on both companies, due to the scope and limitations of this thesis I decided to focus on the company whose characteristics make it the most illustrative of this type of agriculture: Bioparques de Occidente S.A. de C.V.

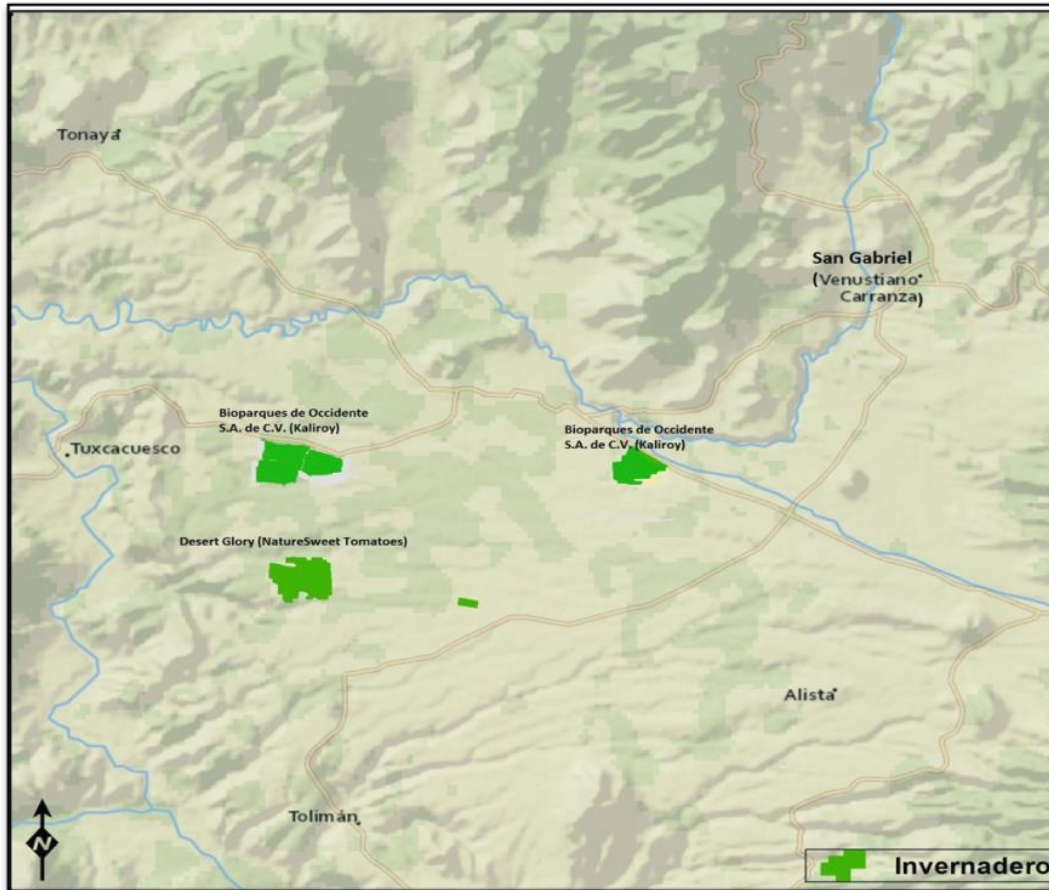


Figure 4.2. The Tomato Companies and Sites that were Observed and Visited by Author in the Region of El Llano en Llamas. (Map made by Vince Clause 2013 with modifications by author).

Bioparques de Occidente began operations in 2002, after I migrated to the U.S. The company takes pride in the transformation of the Llano en Llamas, stating in their promotional video their achievements of “transforming it radically from an arid and

barren wasteland to one that produces export quality tomatoes and has also positively impacted nearby towns by generating thousands of direct and indirect jobs” (Kaliroy Institutional Video n.d., 1:22). According to the company, they “began with the entrepreneurial vision of a farmer and his family, who after a successful start in the state of Sinaloa decided to invest in this region” (ibid, 1:12). However, the company fails to mention that this farmer and his family are the De La Vega family, a well-established Mexican family that also owns Impulsora Azucarera del Noroeste S.A de C.V (Zucarmex), which is Mexico’s third largest sugar producer (International Finance Corporation: World Bank Group 2007). Furthermore, the company received a loan of “\$25 million as part of an investment program between 2005 and 2008 to add 85 hectares of hydroponic greenhouses and a packing facility to its existing greenhouses in the state of Jalisco” (International Finance Corporation: World Bank Group 2012, under Program Description). The company indicates that they produce beefsteak tomato, and roma tomato in greenhouses, using the latest technology in hydroponic systems (Kaliroy Institutional Video n.d.).

Their subsidiary Kaliroy Inc, located in Nogales, Arizona carries sales and exports tomatoes to the United States and Canada under the brands Kaliroy, Kalifresh and Amos. The company also does national sales by direct marketing, mainly in the cities of Culiacan, Guadalajara, Mexico City, and Monterrey (ibid.). Bioparques de Occidente, is also following a different type of business model, one that claims to practice social corporate responsibility in its production, which means that they are not only at the technological forefront in agriculture, but should also have a “strong social commitment with its employees, the environment and society” (ibid, 7:44). The company indicates that this new concept is part of a “modern-globalized business model, which puts the human capital training beyond geographical considerations, economic and other

variables” (ibid, 6:03). According to Bioparques de Occidente, for a company that follows this model:

A community with low-levels of education cannot hope for creating prosperity or a strong society for that reason Bioparques de Occidente maintains important commitments with its partners, and has proudly earned the distinction of a socially responsible company, certified by the Mexican Center for Philanthropy. We meet all 31 requirements set forth by the center, which are divided into four main areas; quality of life, business ethics, community outreach, and environmental care. We receive constant recognition from federal institutions and our state government for the work we do on behalf of our [I]ndigenous migrant workers and their children in the area of education, ongoing training and total eradication of child exploitation. Amongst the additional services provided by Bioparques to migrant workers are housing, gas, water, electricity, stove and others all at no cost during their stay. We also offer childcare services and school for the children of migrant workers and a first contact clinic with free medicine. (ibid., 6:14-7:34)

Migrant Jornaleros: A Profile

The company is divided into four sections called Bioparques1, Bioparques2, Bioparques3 and Bioparques4. Bioparques1 is where the research on migrant jornaleros (migrant laborers) was conducted. It is an *albergue* (migrant housing or camp) across from the company’s local headquarters. It has a school, a daycare center, and first aid contact clinic. The migrant camp is gated and in order to enter, visitors must pass by a security guard/assistant. In my case, I presented myself to the security guard who sent me to the social worker, and she then referred me to their local office. At the local office, I was denied access to do research at the company. The reason provided was that they wanted to protect the secret to their success just like the Coca-Cola Company does with their recipe. The person I spoke with then said he was going to check with his superiors, and to send him a follow up email. I did so but never received a response. Fortunately, I was invited inside the *invernaderos*, but only for a few days. The following section is based on my observations and in-depth interviews, and describes how modes of

colonialism that were restructured in the haciendas are also used by the corporate socially responsible greenhouse. It sheds light onto the conditions of migrant laborers and how they help make invernaderos tomato producers a thriving business. This section is structured by providing a profile of migrant laborers, which includes a description of migrant laborers, their work and wages, education, child labor, and an analysis of their living conditions.

Who are the Migrant Laborers in Bioparques de Occidente S.A. de C.V.?

The Bioparques de Occidente states that communities with low-levels of education provide 70-80 percent of the workforce for the invernadero (Personal Interview with local company employee 2011). They are jornaleros that come from the states of Veracruz, Guerrero, Michoacán, Oaxaca, Zacatecas, Sinaloa, and Hidalgo, among other states (Consejo Estatal de Población de Jalisco [COEPO] 2013; Personal Interviews with migrant jornaleros 2011). The migrant laborers are primarily Indigenous, from various ethnicities, as illustrated by one of my participants:

About 13 different ethnicities have converged and of those 13 ethnicities about 20 languages, because in a state, there are many ethnicities and various languages within the ethnicities. For example, Purepecha children speak Purepecha, they also speak Spanish and they also speak English, they have also migrated to the United States, it is not fluent but they understand words.⁹ (Personal Interview with local employee in San Gabriel 2011; my translation)

My study participants were from the states of Michoacán, Guerrero and Veracruz and they all migrated because of desperate conditions in their hometown. For them, staying was not a real option as it guaranteed hard times. If they stayed they risked not

⁹ “Se han llegado a converger 13 etnias diferentes y de esas 13 etnias algunas 20 lenguas más o menos porque de un estado hay varias etnias y también hay varias lenguas dentro de las etnias. Y por ejemplo niños que son purépechas, hablan purépecha, hablan español y también hablan inglés. También les ha tocado la migración a estados unidos, no es fluido pero entienden palabras” (Personal Interview with local employee in San Gabriel 2011).

finding work or working and earning a meager salary. There was not much to think about: staying meant making “straw hats and selling them at 7 pesos the hat”¹⁰ (Personal Interview with migrant laborer in San Gabriel 2011; my translation). If they were lucky, they would get a salary of 200 pesos per week, or sell a “dozen clay *ollas* [pots] for \$35 pesos,”¹¹ both of which are insufficient to pay for daily necessities (Personal Interview with migrant laborer in San Gabriel 2011; my translation).

As we described in Chapter 3 one of the main operational characteristics of the haciendas was that they attracted peons from more impoverished zones. This appears to be the same operational characteristic used by the greenhouse company. My participants indicated that due to their living conditions, when they heard about the company they decided to give it a try. Some already knew about the process, as they had been working as migrant laborers for few months, two or three years, or even:

12 years of contracts, of pure contracts, this September will be our 12th year... We would sign 90 day contracts and we would return to Veracruz. Before, we did not last too long in a contract, only two or three months just coming and going. We would stay only two or three days in the house and then we would go do more contracts and go back for another two or three months and then back again, just like that.¹² (Personal Interview with migrant family in San Gabriel 2011; my translation)

This current process of contract labor is facilitated by recruiters. My participants heard about the company from contractors, and family members, or people they knew from their region. This recruitment process described by the jornaleros is similar to the *enganchadores* described by Morett Sánchez and Cosío Ruiz (2004), and López et al.

¹⁰ “Hacemos sombreros de paja a 7 pesos el sombrero.” (Personal Interview with migrant laborer in San Gabriel 2011).

¹¹ “una docena de ollas por \$35 pesos.” (Personal Interview with migrant laborer in San Gabriel 2011).

¹² “12 años de contrato de puro salir, de puros contratos, este septiembre vamos a cumplir doce años... firmamos un contrato de 90 días y nos regresamos a Veracruz. Antes nosotros no duramos en un contrato, no más dos meses o tres meses, yendo y viniendo. En dos días o tres días estamos en la casa y luego otra vez pa’ tras, dos meses o tres meses y otra vez pa’ tras. Y así.” (Personal Interview with migrant family in San Gabriel 2011).

(2002). According to scholars who conducted research on migrant laborers, the first type of *enganchador* (contractor), recruits people in the hometown and acts more as a social network of mutual support than as a company agent; the second type transports large numbers of people and acts more as a business; and the third type is from small *enganchadores* (contractors) and transports workers in their small trucks to the companies (Morett Sánchez and Cosío Ruiz 2004; López et al. 2002). This type of labor recruitment is very similar to that used by the *mayordomos* (recruiters), who would recruit workers for the hacienda. The jornaleros I interviewed that came under contract indicated that the travel is paid by the Ministry of Labor. They receive \$2,400 pesos (\$196 USD) as an initial travel grant, and then an additional \$600 pesos (\$49 USD). Not only are the recruitment processes rooted in colonial forms of exploitation and domination, but the State facilitates this contract labor by subsidizing it.

Work and Wages

In the *invernadero*, the migrant workers are paid \$100 pesos (\$8 USD) by the *tarea* (assignment), which is on average \$100 pesos (\$8 USD) a day. An average work day starts at 7 a.m. and ends at 3 p.m. Yet, there are variations. For example, some start at 4:30 a.m. and end at 11 a.m. This is for those who *enredan gancho* (tie the tomato plant in order to give it support). Then, in the days when tomato production is high, *tardean* (they work a double shift). In each *invernadero* there are arches with 5-8 tomato rows. Each of these arches is considered an assignment. In comparing the earning process to that of other *invernaderos*, one participant shared:

In Culiacan they would pay \$120 [pesos (\$10 USD)] per day. Here they pay for assignment, and if you don't finish it they pay you less. In one *tarea* [assignment]

you earn about \$100 [pesos (\$8 USD)], it is like 100 meters of picking tomatoes.
¹³ (Personal Interview with migrant laborer in San Gabriel 2011; my translation)

The work in the *invernaderos* is not easy, as shared by a migrant laborer who works inside the *invernaderos*: “It is really hot in there; it feels like you’re baking inside”¹⁴ (Personal Interview with migrant laborer 2011; my translation). Workers also shared that sometimes when they finish an assignment or get help finishing it, then they have to do that assignment and a new one the next day. However, my participants also shared that there are those that are really agile, who usually make more since they do more than one assignment. The *jornaleros*’ more difficult times are when work becomes scarce, “right now work is ending and those assignments are too, so you will earn about \$30, \$40 or \$25 pesos (\$ 2.50, \$3.27 or \$2.00 USD) because it is the end, like on Saturday I earned \$25 (\$2 USD)”¹⁵ (Personal Interview with migrant laborer in San Gabriel 2011; my translation).

For the migrant workers I interviewed, one of their major complaints was that the money was not enough to allow them to save. Most of the money they earned is spent on food and on their daily needs. If they earn “\$100 pesos [\$8 USD] a day and the chicken is \$80 pesos [\$6.50 USD], out of \$100 [\$8 USD] you have \$20 [\$1.50 USD] left for the tortillas. It is very difficult”¹⁶ (Personal Interview with migrant laborer in San Gabriel 2011; my translation). For the majority of my participants it has been very difficult to save money, and some are waiting for the end of the contract to return to their native

¹³ “En la de Culiacán pagaban por día a \$120 [pesos]. Aquí pagan por tarea, si no las completas te pagan menos. En una tarea se gana \$100 [pesos]. Son como 100 metros de recoger jitomates” (Personal Interview with migrant laborer in San Gabriel 2011).

¹⁴ “Hace mucha calor allí adentro, parece que se está asando uno allí” (Personal Interview with migrant laborer in San Gabriel 2011).

¹⁵ “Ahorita no hay casi, ahorita estamos ganando mínimo \$ 30, \$ 40 o \$25 como el sábado gane 25” (Personal Interview with migrant laborer in San Gabriel 2011).

¹⁶ “\$100 pesos al día, el pollo cuesta \$80 pesos de \$100 y sobran \$20 para las tortillas. Sí, está bien difícil” (Personal Interview with migrant laborer in San Gabriel 2011).

states. The locals also confirmed the low pay; in fact, one of the reasons provided for explaining why the company brings workers from other states was that they pay low wages. The following statement made by a local resident confirms the monetary difficulties experienced by the migrant workers:

[I knew one] that was a drunkard, but a hard worker, and suddenly he disappeared, he vanished. I used to lend him money, he would say, “can I borrow \$20 pesos” [\$1.60 USD] and I would lend them to him. And this last time they fired him. I don’t know what he did, he just told me they fired him and asked if I could lend them \$200 pesos [\$16 USD]. I told him, poor guy, that it was too much money and that I couldn’t do it. He stayed with a couple and their baby here for a few days, and suddenly he disappeared, they tell me he left all of his clothes that he simply vanished.¹⁷ (Personal Interview with local resident in San Gabriel 2011; my translation)

The statements made by the local residents touch on other aspects of the life of the migrant worker, for example, how they are perceived by the locals and additional layers of difficulty of being a migrant jornalero. These are all subjects I will discuss in the analysis, but I feel that in order to further understand the life of a migrant laborer, it is important to continue describing other aspects that are of extreme importance, such as education, since this was a constant theme in my interviews.

Education in the Invernaderos

Based on my observations, the school on the invernadero provides education to approximately 200-380 children. There are 8 teachers from the Preschool and Primary Educational Program for Migrant Agricultural Workers (PRONIM, its acronym in Spanish) that teach multilevel classes in Bioparques1 and one teacher at Bioparques2

¹⁷ “[Conocí uno] que era bien borrachito, pero era bien trabajador y de un de repente el señor se desapareció. Yo le prestaba dinero, “oiga no me presta unos \$20 pesos” y yo se los prestaba. Y este últimamente lo corrieron. No sé qué haría, no más me dijo que lo habían corrido y que si le prestaba \$200 pesos. Yo le dije, no, pobre chavo, que era mucho dinero y que no puedo prestarle. Y aquí vive una pareja con un bebe y ahí se estuvo unos días, y de repente se desapareció y me platican que ahí dejo su ropa y todo y no más se desapareció” (Personal Interview with local resident in San Gabriel 2011).

who gives classes to 50 or 60 students. Bioparques1 has four classrooms and one bathroom. Bioparques2 has two classrooms and a bathroom, and more rooms are to be constructed to make it similar to Bioparques1 (Personal Interview with Bioparques employee in San Gabriel 2011). The school is on the company premises but is funded primarily by PRONIM, which is part of the Department of Education of the State of Jalisco. The program has an annual budget of 4 million pesos, but this budget is spread among 18 labor camps in the state of Jalisco (Red Interinstitucional de Equidad de Genero y Migración en Jalisco [RED] 2010b).

PRONIM provides children of migrant laborers with a basic intercultural education at the pre-school and elementary school level (RED 2010b). PRONIM is also part of the Red Interinstitucional de Equidad de Genero y Migración en Jalisco (RED), an intra-institutional and intra-sectorial network of gender and migration equality advocates. The network is composed of 38 organizations, both governmental and non-governmental, which promote migrant rights (this includes Indigenous people's rights, women's rights, rights to health and education, among others) and analyze migration from a gender perspective (RED 2010a). PRONIM also has 70 state grants dedicated to areas in the state of Jalisco where there are migrant housing structures or camps. The schools at the *albergues* (migrant housing) are not regular schools. Unlike regular schools that are taught by grade level, the schools at the *albergues* are multilevel with advisors and teachers. In Jalisco there are nine school advisors and 61 teachers for Tamazula, Casimiro, Cihuatlan, Tequesquitlán, San Gabriel, Autlán and El Grullo (RED 2010b).

In addition to language barriers, one of the challenges the school faces is ensuring attendance. Although, when the school first opened, it was the parents who insisted that their children work instead of attend school, more recently it is the children who are refusing to go to school (Personal Interview with Bioparques employee in San Gabriel

2011). It is important to understand that due to the marginal conditions migrant workers face, the children are integral to the survival of the family. It is likely that for this reason children are insisting on working instead of attending school:

He wanted to work, but I don't let him. And he gets really upset with me because I did not take him to work, and he wanted to work. In San Luis Potosi, I told him, "don't work you are little. The day I get old, and I am no longer able to work, then on that day you will raise your hand to feed me." Right now, thanks to God, everything is ok.¹⁸ (Personal Interview with migrant worker in San Gabriel 2011; my translation)

My participant's resistance to allow her son to work is ironically also telling of the context that fuels children preferences to work. Although he is viewed as a child by his parents, his mental matureness is that of an adult who has the responsibility to provide for the family. This necessity to be an adult is further illustrated by her comment explaining her son's insistence to work:

He is attracted to the money. He sees people get their money every Saturday and he is attracted. And he wants to earn money too, because there are children younger than my son who work, and he is big now.¹⁹ (Personal Interview with migrant worker in San Gabriel 2011; my translation)

For her child, even if there is no parental pressure, there is a perceived peer pressure or message to work. The other children who with whom he interacts also appear to be replicating the same message, which derives from their marginal conditions. Going to school and not working does not appear to be the norm set by society. The norm for migrant children in Mexico is to work:

¹⁸ "Él ya también quería trabajar pero lo que pasa es que yo no lo dejo. Y él se molesta mucho conmigo se pelea mucho conmigo porque yo no lo llevé a trabajar y él quería trabajar. En San Luis potosí, y le dije "no trabajes ahorita estas chiquito, el día que yo esté viejita y ya no pueda trabajar ese día, entonces ese día vas a levantar la mano para que me des de comer." Ahorita gracias a Dios, todo está bien, lo poco que pueda trabajar no vas a trabajar" (Personal Interview with migrant worker in San Gabriel 2011).

¹⁹ "Porque le llama la atención el dinero ve que la gente recibe el dinero cada sábado y le llama la atención. Y él también quiere ganar, porque hay niños más chicos que mis hijos, él ya está grande" (Personal Interview with migrant worker in San Gabriel 2011).

Now it is the children that refuse to go to school. Because some of them are children from other places....And in some places they do allow children to work, and they get here and they freak out, because they can't work. And they are used to having a salary, buying their clothes, eating what they want to eat, not just a taco with chili or a taco with beans, they were eating what they wanted.²⁰ (Personal Interview with Bioparques employee in San Gabriel 2011; my translation)

The aforementioned statement provides an explanation for the logic behind deciding to work. It is a logic that derives from complex processes of life. It is really not unusual in Jalisco, Mexico for children to work at an early age. However, I think it is important to dissect that the work jornalero children perform at the various invernaderos they visit is not compatible with getting an education. In other words, if both attending school and working are available options, children will tend to work rather than go to school. Even if they do want to pursue more education, “in an education, you spend too much on the trips, because the school is too far and we need the money”²¹ (Personal Interview with migrant worker in San Gabriel 2011; my translation). However, this is just one of the many complexities of the pressures of education and child labor. In the following section I will go more in-depth into the relationship between work and school at the company Bioparques de Occidente.

Education and Child Labor

In my interviews, child labor and education were often themes that intersected. Although children are not currently allowed to work at the company, the invernadero had employed children in 2005. According to one of my participants, it was around 2005,

²⁰ “Ahorita los dejan ir a la escuela, ahorita son los niños que no quieren ir a la escuela. Porque algunos son niños de otras zonas. Y en algunos lugares si les permiten trabajar, y entonces llegan y se friquean, porque no los dejan trabajar y están acostumbrados a tener un salario, a comprar su ropa, lo que quieran comer, no taco con chile o taco con frijoles. Allá comían lo que ellos querían” (Personal Interview with Bioparques employee in San Gabriel 2011).

²¹ “una educación cuesta mucho; los viajes, porque queda lejos y necesitamos el dinero” (Personal Interview with migrant worker in San Gabriel 2011).

when the school was beginning operations that the children were employed for a period of about 15 days. Before the company became socially responsible, the children were employed to do a type of work called “*armonizar*,” which consists of applying some type of liquid to the plant. Children were used to perform this task because:

The plants are small and an adult could not bend over for so long, it’s tiring, so they [the children] would go. But the parents would also ask the recruiter to let them work for 15 days and the children would go. This was before the school began. After the school started the parents did not understand and they would continue to take them [to work]...After that, the company became socially responsible; they no longer allowed children to workThe parents kept insisting but the school was firm on not letting them work.²² (Personal Interview with Bioparques employee in San Gabriel 2011; my translation)

At around the time the school began operations, UNICEF Mexico (2007) reported that an average of 300,000 children in Mexico between the ages of 6 and 14 migrate yearly, as laborers. In 1999, agricultural companies were employing about 900,000 migrant children, of whom 374,000 were between the ages of 6 and 14 (Cos Montiel 2000). In another study, it was argued that on average, male children start working at the age of five, and female children at the age of six (Morett Sánchez and Cosío Ruiz 2004). Findings from such studies are important not only because they shed light on the ‘normalization’ of migrant child labor and how migrant laborers incorporate their children in their survival processes or strategies, but also because they contextualize the social corporate responsibility discourse.

The invernadero Bioparques de Occidente became a socially responsible company and then did, in fact, eliminate child labor. To contextualize this, we need to understand

²² “Las plantas estaban pequeñas y un adulto no puede estar agachado todo el tiempo, se cansa, entonces ellos iban. Aparte de que los padres les pedían a los encargados de que los dejaran trabajar 15 días y pues los niños iban. Eso fue antes de la escuela...Después la empresa se hizo socialmente responsable y entonces ya no permite a los niños trabajar...Los padres seguían insistiendo pero la escuela se puso cuajante de que los niños no iban a trabajar” (Personal Interview with company employee in San Gabriel 2011).

that the idea of corporate social responsibility gained institutional support under the United Nations Global Compact, in which it is defined as, “a strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption” (United Nations Global Compact n.d.). Corporate social responsibility is the idea that companies can self-regulate in regards to human right abuses, environmental devastation and corruption (Bebbington and Humphreys 2009). However, the reality is that the reason many companies are now socially responsible is because they had been exposed publicly as being responsible for environmental damage, child labor exploitation, and labor contracting or subcontracting of slave-like work (Svampa, Bottaro and Alvarez Sola 2010). The extensive research on migrant laborers brings to the forefront issues of child labor, slave-like work, and exploitation of migrant workers happening throughout Mexico (Cos Mantiel 2000; Galindo and Guevara 2007; Grammont 1986; Grammont and Lara Flores 2005; Morett Sánchez and Cosío Ruiz 2004).

Migrant Housing

Migrant housing is also important to consider since the company takes pride in providing housing to its workers. However, the conditions of the migrant housing are inadequate for a dignified life and have actually not changed much from the conditions offered during the hacienda period. While most of my participants confirmed that water, electricity, gas, and housing is provided free of cost, this by no means indicates that living conditions are just or dignified.

As shown in Figures 4.3 and 4.4, the majority of migrant houses were very similar, and built from *lamina* (steel sheets). There were only a few houses at the entrance that were made from brick. As one enters the house, one can see a protected gas cylinder to the left and a two-burner mini electric stove. There are no tables, sometimes no chairs, and the furniture basically consisted of recycled tomato boxes.



Figure 4.3. Migrant Housing at the Invernadero. (Photo taken by author 2011).

According to one of my participants “the metal sheets get hot during the hot weather and cold in cold weather”²³ (Personal Interview with migrant workers in San Gabriel 2011; my translation). The houses are a room that measures approximately 15 feet by 12 feet, including the mini kitchen seen in Figure 4.3. Some of the houses did not

²³ “la lámina es caliente en la calor y fría en el frío” (Personal Interview with migrant workers in San Gabriel 2011).

have mattresses, forcing the migrants to sleep on the floor. Most of the houses are inhabited by families; and sometimes two families are sharing one house, which makes privacy an issue. The housing also has communal bathrooms for women and men, as well as communal sinks.



Figure 4.4. Migrant Housing. (Photo taken by author 2011).

It is also important to know that that the housing was constructed with monetary assistance from SEDESOL (the Ministry of Social Development). SEDESOL, under its social program for migrant agricultural workers provides direct assistance to migrant workers, such as payments for school attendance upon arrival at their work destination, and indirect services such as childcare centers, health center units, and funding for migrant housing infrastructure (Secretaría de Desarrollo Social [SEDESOL] 2013b). The municipality of San Gabriel is listed as the J1414 participant in their program (SEDESOL 2013a). This was further confirmed by one of my participants who indicated:

One of the migrant houses was constructed by the company, they ask for support from SEDESOL and they finished it. Imagine the room, with a small *terrazza* [terrace] the *terrazza* was covered and they put like a bar and then they put a gas cylinder, and they covered it with protection. And then it has its window and its spring door, the conditions improved with the support provided. For Bioparques2 the construction phase is shared with SEDESOL. They have also supported them with material and not the metal sheet type like Bio1. The conditions are improving more. The rooms have a wood door²⁴ (Personal Interview with Bioparques employee in San Gabriel 2011; my translation).

Regardless, the housing at the site is provided free of cost, and according to some of the migrant jornaleros, it is better than other *galeras* (migrant houses) they have visited. Still, this is not the type of house they envision living in for the rest of their lives. They want to have a house of their own; a house that is dignified and that is nearby a good school so that their children can have a dignified life.

More recently, on June 11, 2013, the company Bioparques de Occidente made headlines after 275 workers were rescued for living in slave-like conditions. The various news reports indicate that a migrant worker escaped and alerted authorities in the city of Guadalajara. (*El Economista*, June 12, 2013; Agence France Presse (AFP), June 12, 2013; *La Jornada*, June 11, 2013; Cobián Felipe, June 11, 2013; *Univision*, June 12, 2013). According to the news reports, the workers were living in precarious, dirty and overcrowded conditions, and were paid half of what had been promised in vouchers redeemable at the company's store. Additionally, they reported that sometimes if they tried to escape they were brought back and beaten. *The Agence France Presse (AFP)*. reported that the regional prosecutor Salvador Gonzales said that five foremen were

²⁴ “Un albergue la empresa lo construyó, pidieron un apoyo a SEDESOL y terminaron de poner, haz de cuenta que es el cuarto. Tiene una pequeña terraza, a la terraza la taparon le pusieron como una barra y pusieron un cilindro de gas cubierto con protección y su ventana, su puerta de alambre con mosquitero. Haz de cuenta que las condiciones se mejoraron con ese apoyo. Bioparques 2 las condiciones son divididas con SEDESOL. Las condiciones de construcción ya están divididas con SEDESOL y los ha apoyado con el material y no de lámina como es el Bio1, entonces las condiciones van mejorando mucho más. Los cuartos tienen puertas de madera” (Personal Interview with Bioparques employee in San Gabriel 2011).

arrested for “grave violations and crimes, including the illegal privation of liberty and human trafficking” (June 12, 2013). The Mexican newspaper *Proceso* reported that the workers were offered \$100 pesos (\$8 USD) daily, food and a space to live, but once they arrived they were paid \$50 to \$70 pesos (\$4 to \$6 USD) daily and they were housed in a room of about 4 meters by 4 meters. (June 11, 2013). A local contact indicated that the migrant housing where this situation occurred was in Bioparques 4, and that the company continues operations in the other migrant housing sites. The interviews I conducted with migrant laborers and this latest documentation of violations of human rights makes evident that even those companies who are acknowledged as socially responsible benefit at the expense of their workers and of the communities where they operate. The company Bioparques de Occidente praised itself for the living and working conditions it provided to its workers. However, what is most concerning is that the Mexican government subsidized the company, suggesting that it either deemed appropriate the conditions that workers were living in, or simply never conducted inspections. Additionally, the International Financial Corporation (IFC), the \$25 million dollar lender, has supposedly also conducted inspections of the site reporting no irregularities. I contacted the IFC’s communication officers for a statement or clarification on the situation and they indicated that they were going to see how the investigation unfolds. They did not mention that they will conduct their own investigation or possible sanctions for the company. The company Bioparques de Occidente (Kaliroy) has not provided a public statement as of June 17, 2013, their website is unavailable, and the promotional video has also been removed.

Reflecting back on the description of the haciendas provided in Chapter 3, most of the people who decided to live at the haciendas did so due to the fact that they were given yearlong employment. At the haciendas, workers were provided housing, food, and clothing, and although there were no schools the women in the haciendas taught the

children how to read and write. The similarities are not coincidental. The haciendas, like the *invernadero* benefit from the stratification of labor. The haciendas were dependent on the impoverished situation of their workers in order to function, just as the *invernaderos* do now. The living conditions of the *invernaderos*, just like in the haciendas, simply maintain a steady supply of labor; they do not translate into a dignified life for the workers and only reinforce a system of domination.

In addition to the living conditions experienced by *jornaleros* in the migrant housing at Bioparques de Occidente, it is also important to include the perspectives that the surrounding communities have about them. Most of the people I talked to, either informally or formally about the *invernaderos* referred to the migrant workers as '*cochitos*', describing them as drunkards, '*peleoneiros*' (quarrelsome or belligerent) and dirty.

During my research, as I was volunteering at a local junior high in the hopes of preparing students to help me conduct a community survey, migrant *jornaleros* came up in conversation. Again, the students called the migrant workers *cochitos*. I asked them why they called them that and they told me that it was because they were dirty, they did not shower, and they lived like *cochinos* (pigs), with about 10 of them in a house. Then, the students would mention that many of them get drunk and walk drunk along the roadway. The people I interviewed who had a closer relationship with the migrant *jornaleros* shared that they drink alcohol because the work they performed is difficult and that the people who called them 'drunkards' are usually the same people that sell them the alcohol. It is important to consider these local perspectives in order to understand the difficulties that migrant *jornaleros* face when doing contract labor.

The Local Communities

Quality Tomatoes in a “Barren Waste Land”?

In the region of el Llano en Llamas, the process used to justify the entrance of the *invernaderos* Bioparques de Occidente S.A. de C.V. is very similar to the process of entry used by open-pit mining. In other places, such as Argentina the government used the metaphor of ‘*territorio vacio*’ (empty territory) with the idea of ‘*desierto*’ (desert) to pose large scale mining as the only productive alternative in regions where the ‘stone desert’ predominates (Svampa, Bottaro and Alvarez Sola 2010). Similarly, in the region of the Llano en Llamas, the *invernadero* Bioparques de Occidente uses Rulfo’s ‘desert-like’ description of the Llano to establish themselves as the only productive alternative in the region. This narrative-discourse is portrayed in the company’s promotional video, which begins with Rulfo’s description of the territory:

No, the plain is good for nothing. There are no rabbits or birds. There’s nothing...except a few scrawny huizache trees and a patch or two of grass with the blades curled up, if it weren’t for them, there wouldn’t be anything. And here we are. (Kaliroy Institutional Video n.d.)

Furthermore, they address the land as “an arid and barren wasteland” which they transformed into a land that produces quality tomatoes, and thousands of direct and indirect jobs (Kaliroy Institutional Video n.d.). However, in other places it has been well documented that this strategy is used to justify the sale of large territories to foreign investors and companies, which in some cases include entire communities, and exclusive access to rivers and lakes (Svampa, Bottaro and Alvarez Sola 2010). In the Llano en Llamas many *ejidatarios* have sold their land to the *invernaderos* Bioparque de Occidente and some of this land included access to water wells. I argue that this is a process of accumulation by a silent dispossession.

Groundwater Extraction: A Silent Dispossession

The neoliberal project of modernity has created the conditions that allow and justify the rental and sale of ejido territory, which includes wells, and aquifers. It is not a coincidence that the invernaderos settled in the municipalities of the Llano en Llamas. The Llano en Llamas is, according to Rulfo, a hot *comal* (griddle). The campesinos in the region depend mostly on rainwater for their crops. However, if rain water cannot be purchased, why would an invernadero settle in a desert-like region like the Llano en Llamas? Why have concessions been granted for 1,177,344.00m³/year? It happens that Rulfo was unable to detect the region's treasures hidden underneath the hot griddle. He ignored the knowledge shared by our ancestors that indicate that the mountains are full of treasures. One of those treasures is the aquifer of Autlán (outlined in Figure 4.5). It covers the region of the Llano en Llamas. In Table 4.1 we can see the percentage of the municipalities situated just above the Autlán aquifer.

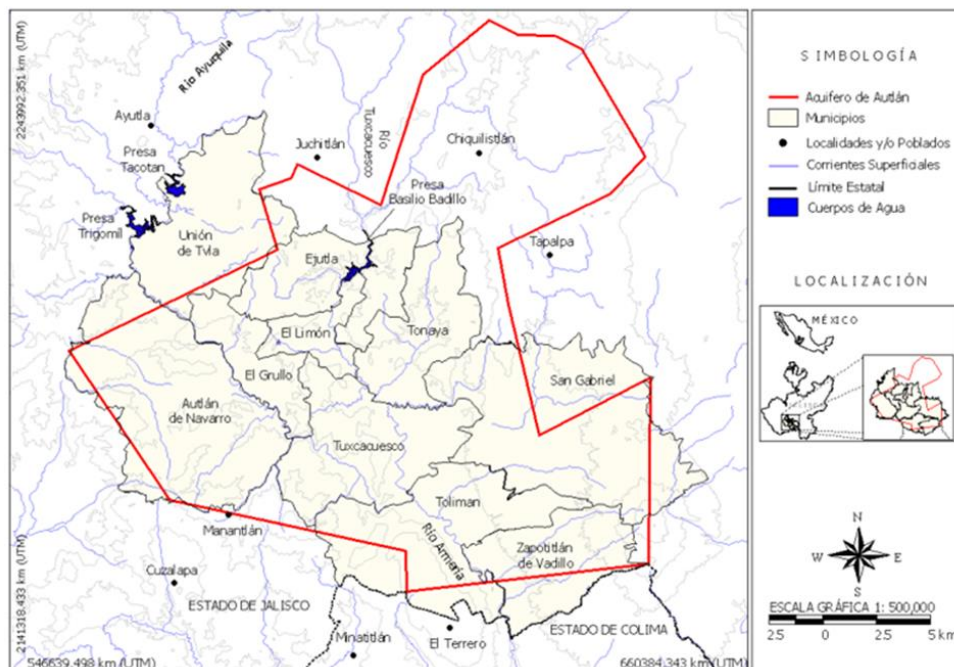


Figure 4.5. Outline of the Autlán Aquifer. Source: Martínez et al. 2008, 13.

Table 4.1. Municipalities Located on the Autlán Aquifer

Municipality	Municipal surface	Surface located inside the aquifer	Percent on the aquifer	Total percent on aquifer
Autlán de Navarro	715.09	596.48	83.41	13.88
Ejutla	300.11	299.13	99.67	6.96
El Grullo	178.17	178.17	100	4.15
El Limón	113.45	113.45	100	2.64
San Gabriel	745.56	505.68	67.83	11.77
Tolimán	514.26	372.49	72.43	8.67
Tonaya	297.18	297.18	100	6.91
Tuxcacuesco	431.65	431.65	100	10.04
Unión de Tula	437.27	58.6	13.4	1.36
Zapotitlán de Vadillo	305.71	207.96	68.02	4.84

Source: Martínez et al. 2008, 12.

According to an investment proposal by the company Bioparques, submitted to the International Finance Corporation: World Bank Group, the invernadero falls under the section “sustainable water resource use.” The document indicates the following:

Bioparques’s key business risk is sustaining an adequate level of quality tomato production, which in turn *depends on the appropriate long term use of the groundwater resource at premium in the Jalisco areas where the company operates*. Currently, the company uses a semi-hydroponic system in their operations and irrigation water (where soil nutrients are applied), is not recycled. It is rather discharged as liquid effluent with consequent loss of valuable groundwater resources as well as loss of expensive soil nutrients. (International Finance Corporation: World Bank Group 2007; emphasis added)

Arguably, one of the primary reasons for the company's interest in establishing invernaderos in this region is their access to groundwater. The discourse the company used in their promotional video, in which they indicate that the area is an "arid and barren waste land" contradicts their statement that quality tomato production depends on "the long term use of groundwater resource at premium in the Jalisco areas where the company operates." Furthermore, the fact that the invernadero is not recycling water means that there is a huge loss of groundwater, which also indicates that there is a constant need to be extracting more groundwater.

As I conducted interviews with community members closest to the company, it became apparent that the company did not have any issues accessing water in this 'hot griddle' known as the Llano en Llamas. But, the communities were only getting limited access to water. The accessibility to water in this region has to do with who has the resources to extract water, and in this regard the company has an overwhelming advantage over the local communities. For the communities:

[water] only comes once a week. But here we are fighting every day. But as I said, no government has done anything for the issues with water, only when they are campaigning as I said, there comes one, and then another one, and the same promises but after that, they forget about what we said... Yes, they release it [water] every Wednesday, it comes like around 10 in the morning and it lasts all day and night, and on Thursdays like around 11 in the morning they take it away. In [another community] I think it comes on Tuesday, in the morning and on Wednesday morning they take it away²⁵ (Personal Interview with rural resident in San Gabriel 2011; my translation).

²⁵ "[El agua] no más nos llega una vez por semana. Pero ahí estamos, peleando cada día. Pero como le digo ningún gobierno nos ha hecho caso en eso del agua, no más cuando andan de campaña como le digo, llega uno y llega otro y las mismas promesas pero ya después de eso se olvidan de lo que les dijimos....Si, no la [agua] sueltan el miércoles y llega como las 10 de la mañana dura todo el día y toda la noche y el jueves como a las 11 de la mañana ya no la quitan. En [otra comunidad] yo creo que llega el martes, en la mañana y ya el miércoles por la mañana se la cortan" (Personal Interview with rural resident in San Gabriel 2011).

It is important to note that the community struggle to access water is historic. In other words, they have a very long history of trying to get access to water. In contrast, for the company Bioparques de Occidente accessing water is just a simple matter of investment. Dispossession happened when underground water began to be used to benefit the company rather than the communities who face water shortages. In this case, water is privatized and commoditized since those who can acquire it are the ones who have the most capital: the greenhouse company.

The community also has to deal with another type of dispossession. The pollution of the dam has also limited the community's access to clean water. The following statement illustrates how the construction of the dam prohibited them from accessing the river water they had benefited from previously:

Since I can remember, we have always been struggling for water, through here passes a river, about 200 meters from us. We used to go to the river to get water, but it went bad. Since they made the dam, it carries the wastewater from the city of San Gabriel and nearby communities.²⁶ (Personal Interview with rural resident in San Gabriel 2011; my translation)

A nearby community was also facing the same situation with water. However, the ejidatarios indicated that there was a time when the communities came together and were able to obtain access to water from a spring source. But, with time, the spring source started depleting and it became insufficient in providing both communities with water. As a result, they were left with no access to the water from the spring source, and instead began receiving water every night from a *yacimiento* (natural spring source), called the Pitayita. This water source also provides water to the communities of La Guadalupe, El Jazmin, El Teposal and La Croix. In order to access the water, residents had to go

²⁶ “No pues desde que yo me acuerdo, desde que yo he tenido razón, siempre hemos estado con esos trabajaos del agua... aquí pasa un río, aquí adelantito, a unos 200 metros de aquí con nosotros. Bajamos al río al agua, pero pues ya se echó a perder. Pues como hicieron una presa, y por ahí viene el drenaje de San Gabriel y todos los ranchos” (Personal Interview with rural resident, in San Gabriel 2011).

through long lines because water was only released to one side of the community. This required much effort from community members:

My dad would wake up every morning at around 1am to fill up water jugs, and carry them to the house, this was hard work, and my mom had a bad leg. When I was a little girl, I would carry water from the river for her to clean the house, I would do this using a donkey and four jugs, those squared ones that are used for alcohol. In those four jugs I would carry water from the river to a huge tub, and I would tell her to not grab any until I was back, so that she would let me rest. Here we have suffered a lot with lack of water.²⁷ (Personal Interview with rural resident in San Gabriel 2011; my translation)

The government of the region also indicates that the issue with access to water is a “*problema ancestral*” (ancestral problem) and that it is due to the geographic location of the region (Municipal representative, Personal Interview 2011; my translation). However, the geographic location of the region is actually the reason why the *invernaderos* are able to use yearlong groundwater for the production of their tomatoes.

In an attempt to prove that there is a silent dispossession of groundwater, information was requested regarding the company’s water concessions. I submitted many requests to National Water Commission (CONAGUA, its acronym in Spanish), the federal government agency responsible for water-related matters, inquiring about water rights or water concessions under the name of Bioparques de Occidente S. A. de C.V. and for the company Desert Glory. Mexico’s Federal Transparency and Public Information Access Law (LFTAIPG, its acronym in Spanish) guarantees the public the right to request and receive information from the federal government.²⁸ Figure 4.6 is a paragraph

²⁷ “Mi papá madrugaba a la una de la mañana a llenar botes, y acarrear agua para la casa, ahí con unos trabajos, y mi mamá siempre estaba enferma de un pie. Cuando estaba yo chiquilla, le acarreaba agua del río para que ella lavara la casa, en un burro con cuatro botes, de esos botes cuadrados que antes eran para el alcohol. Y en cuatro botes le traía agua del río y le llenaba una tinona grande y yo le decía no valla agarrar hasta que venga otra vez, para que me dejara descansar. Aquí hemos sufrido bien mucho con el agua” Personal Interview with rural resident San Gabriel 2011).

²⁸ Ley Federal de Transparencia y Acceso a la Información Pública (LFTAIG). Published on the Diario Oficial de la Federación on June 11 2002.

from part of the response from CONAGUA in regards to my request. In the letter, they indicate having information about water concessions for the greenhouse, Desert Glory, but not for the Bioparques de Occidente. The reason provided is simply that the information is non-existent. The response given by CONAGUA suggests that there is inefficient enforcement of legal dispositions. In other words, if CONAGUA does not have water concessions for the company Bioparques de Occidente how can it guarantee that the volumes for water extraction are respected? This is especially problematic in regions where the aquifers are over-exploited or in communities where there is a lack of access to water.

RESUELVE

PRIMERO.- Este Comité de Información de la Comisión Nacional del Agua, hace del conocimiento del **C. NANCY PRECIADO**, que con relación a su petición consistente en títulos de concesión a nombre de la empresa Desert Glory Invernadero, S. de R.L. de C.V., en este acto se hace entrega de la información peticionada, en la forma y términos y por las razones y argumentos vertidos en el considerando II de la presente resolución.

De igual forma y con relación a los títulos de concesión y asignación otorgados a las empresas Minera Metalúrgica Tapalpa S. A. de C.V., Bioparques de Occidente, S.A. de C.V. y Desert Glory Invernadero, en los municipios de Tonaya y San Gabriel, así como los permisos de Descarga de las empresas Minera Metalúrgica Tapalpa S. A. de C.V., Bioparques de Occidente, S.A. de C.V., Desert Glory Invernadero, respectivamente del estado de Jalisco, así como del cobro por uso y descargas registros de derechos de agua de las mencionadas empresas, en este acto se hace de su conocimiento que este Comité de Información determinó procedente CONFIRMAR la inexistencia de la información solicitada, por las razones y argumentos vertidos en el considerando II de la presente resolución.

Figure 4.6. Paragraph from CONAGUA's Response to a request of information. (INFOMEX 2012b²⁹).

²⁹ This National Water Commission Committee on Information makes it known to Nancy Preciado, that in regards to the request of water concessions in the name of Desert Glory Greenhouse, in this act we deliver the information requested and in the form and terms and for the reasons and arguments presented in section II of this resolution. Similarly, in regards to water concessions and titles granted to companies Minera Metalúrgica Tapalpa S.A. de C.V. and Bioparques de Occidente S.A. de C.V., Desert Glory Greenhouse in the municipalities of Tonaya and San Gabriel, as well as the permits for discharges, of the Companies Minera Metalúrgica Tapalpa S.A. de C.v., Bioparques de Occidente, S.A. de C.V., Desert Glory Greenhouse respectively in the state of Jalisco, as well as charges for use and discharges of the

In addition, I visited the municipality of San Gabriel, as the company is under its local jurisdiction, and requested all the information available about the company Bioparques de Occidente S.A. de C.V. I was given information mostly in regards to the construction plans for migrant housing and property taxes. They confirmed that the company Bioparques de Occidente does not make any water payments to the municipality. They further indicated that if they made any payments for water it would be to the federal government. However, CONAGUA never provided any information that would confirm the company is paying for water usage.

Due to the fact that the company Bioparques de Occidente S.A. de C.V is not recognized by the CONAGUA authorities (INFOMEX 2011c; 2012a; 2012b; 2013a), I was unable to find out if they have water concessions for tomato production. I also looked into the Water Rights Public Registry (REPDA, its abbreviation in Spanish) and there were no titles under any of the names associated with the greenhouse company: “Bioparques De Occidente S.A. de C.V.,” “Bioparques de Occidente,” “Bioparques,” “Kaliroy,” “Kaliroy Fresh LLC,” or “Agricola La Primavera S.A. de C.V.” However, the community members I interviewed indicated that the invernaderos use both surface water and water pumped from water wells. In a report based on field visits to the company in 2010, the International Finance Corporation indicate that from 2009 to 2010 the company used a total of 1,842,325 cubic meters of water, out of which approximately 1,114,226 cubic meters were derived from the Nogal dam, and approximately 700,099 cubic meters from water wells (2010). However, according to research participants, the Nogal dam is polluted and for the invernaderos:

aforementioned companies, in this act we inform you that this committee CONFIRMS the inexistence of the solicited information, for the reasons and arguments presented in section II of this resolution.

The water they were using did not work out, for the same reason, because [water] flows in the open, the [tomato] plants got sick and for that reason they decided to get piped water. Well, it is exposed to the wind, but not a lot. They pump the water, from a *jaguey* (water well) in Tuxca and they have another one that also pumps water. They further cure the water, by putting bleach, and the water is good for domestic use, because it is very clean.³⁰ (Personal Interview with rural resident in San Gabriel 2011; my translation)

Also reflected in the report by the IFC is the same assertion made by the *invernadero* that quality tomato production depends on the appropriate long term use of the groundwater resource at premium in the Jalisco areas where the company operates. This statement and the fact that use of the water from the polluted dam negatively affected the tomato production suggest that the *invernadero* is more likely using more groundwater than in 2010. While for the purpose of this thesis I focused only on the company Bioparques de Occidente, it is also important to consider that the dispossession of water is not only caused by this company, but also by the company Desert Glory. These *invernaderos* are using large quantities of water, as seen in the REPDA's water concessions data in Table 4.2. The companies use more water than that of three communities in the region.

³⁰ “No, y aparte de eso creo que el agua no les sirvió muy bien, por lo mismo como viene rodada, se les enfermaban las plantas, entonces por eso decidieron comprar esta de acá que la traen entubada. O sea, pues le pega el viento pero no es mucho lo que le pega, tienen dos la re-bombean, la compañía al cruzar, ahí de Tuxca, ahí está un pozo un *jaguey*, ahí cae, pero ahí mismo se está re-bombeando. Aquí abajito hay otro a unos 200 metros y la re-bombean para arriba también. Y ellos la están curando, le echan este cloro, y está buena el agua para el gasto doméstico, está buena, porque está bien limpiecita” (Personal Interview with rural resident in San Gabriel 2011).

Table 4.2. Public and Water Concessions on the Autlán Aquifer

Title Holder	Title	Type of Usage	Registration Date	Water usage (m3/year)
MUNICIPIO DE SAN GABRIEL JALISCO (TOTOLIMIXPA, LA GUADALUPE Y LA CROIX)	08JAL109674/16HOG98	Public	12/21/1998	99,575.00
DESERT GLORY INVERNADEROS, S. DE R.L. DE C.V.	08JAL125450/16AMGR04	Agricultural	6/19/2002	1,177,344.00
DESERT GLORY INVERNADEROS, S. DE R.L. DE C.V.	08JAL105500/16AMOC08	Agricultural	11/3/2004	1,177,344.00
DESERT GLORY INVERNADEROS S. DE R.L. DE C.V.	08JAL126281/16AMGR04	Agricultural	2/10/2003	699,000.00
DESERT GLORY INVERNADEROS, S. DE R.L. DE C.V.	08JAL135032/16AMOC09	Agricultural	12/4/2009	294,000.00

Source: Data adapted from Registro Público de Derechos de Agua (Public Registry of Water Rights) 2012.

Note: The data only includes water concessions given to Desert Glory Invernaderos, S. de R.L. De C.V. on the Autlán Aquifer. The company was also given water concessions on the following aquifers: Colima (Colima), Ciudad Guzmán (Jalisco), San Isidro (Jalisco), Lerma-Santiago (Jalisco) and Valle de Santa María del Oro (Nayarit).

The process of accumulation by dispossession re-emerges, but this time it is silent. The dispossession is not as evident as in the case of the mine. In this region where the community is experiencing water inaccessibility it becomes difficult for the communities to see the dispossession. The community is uncertain as to what lies underneath its land. Some argue that there is water; some argue that there is nothing under the burning plain. Furthermore, even if the communities feel that what is

happening is unjust, they are trapped due to the fact that they are dependent on the jobs provided by the company Bioparques de Occidente.

The community responds to this dispossession through an asymmetrical agreement in which, again, the language used is not of economic valorization, but is rather about language of valorization of the poor. Some community members indicated that some ejidatarios sold land to the company Bioparques de Occidente, which included water wells. The ejido in this community has a 5 percent mandatory contribution from any sale. In other words, if someone sells ejido land, the ejido is expected to receive a mandatory contribution of 5 percent of the sale. In this case, rather than asking for the monetary value of the sale, the community asked the invernadero to provide them with one to three hours of access to water, and according to them, “the company is going to exploit a water well and they agreed to give us an hour and a half of water, it is just a matter of pumping it this way” (Personal Interview with rural resident in San Gabriel 2011). The asymmetrical negotiation that took place is unfair to the communities since access to water is a human right and the communities should not be forced to negotiate a human right.

The Dispossession of Water in the Non-traditional Agriculture: Not an Isolated Case

The process of privatization in the ejido communities goes beyond land to include natural resources, such as water. The communities in the region are arguably experiencing colonization through the privatization of their water, as evidenced above. There are communities that have limited access to water, while the invernadero corporations have the capital to extract both from the river and underground sources as much water as they need for the production of their tomatoes. The situation that the communities in the Llano en Llamas experience is not an isolated case.

In December 30, 2011, Elisabeth Rosenthal from *The New York Times* reported a similar situation with organic agriculture. Rosenthal indicated that “the tomatoes, peppers, and basil certified as organic by the Agriculture Department often hail from the Mexican desert, and are nurtured with intensive irrigation” (December 30, 2011). She elaborates that the commercial cultivation of organic tomatoes puts stress on the water table, which is a huge concern because in some areas water wells have run dry this year, which is detrimental to the small subsistence farmers since they cannot grow crops. Her article also supports my argument that the *invernaderos* settled in the region of the Llano en Llamas because of the access to fresh water from the aquifers. She indicates that more than a third of the aquifers in southern Baja are categorized as overexploited by the Mexican water authority and now “they are focusing new farms in ‘microclimates’ near underexploited aquifers, such as in the shadow of a mountain” (ibid, n.p.). This new trajectory is consistent with the establishment of greenhouses in the territory of the Llano en Llamas.

In another case of dispossession in Torreon, Coahuila it has been documented how the *campesinos* have increasingly lost control over their water resources in the region. In the work of researcher Luis Navarro Hernández (2006), Juan Monreal, a reporter, is cited indicating that “between 70-80 percent of water sources are privatized, they are no longer benefiting the social sector” (244). As we can see, when access to water is no longer considered a human right or communal good, and becomes solely an economic good, the usage of water changes priorities and the priority becomes private.

In conclusion, the company Bioparques de Occidente is dispossessing the communities of the municipality of Tonaya from their underground water sources. As demonstrated in the chapter, the communities have limited access to water while the protective agriculture is using large quantities for their tomato production. Additionally,

the profile of migrant laborers presented in this chapter exemplifies other processes of accumulation employed by the *invernaderos* that depends on the marginalized conditions of its workers. I also attempted to shed light on the concept of corporate social responsibility by illustrating how it is experienced on the ground, and indicating how this process is heavily funded by the State.

Chapter 5: Mining Pollution and Dispossession in Tonaya

In this chapter, I discuss another development project, the mine Minera Metalúrgica Tapalpa, which has also dispossessed communities in the Llano en Llamas from their water sources by polluting the community's main river. Using secondary sources, I explore briefly the history of mining in Mexico in order to show how mining and dispossession are structures rooted in colonialism, which continue to be facilitated in current times through mining legislation. Drawing on field research, news articles, public documents, and information provided by an activist organization, I reconstruct the mining conflict in the community of Tonaya as well as the community resistance to stop the pollution and toxic discharges into their river, arguing that the communities in the municipality of Tonaya have been dispossessed from water sources primarily through water pollution. By illustrating the process of accumulation by dispossession, I aim to demonstrate how environmental, economic, and social costs are transferred to the communities. I also describe the actions of the local government to stop community resistance, including a violent public response that resulted in the displacement of one of the activists and his family.

A View of Dispossession: A Brief History of Mining in Mexico

Mining and dispossession in Mexico inevitably date back to the time of the conquest, making them projects of Spanish colonialism. It is well known that before the arrival of the Spanish, the people of Mesoamerica had a process for acquiring precious metals such as gold, silver, and copper. This is evident since many of those precious metals were used in temples, graves and other sacred places. In fact, the first shipments that were sent to the Spanish crown were due to the plundering of those sacred places (Uribe Salas 1998). After the Spanish depleted that source of wealth, they began

expanding to other places in search of minerals. The exploitation for precious mineral deposits is a clear example of dispossession where in order to continue extracting resources, the Spanish expanded to other places to plunder them.

A year after the fall of Tenochtitlan (1521), the first mine, Socavón del Río was established in Tehuilotepic in the district of Taxco, state of Guerrero (Urías 1981). The colonizers not only plundered minerals but also drastically changed the value and meaning of precious metals in that the extraction of silver and gold forced creation of a market based economy on the peoples of Mesoamerica. The colonizer forced the Indigenous people to pay tribute with gold and silver, and devalued their products derived from the land (i.e. maize, fruits, and animals). These products were then valued against gold and silver (Florescano 1980).

This new economy also came with its own structure of labor, which converted thousands of Indigenous peoples into slaves whose main duty was to extract precious metals. This transformed their previous collective, ritualistic, and spiritual processes of working the land (ibid). Even in its early stages, this type of mining extraction was devastating not only to the enslaved labor force but also to the mineral rich communities. It is therefore not surprising that the *saqueo* (plundering) of gold is also evidence of the negative impacts left on the communities by colonial mineral extraction. Scholar Enrique Florescano indicates that “it had left frayed communities, disarticulated in their traditional activities and with depleted resources, plus a large number of Indian slaves with the brand of their owner marked on their face”³¹ (ibid, 69; my translation).

The same conditions of exploitation, domination and dispossession continued to exist even after Mexico acquired its independence. This process can be described as

³¹ “solo había dejado pueblos mermados, descoyuntados en sus recursos y actividades tradicionales, más un gran número de esclavos indios, con el hierro de su propietario marcado en el rostro” (Florescano 1980, 69).

internal colonialism: an internal system of social domination that develops after colonized countries enter a process of liberation, obtain independence, or transition into socialism (Barajas 2009; González Casanova (1969) 1980). In other words, the forms of exploitation, dispossession and domination are internalized and used by the national elite against those they consider inferior (peasants, Indigenous peoples, workers, etc.). Thus, even though the country is not officially under colonial rule, they continue experiencing the same conditions of economic, political and social exclusion and domination. After the independence movement, mining was negatively affected. However, the British intervention attempting to secure wealth accumulation in Mexico began a process of mining revitalization, which received marginal benefits. By 1821, the British, French and U.S. influences were well established in Mexico, and in 1848, the mining sector began to gain force in the economy. Foreign investment is of particular importance since during the Diaz dictatorship foreigners dominated not only the mining sector, but Mexico in general.

The regime of Porfirio Diaz (1876-1911) set the conditions for the exploitation and dominion that fostered the dispossession of communities by foreign investment. For example, in 1887, the Mexican government eliminated state taxes and a protective mining code, replacing them with a national tax and by 1892, a new mining law gave property owners absolute titles over subsoil deposits (Hart 1997). Not surprisingly, by 1904, mining concessions reached 13,696, which is about 223,698 hectares—a significant increase from the 2,382 concessions in 1884, which mostly benefited the United States who managed to own 70 percent of the mining sector (Hart 1997; Urías 1981). Diaz's modernization of the mining sector was most beneficial to foreign investors and it did not improve the working and living conditions of laborers (Hart 1997). The unjust conditions of workers led to the strike of the Cananea mine (1906), a key event in the onset of the

Mexican Revolution (1910). The regime of Porfirio Diaz exemplifies internal colonialism in which the national elite began emulating structures of domination by becoming business partners, selling property rights, creating banks with foreign investors, and therefore benefiting from the processes of accumulation.

By the end of the Diaz dictatorship the dominant groups in Mexico were composed of mining and railroad companies, large hacienda owners, and politicians close to the Diaz political group (Velasco Ávila et al. 1988). But, they also included Diaz's opponents from the national elite such as Francisco I. Madero who despite having opposed foreign ownership during the Diaz dictatorship, as acting president signed a deal with Standard Oil Company which included:

Ten years of tax-free operations, including imports, exports, and all domestic activities....Rights of eminent domain and denunciation for any properties, government or privately owned, it wished for pipelines, ports, roads, railroads, and refineries anywhere in the republic. (Hart 1997, 246)

The deal that Madero signed with the Standard Oil Company exemplifies how even after the Mexican Revolution, the national elite continued favoring foreign interests at the expense of the Mexican people. The rights of eminent domain basically gave the company open access to dispossess communities from land and resources. The presidencies of Diaz and Madero illustrate how the national elite began to internalize and replicate conditions that favored them and foreign interests, but not the masses. Disputes for power happened even within the national elite, but as noted above, the power always remained within the same circles (i.e. national elite, and foreign interests), and decisions were always made at the expense of the marginalized. For these reasons, it is important to also focus on those that suffered the exploitation, domination and dispossession and were openly against it. Therefore, the next discussion illustrates internal colonialism from those that experienced it firsthand.

Dispossession through the Eyes of the Dispossessed

The accumulation processes during the Diaz regime, as well as the Mexican Revolution (1910) were based on the exploitation and dispossession of industrial and urban workers and the Mexican peasantry. I illustrate this dispossession of the subalterns (i.e. urban workers and the peasantry) by focusing on Emiliano Zapata and the Magón brothers, who are well-known Mexican revolutionaries.³² For Zapata, to stop dispossession was to gain autonomous livelihood that could be acquired through land reform. In other words, he wanted the peasantry to be able to fend for themselves and in that way put an end to the abuses they experienced at the hands of the *hacendados* or to “remove from the enemy damaging tools.”³³ (Fabela et al. 1970, 104; my translation). In fact, agrarian reform had its origins in Zapata’s Plan de Ayala (Hart 1997; Meyer, Sherman and Deeds 2007). In a public manifesto, he declared:

The Plan de Ayala, which reflects and embodies the ideals of the peasantry, gives satisfaction to both terms of the problem, while it treats the enemies of the people as they deserve, reducing them to impotence and to immobilization through confiscation, it also establishes in articles 6th and 7th the two great principles of distribution of stolen land (compelling act of justice) and the parceling of expropriated land (act required for both justice and convenience).³⁴ (Fabela et al. 1970, 103-104; my translation)

³² In this thesis, “subaltern” is a term that refers to those marginalized people and/or groups who are in a state of exclusion, meaning they are without access to the line of social mobility. The subaltern is heterogeneous, which means that groups that dominate in one area can be dominated in another. Additionally, the term recognizes the subaltern’s agency/resistance despite its failure to influence the hegemonic power structure. The term is primarily associated with the thinkers: Antonio Gramsci, Ranajit Guha, and Gayatri Chakravorty Spivak. In addition to the aforementioned thinkers, further readings can be found from the South Asian Subaltern Studies Group, and the Latin American Subaltern Studies Group.

³³ “Quitar al enemigo los medios de dañar.” (Fabela et al. 1970,104)

³⁴ “El Plan de Ayala, que traduce y encarna los ideales del pueblo campesino, da satisfacción a los dos términos del problema, pues a la vez que trata como se lo merecen a los jurados enemigos del pueblo, reduciéndolos a la impotencia y a la inocuidad por medio de la confiscación, establece en sus artículos 6o. y 7o. los dos grandes principios de la devolución de las tierras robadas (acto de imperiosa justicia) y del fraccionamiento de los predios expropiados (acto exigido a la vez por justicia y por conveniencia).” (Fabela et al. 1970, 103-04)

For Zapata, the most obvious dispossession experienced by the Mexican peasantry was the forceful takeover of village lands, and the immediate return of the land was a solution to that dispossession (Meyer, Sherman and Deeds 2007). Quotes attributed to Zapata such as, “*La tierra es de quien la trabaja*” (The land belongs to those who work it) and his demands for “*Tierra y Libertad*” (Land and Liberty) illustrate his resistance against a forced economic, social and political dispossession of the peasantry. Furthermore, the publications of the revolutionary intellectuals, the Flores Magón brothers make the connection between the Spanish conquest and the conditions during the Porfiriato. The following analysis is found in their newspaper titled *Revolución*:

[For the Spanish] it was easy for them, very simple, to get rural and urban land titles, but these historically belonged to the [I]ndigenous. To evict the [I]ndigenous people from their lands were trivial and ordinary things in the days of Spanish rule, as it is now....The Mexican territory is possessed, almost entirely, by an extremely small group of landowners, leaving behind small land extensions for smallholders. The mass of the population, the proletariat as numerous as hungry, no longer has an inch of land.³⁵(Flores Magón, July 20, 1907, 2; my translation)

The Magón brothers began to recognize the condition of internal colonialism. For them, the State was using colonial forms of domination such as violence and corruption to deprive the people from their land. Furthermore, they indicate that after the colonizer dispossesses the communities from their land they become powerful landowners or hacendados and such power gives them the power to dominate the life of the workers. The work of the Magón brothers, as well as that of the various revolutionaries was

³⁵ “[Para los españoles] les era fácil, sencillísimo, obtener títulos de propiedad sobre terrenos rústicos o urbanos, aunque estos pertenecieran de antiguo a los [I]ndios. Desalojar a los [I]ndígenas de sus tierras era cosa trivial y corriente en tiempos de la dominación español lo mismo que ahora....El territorio mexicano está poseído, casi en su totalidad, por un grupo reducidísimo de terratenientes, quedando cortas extensiones en poder de los pequeños propietarios. La masa de la población, el proletariado tan numeroso tan hambriento, no posee ni un palmo de terreno.” (Flores Magón, July 20, 1907, 2)

important as it helped with consciousness formation that resulted in the Mexican Revolution.

The Mexican Revolution: A Battle for Power

One of the most important achievements resulting from the Mexican Revolution was agrarian reform. But the process to obtain land redistribution was not simple. There was a political battle over the presidency and the national bourgeoisie, who had a conservative position over land-redistribution and disagreed with the progressive land redistribution position advocated by Francisco Villa and Emiliano Zapata (Menchaca 2011). The political battle resulted in the assassination of President Francisco I. Madero by Gen. Victoriano Huerta, a U.S. backed president, who was eventually removed from office by the forces of Gen. Emiliano Zapata, Gen. Pancho Villa and Gen. Venustiano Carranza. By 1914, Venustiano Carranza took over the presidency and the disagreements over the re-distribution of the usurped land Diaz had given to the foreign companies and the national elite continued. Carranza wanted the land given to the *hacendados* preceding the regime of Diaz to be excluded from being redistributed as part of the agrarian reform, and also wanted the interventions of the courts. The Generals Villa and Zapata opposed his plan and viewed it as elitist; they wanted land redistribution through executive order and military enforcement. (ibid). It was not until 1917 that Carranza, pressured by the masses approved the passage of the monumental Article 27 of the Mexican Constitution of 1917. Under the constitution, the State was forced to return the land rights to the Indigenous communities through ejidos (village collective landholdings).

In regards to mining, the article gave the Nation direct dominion over natural resources, and mineral reserves. The governments of the United States and Europe protested the nationalization, with U.S. President Wilson going so far as to declare

Article 27 illegal and reject the nationalization strategy of natural resources, primarily that of oil. Despite pressure from American businessmen, there was no U.S. intervention since the U.S. was in the process of entering World War I (Menchaca 2011).

In the 1960s, the “mexicanization of mining” was a strategy established in order to give the State control of the mining sector (World Bank 1991). In 1961, the Mining Industries Law of 1961 made it mandatory that Mexican mining investors participate as majority owners in mining companies.³⁶ Indeed, mining concessions were only given when 51 percent of the capital was Mexican owned. However, it is also important to understand that nationalization did not mean the end of a colonial situation for the masses. In fact, in regards to mining, nationalization mostly benefited the Mexican elite. One of the most relevant effects of the “mexicanization of mining” was the creation of a Mexican oligopoly who had strong ties with foreign investors (Urías 1981). Small and medium companies faced marginal conditions and their only two alternatives were to get absorbed by the big mining companies or go bankrupt. In order to survive, the small and medium companies would sell their production to the big mining companies, making them even more powerful and by 1978, 16 mining companies were featured among the 500 most important companies in Mexico (Urías 1981). Most of the private companies on the list were associated with important financial groups in Mexico, as shown in Table 5.1. Due to this history of power that favored the national elite, it is not surprising that the most influential and gigantic mining companies in Mexico now—Grupo Mexico, Minera Frisco, and Industrias Peñoles—are currently owned by German Larrea (the third richest man in Mexico and 40th on Forbes Billionaires), Carlos Slim (the world’s richest man

³⁶ Ley Reglamentaria del Artículo 27 Constitucional en materia de explotación y aprovechamiento de recursos minerales. Published on the Diario Oficial de la Federación on February 6, 1961. Hereinafter cited as Mining Industries Law of 1961 or as the “mexicanization of mining”.

and 11th most powerful), and Alberto Bailleres (the second richest man in Mexico and 32nd on Forbes Billionaires), respectively (Forbes 2013a; 2013c; 2013b).

Table 5.1. Financial Association of the Most Important Mexican Mines in 1978 and 2013

Private Mining Companies (1978)	Financial Groups Association (1978)	Ranking among Top Mining Companies (1978)	Mining Company (2013)
Industrial Minera México. S.A	Pagliari-Alemán-Azcárraga	2	Grupo México S.A. De C.V. (German Larrea)
Minera Frisco	Grupo Bancomer	6	Minera Frisco (Carlos Slim)
Industrias Peñoles	Grupo Cremi	1	Industrias Peñoles (Alberto Bailleres)
Minera de Cananea	Grupo Banamex	5	Grupo México (German Larrea)
Minera Autlán	Grupo Banamex	3	Grupo Ferrominero S.A. de C.V. (José Antonio Rivero Larrea)
Minera de Norte	Fundidora de Monterrey	12	Altos hornos de México (Ancira and Autrey)

Source: Urías 1981, 15; Forbes 2013.

While the “mexicanization of mining” was arguably most beneficial to the Mexican national elite, it also posed a problem for foreign investors who wanted to exploit Mexico’s resources. The “mexicanization of mining” was a problem because it prohibited foreign investors from maximizing profits. However, the chance for foreign investors to enter the Mexican mining sector presented itself during the economic crisis of 1982.

The economic crisis of 1982 abruptly halted Mexico’s national development strategy of strong State intervention. The State was forced to drastically change the orientation of the economy to a neoliberal strategy of market-oriented development,

implemented by the World Bank and the International Monetary Fund (Delgado Wise and Del Pozo Mendoza 2005). However, it was not until the presidency of Salinas de Gortari that the neoliberal strategy was applied to sensitive sectors such as mining. In the Mexican mining industry, practices of deregulation, privatization, and liberalization began in the 1990s. This mining legal framework facilitates a more vicious dispossession of land, water and mineral resources as is evident in the Mining Law (1992) and Foreign Investment Law (1993).³⁷ In other words, these laws facilitated the taking of land from peasant communities for mining purposes. This legal framework follows the World Bank strategy of modernizing the sector.

According to the World Bank, for Mexico to have a comparative advantage as a mineral producer it needed to: 1) Increase access to land and mineral rights, 2) Open the sector to foreign investment by reducing ownership limitations, 3) Revise mining tax legislation in order to eliminate taxes, 4) Modernize the existing, ineffective institutional setup, and 5) Stabilize the microeconomic environment (World Bank 1991). Although the World Bank asserted that the most effective strategy for increasing foreign investment in the mining sector was to eliminate existing foreign ownership restrictions, said strategy was deemed undesirable by the Mexican government and instead alternatives to the privatization of land and minerals were introduced (*ibid*). For the most part, the Mexican government followed the strategy set by the World Bank facilitating the dispossession of land by increasing access and streamlining the mining concession requirements, making it faster and easier for mining companies to acquire concessions.

³⁷ Ley Minera. Published on the Diario Oficial de la Federación on June 26, 1992. Hereinafter cited as Mining Law of 1992. See also Mexican Mining Law on reference for official English translation. Ley de Inversión Extranjera. Published on the Diario Oficial de la Federación on December 27, 1993. Hereinafter cited as Foreign Investment Law of 1993.

Even though, the Mexican Constitution indicates that Mexico's subsoil legally belongs to the Nation, the legal framework (i.e. Mining Law of 1992 and Foreign Investment Law of 1993) opens the sector to global corporations by allowing foreign capital to own 100 percent of Mexican mining concessions through "*sociedades mexicanas*" (Mexican companies) or entities that have zero restrictions to foreign capital and must have a legal address in the country (Delgado Wise and Del Pozo Mendoza 2005; Garibay et al. 2011; Mining Law of 1992, Article 11.). In regards to mining tax legislation, in the past, mining companies in Mexico were required to pay three types of tax payments: royalties (ad valorem), surface taxes, and work requirements (World Bank 1991). The World Bank believed the royalties, which are applied to mining output, discouraged production. It is not surprising that the new *Reglamento*, or legislation of 1992, does not require the payment of mining royalties; in fact, Mexico is the only country in the Americas where companies do not pay royalties (Secretaría de Economía n.d.; World Bank 1991). Currently, the only taxes companies are required to pay are standard corporate income tax, and property taxes (Secretaría de Economía n.d.).

Another change reflected in the Mining Law of 1992, that facilitates the entry of the extractive industry is mining concessions. The concessions are given for 50 years, starting on the date of registration in the public registry, and can be renewed for another 50 years for a total of 100 years (Article 15.). Prior and informed consent or any form of consultation is not included in the legislation. The omission of any instrument of consultation with landowners and communities potentially affected by mining is problematic since communities are unaware of the potential risks to their livelihoods and well-being, and do not have the opportunity to influence the decisions made about projects of development. Consequently, communities like Tonaya know of environmental

devastation not because they were formally notified about them, but because they are direct victims of the pollution.

There are very few mechanisms that protect communities from environmental devastation. Environmental legislation in regards to the mining industry lacks specific standards, and the environmental risk evaluation process's effectiveness is limited. Environmental protection responsibility resides with the Ministry of Environment and Natural Resources (SEMARNAT, as it is abbreviated in Spanish). However, as made evident by the mining conflict in Tonaya, the strategy of the Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT) and other environmental protection entities is to reach an agreement between the affected communities and the mining companies, almost always allowing the companies to continue their process of accumulation and dispossession, as will be explained in detail later in this chapter.

Mexico is endowed with significant mineral resources that make it very attractive to mining investment. It is ranked as the first country in Latin America for mining foreign investment and the fourth country in the world (Deloitte 2012). It is therefore not surprising, that Mexico is leading the world on silver production, and it is also third in bismuth, fifth in lead, ninth in gold and eleventh in copper (Secretaría de Economía n.d.). The mining sector is ranked as the fourth source of foreign exchange, following remittances and displacing the tourism industry (Cámara Minera de México [CAMIMEX] 2013). According to the Ministry of Economy, there are about 288 metallurgical mining companies and about 71 percent of them are owned by Canadian investors (Secretaría de Economía n.d.). Mining projects are mainly in the northern states of Mexico, including Sonora, Zacatecas, Chihuahua, Coahuila, San Luis Potosi and Durango. However, the extractive industry is quickly expanding to states such as Jalisco. In 2005, Jalisco had mining concessions covering 6.66 percent of the state, and by 2011,

about 24 percent of Jalisco's territory was designated for mining concessions (Servicio Geológico Mexicano 2011).

The Tonaya Mine Case: The Actors

The Mining Company Minera Metalúrgica Tapalpa

In 2005, a Mexican mining company registered in the Mexican mining registry as Minera Metalúrgica Tapalpa, S.A. de C.V (CODEA e-mail correspondence to author, September 24, 2011). There is no more public information on the ownership of the company. The company's main contact Armando Alexandri Rionda, and its legal representative Baltazar Chávez Durán, neither gave indications of owning other companies or representing other companies (Servicio Geológico Mexicano 2011). The company does not have a website, nor has it been the subject of any research, and the company is only operating in this region. The rural residents in Tonaya I interviewed believed that the company was a subsidiary of a Canadian company, due to the Canada's dominion over the mining sector. As previously stated, about 71 percent of metallurgical mining companies are owned by Canadian investors. Furthermore, Canadian companies have been most often publicly accused of causing environmental damage and community conflicts³⁸ (Frente de Defensa Wirikuta Tamatsima Wa Haa 2013; *La Jornada* January 19, 2012; Mexico Geologic Service 2011; MiningWatch Canada 2012). However, in examining various companies' public websites, as well as mining projects of 34 foreign companies that are listed in the Mexican mining registry as conducting exploration or exploitation mining activity in the state of Jalisco, none of them listed the company

³⁸ According to the organization MiningWatch Canada, Canadian mining corporations are responsible for environmental devastation and for perpetrating violence all over the world (MiningWatch, 2012). More recently in Mexico the Canadian company Fortuna Silver was blamed for the death of Bernardo Mendez Vazquez, an anti-mining activist who was killed in San Jose del Progreso, Oaxaca (*La Jornada*, January 19, 2012). Additionally, the Canadian Mine, First Majestic Silver acquired concessions that dispossessed the Wixarika from their sacred territory of Wirikuta. (Frente de Defensa Wirikiuta Tamatsima Wa Haa, 2013).

Minera Metalúrgica Tapalpa as a subsidiary or project they were working on (Dirección General de Desarrollo Minero 2012). Similarly, the biggest Mexican companies, Frisco, Grupo Peñoles and Grupo Mexico also do not report having exploration or exploitation in the area.

However, based on press releases, I believe the Minera Metalúrgica Tapalpa was at some point a subsidiary company to Canadian Aurcana Corporation. This is based on the fact that in 2004, the Aurcana Corporation, a Canadian junior mining company, announced that it had commenced drilling in the gold-silver vein named “Veta Venado,” located approximately 90 kilometers southwest of the city of Guadalajara, Jalisco, Mexico (Aurcana Corporation 2004). The name “Veta Venado” corresponds to the mining project name “Veta Venado,” located in the municipality of Tapalpa that belongs to the company Minero Metalúrgica Tapalpa S.A. De C.V. (Servicio Geológico Mexicano 2011). The distance reported by the Aurcana Corporation is approximate to the distance of 100 km southwest of Guadalajara, provided in the environmental assessment by SEMARNAT. However, the Aurcana Corporation indicates that as a result of exploration work, they discontinued work on the Altiplano project or on: “four of the five properties known as the Cerro Blanco, Sabinas, Veta Venado and Penoles, and will not proceed with any further work on these four properties” (Aurcana Corporation 2004). The Altiplano agreement was terminated on August 5, 2005 (Aurcana Corporation 2005). Due to the lack of information available about the mining company, the description of mining operations is limited to the Environmental Impact Assessment (MIA, its acronym in Spanish), produced by the company BIMAS S.C. I provide a discussion about the company’s ownership because knowing who owns the company can provide more detailed information on its operations. Also, for the communities, it is important to know

the ownership of the mining companies as it is seen as an opportunity to gain publicity and international pressure.

The company's stated goal is to extract gold, zinc, iron, and barite from a region located between the community of Santa Gertrudis and the *cerro* (highland) of El Gavilan in the Sierra Madre del Sur (BIMAS S.C. 2007; see Figure 5.1).

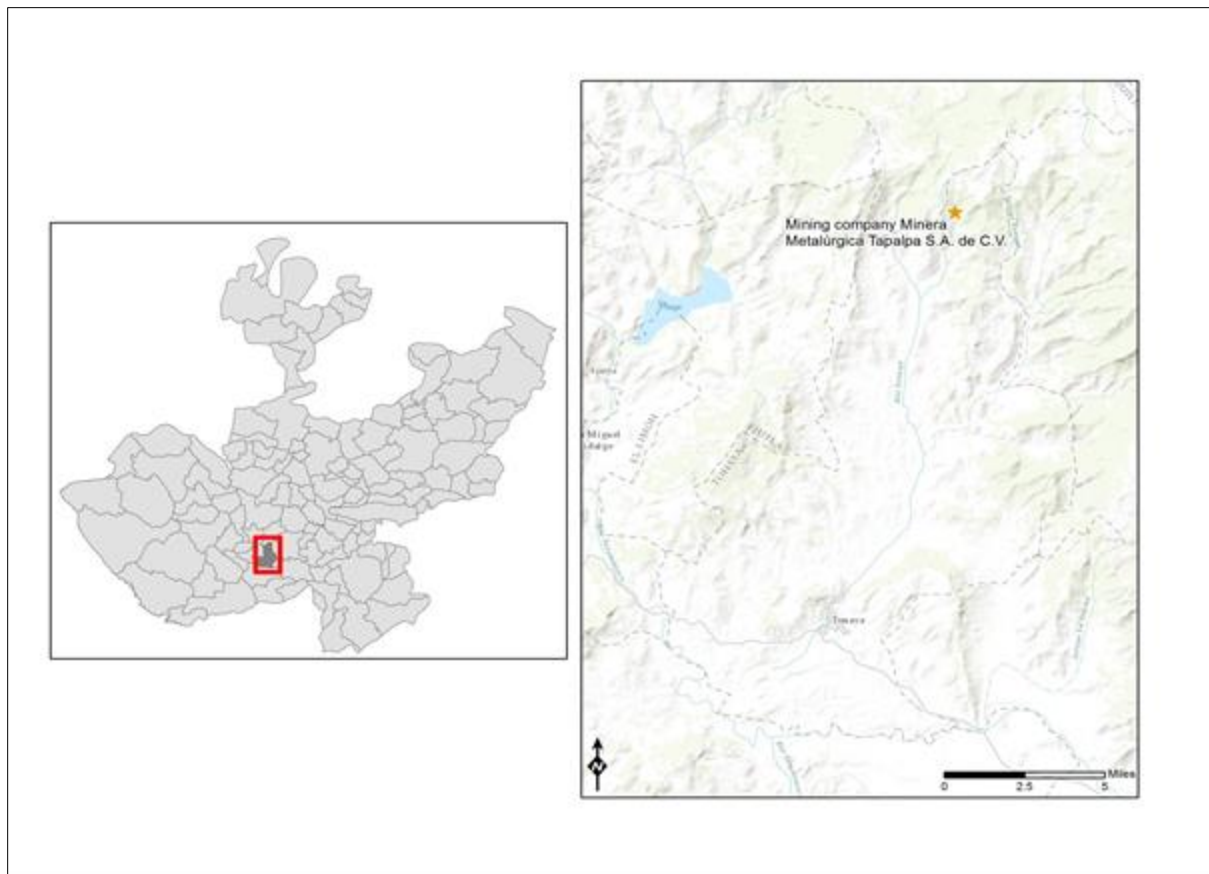


Figure 5.1. The Location of the Mining Company. (Map made by Vince Clause with data from environmental assessment BIMAS S.C. 2007).

The environmental assessment report indicates that the company uses 100 liters of water per day that are brought from Chiquilistlan for the usage of its personnel. However,

the environmental assessment report does not indicate how much water is used for the actual project. But, the company uses heap leaching, which is an industrial mining process that uses cyanide to separate the ore from the rock or other earth materials (Observatorio de Conflictos Mineros de América Latina [OCMAL] 2013). The MIA confirms that the company uses heap leaching:

In the operations of the processing plant, the only possible accident that could present a risk to the environment would be caused by the inadequate handling of sodium cyanide, which will be used in gold and precious metals leaching (III-48)... sodium cyanide, will be used in the dynamic process of cyanide leaching, a method to be used to extract gold from the ore.³⁹ (BIMAS S.C. 2007, 102; my translation)

In order to dispose of toxic substances emitted during heap leaching, dams are created to store the toxic waste. The company is supposed to have two dam systems that are estimated to last for eight years, each giving the project sixteen years of utility (BIMAS S.C. 2007). In addition to being environmentally hazardous, there are also concerns with water consumption. Although, it is difficult to make generalizations about a mine's water footprint because of the differences in mining methods, processing techniques, and environmental variables, the heap leach process can potentially use large amounts of water each day. According to the Wirikuta Defense Front, that particular mine, through its "heap leach process uses 100 million liters of water per day from local water sources and aquifers. In other words, every day the consumption of water will be

³⁹ "En la operación de la planta de beneficio, el único posible accidente que podría presentar un riesgo al ambiente, sería el generado por el manejo inadecuado del cianuro de sodio que se utilizará para el proceso de lixiviación del oro y los metales preciosos... (III-48) cianuro de sodio, el cual será utilizado en el proceso de lixiviación dinámica por cianuración, método a utilizarse para extraer oro de los minerales." BIMAS 2007, 102)

equivalent to the used by 150,000 families”⁴⁰ (Frente de Defensa Wirikuta Tamatsima Wa Haa 2011; my translation).

Affected Communities

In this section I will provide a description of the most affected communities in the region. The most affected communities include Santa Gertrudis, San Isidro and El Alpizahuatl, as shown in Figure 5.2. These are campesino communities that depend mostly on cattle ranching and agriculture for their daily subsistence. In northern parts of the municipality people harvest mostly corn, tend pastures for their cattle, and some have started harvesting a few acres of cucumbers (Personal Interviews in Santa Gertrudis 2011).

The majority of the cattle ranchers belong to the Asociación de Ganaderos, the Livestock Association in the municipality. The communities in the region, specifically the communities of Santa Gertrudis, San Isidro and El Alpizahuatl, are connected by the Santa Gertrudis stream, which becomes the river Río de Tonaya, which unites with the rivers of Río de Santa Buenaventura, Río de Tuxcacuesco, and Río de Ayuquila forming the river Río de Armeria (CODEA e-mail correspondence to author, September 24, 2011). In addition to its recreational use, the Santa Gertrudis stream helps the economies of the campesinos by providing them with water for their cattle (Personal Interviews with cattle rancher in Santa Gertrudis 2011). Below I provide information on the availability of water sources and water supply to contextualize the importance of water in this region.

⁴⁰ “A la vez, el lixiviado con cianuro utiliza aproximadamente 100 millones de litros de agua potable al día, agua que se tomará de las fuentes y acuíferos locales. Es decir: cada día se usará el agua equivalente al consumo promedio de 150,000 familias.” (Frente de Defensa Wirikuta Tamatsima Wa Haa 2011)

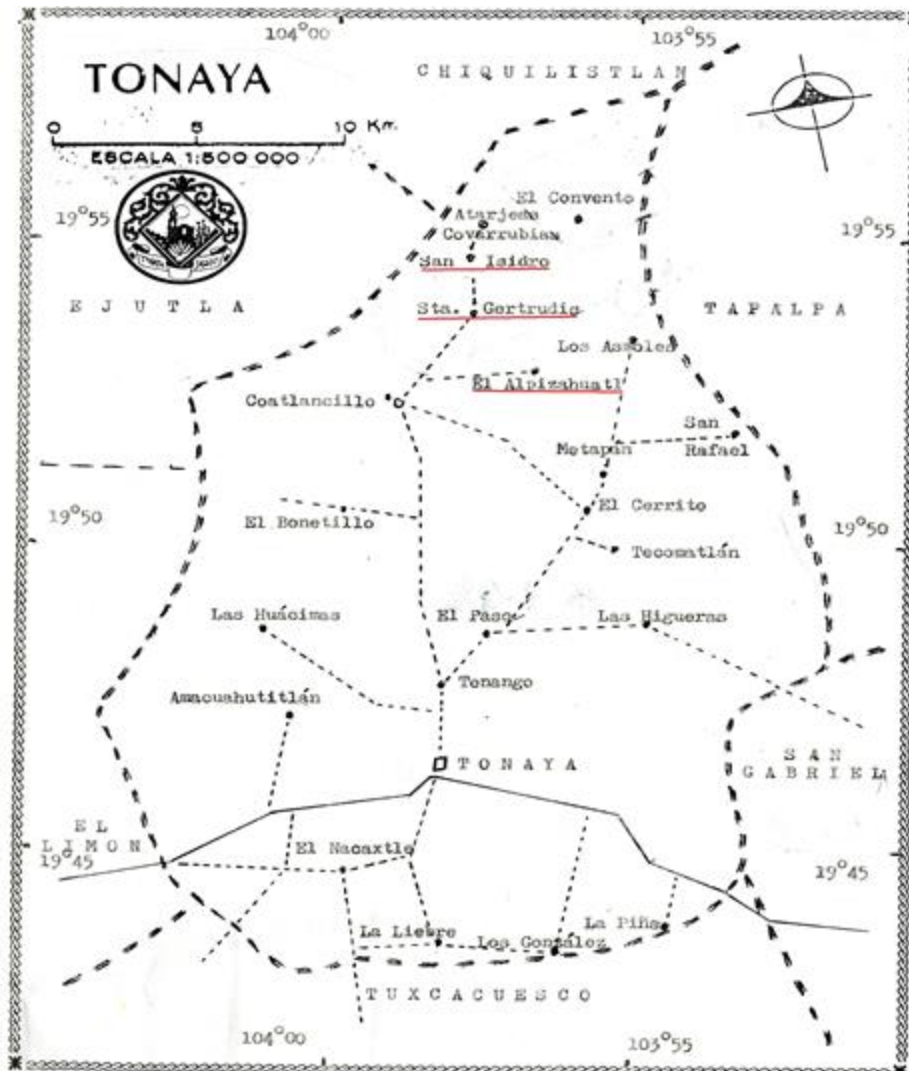


Figure 5.2. Local Map of the Communities in Tonaya. (Public local map obtained from local store 2011).

In regards to water for domestic use, the municipality tries to supply water to the 5,557 inhabitants or 23 communities from 15 water storage tanks, 5 water wells, 5 water springs (*ojos de agua*), and 5 shallow wells (*norias*), as seen in Table 5.2. (Plan de Desarrollo Municipal Tonaya, Jalisco, 2007). The municipality administers about 17 to 18 liters of water, per second. Most of the people receive piped water, not potable water,

for only a few hours a day, and to conserve the water they use *pilas* (water storage units). But, the reality is that not all communities receive piped water; the communities of Tecomatlan, El Alpizahuatl and El Convento obtain their water from water streams, which are inadequate and insufficient (CODEA e-mail correspondence to author, September 24, 2011; Cerón Núñez 2010). Additionally, the community of Santa Gertrudis receives water from the San Isidro deposit, which they indicate is insufficient since they get piped water every other day, only for two hours (Personal Interview with rural resident in Santa Gertrudis 2011).

Table 5.2. Water Sources in the Municipality of Tonaya

Water Source	Location	Beneficiaries
Pozo (water well) 1	Fraccionamiento La Ermita	2000 people
Pozo (water well)2	Carretera El Grullo-Cd. Gúzman	2000 people
Manantial (spring source) “La Toma”	Río Tonaya	500 people
Noria (shallow well)“El Verde”	Carretera a San Luis Tenango	550 people

Source: Plan de Desarrollo de Tonaya 2007, 40.

CODEA/ Río Vivo Tonaya A.C.

The Commission for the Defense of Water in Tonaya or Comisión para la Defensa del Agua de Tonaya (CODEA) originated from the Asociación de Ganaderos (the livestock association). The campesinos in the communities of El Alpizahuatl and Santa Gertrudis were the first to notice the effects of the water pollution on their cows, and subsequently took the matter to the Livestock Association who provided them with support (Personal Interviews with affected residents in Santa Gertrudis and El Alpizahautl 2011). Interviews conducted with the affected rural residents indicate that as

information about the water pollution spread, many started to organize in an attempt to stop the mining activity. In one of my interviews, an active member of the organization indicated that at one point the organization reached 30 members, and included campesinos, teachers, students, local business professionals, and even a former municipal president. The organization created a video titled “Agua: El Verdadero Tesoro” (Water: The Real Treasure) that they used to raise awareness and gain additional community support. Research participants also indicated that initially the municipal government provided the organization with space and funding so that CODEA’s secretary could gather more information about the water pollution. Then, the organization filed complaints with the appropriate government agencies and in the process was able to get technical support from the Junta Intermunicipal de Medio Ambiente para la Gestión Integral de la Cuenca Baja del Río Ayuquila (JIRA), a decentralized government agency composed of ten municipalities along the Ayuquila river, and also from the Ayuquila-River Basin commission (CCRAA its acronym in Spanish). At one point, after a community vote, also known as a plebiscite, the organization attempted to reconstitute itself as Río Vivo Tonaya A.C, an NGO, in order to continue organizing against environmental devastation.

The Accumulation: Who Benefits?

My research participants indicated that they received zero benefits from the mining company Minera Metalúrgica Tapalpa, a point that is supported by examining breakdowns of the investment the mine generates in the region, the wages of mine workers, and the perceived benefits to the communities. Overall the money the company invested in the project was \$685,000 USD, which includes equipment, construction of buildings, and environmental assessments (BIMAS S.C. 2007, n-6). In regards to cost,

the company estimates that they spend approximately \$95,500 USD to produce 500 tons of gold per month, as seen in Table 5.3. In addition, it also cost the company a total of \$1,500 USD in prevention and mitigation strategies, mainly including safety equipment (i.e. fire extinguishers, hard hats, personal protection equipment, breathing masks) (ibid). According to the 2007 environmental assessment report (MIA) by BIMAS S.C., there are 24 employees working in the processing plant and 24 mine workers, which is a total of 44 workers. The mine workers, who are all from the municipality of Chiquilistlan are earning an average of \$900 pesos or \$74 USD per week, and work 12 hours a day in precarious conditions (Agua: el Verdadero Tesoro 2011). This is a miserable salary compared to the millions of dollars the company will take as a result of mineral extraction. This is further illustrated by the following statement made by one of the CODEA members: “From the town of Tonaya, there is not a single person working for the company; and the migratory flow, instead of decreasing in the region, continues to skyrocket due to the low and bad paid jobs in the area”⁴¹ (CODEA e-mail correspondence to author, September 24, 2011; my translation).

⁴¹ “Del pueblo de Tonaya, no trabaja ni una sola persona para la empresa. Y el flujo migratorio, contrario a disminuir en la región, se sigue disparando por la baja calidad de los empleos ofertados y su vergonzosa remuneración.” (CODEA e-mail correspondence to author, September 24, 2011).

Table 5.3. Cost of Minera Metalúrgica Tapalpa

Minerals	Total Gr. of Gold Contained	Value of gr. of (Au)	Value in Pesos	Average Exchange Rate (*Feb. 2007)	Value in US Dollars
Mineral Probable	100,477	\$182.31 pesos	\$18,317,961.87	\$US 10.93	\$US1,675,934.30
Mineral Positive	96,336	\$182.31 pesos	\$17,563,016.16	\$US 10.93	\$US1,606,863.33
Gold (Mineral Positive & Mineral Probable)	196,813	\$182.31 pesos	\$35, 880,978.03	\$US 10.93	\$US 3,282,797.62

Source: BIMAS S.C.2007, 8 and modified using World Bank data indicators.

Note: The official exchange rate for 2007 according to the world bank was \$US10.93 per Mexican peso. The 2007 base was used due to the date of report (data.worldbank.org/indicator).

The environmental assessment only provides information regarding the extraction of gold but the company also extracts silver and zinc. Although the figures may fluctuate due to influences on the market value of each mineral, the revenue expected from the project is greater than that indicated in the project's environmental assessment, even if we include the company's production costs. This means that at the end of its production, the company will earn more than \$3 million dollars while the affected communities will only receive the environmental consequences of mining pollution.

The Process of Dispossession

The Agreement: A Change in Land Use

The mine Minera Metalúrgica Tapalpa began operations in 2006 (CODEA e-mail correspondence to author, October 5, 2011). This is the same year dispossession began

for the campesino communities in the municipality of Tonaya. However, in June 2006, the SEMARNAT received the environmental risk assessment and request for authorization of the project, which they denied because the location of the plant was on forest soil and therefore was categorized as incongruent with the environmental conservation strategies (ibid). The company was able to override the denial by convincing the local municipal government to change the land use category of the desired territory.

To begin this process, in January 2007, the *ayuntamiento* (city council) and the municipal president Rafael Leal Aquiles met to discuss the mining company's petition for a change in land use. The municipal trustee argued that the city council had the power to make land use changes but proposed consultation or research with the appropriate authorities before giving out the permit. The *regidor* (city council member) Leal Maldonado proposed that an agreement be reached between the mining company and the city council in which the mine company assumed complete responsibility for all the possible ecological damages generated by the mining activities (Secretaría General del Ayuntamiento Constitucional de Tonaya, Jalisco 2007). At the next private council meeting, February 9, 2007, council members voted unanimously in favor of the change in land use to benefit the exploitation and extraction of minerals by the company Minera Metalúrgica Tapalpa. The agreement to change the land use to benefit the mining activity was agreed upon by the local municipal government. It is due to this change in land use that the company was legally able to continue with its operation. In other words, by making this change in land use, the municipal government facilitated the process of water dispossession.

‘Reserved Information’

Information about the mining company Minera Metalúrgica Tapalpa is very limited. I, as well as CODEA, the organization against mining made requests for information to the various governmental and non-governmental agencies (i.e. SEMARNAT, CONAGUA, municipal government), but the information was categorized as *‘información reservada’* or reserved information. This means that the information is classified as reserved since the government believes that the information can cause damage or injury to any person or the State and therefore access is temporarily reserved and restricted. Reserved information is classified as such for a period of six years (INFOMEX 2011a). It is worth mentioning that in this mining conflict withholding information by classifying it as reserved not only benefits the mine, as they can continue with their mining activity, but can potentially be dangerous as the residents may unknowingly expose themselves to harmful toxic substances.

Lack of information about the mine is not uncommon in the region since other mining companies have been found to be operating illegally or without sanctions, as well. Indeed, in 2009, in the municipality of Tapalpa, an open-pit mine owned by Gregorio Miramontes Gaeta was extracting iron illegally in area known as La Piedra Bola (*Informador*, August 18, 2009).⁴² He did not have the SEMARNAT authorization to exploit the area and although the landowner denounced the activities with the appropriate governmental agencies, the mine owner continued to exploit the mineral and even hired armed personnel to impede the owner from accessing his *predio* (property) (ibid). A

⁴² Open-pit mining consists in the removal of large amounts of soil and subsoil which is furthered processed to extract the ore. The process involves digging giant craters since in order to extract a few ounces of ore, mining companies are required to remove and destroys a ton of soil. In addition, this type of mining uses large amounts of cyanide for the recovery of metals from the material removed. (Frente de Defensa Wirikuta Tamatsima Wa Haa, 2011; Observatorio de Conflictos Mineros de América Latina [OCMAL] 2013).

similar process of illegality was occurring with the Minera Metalúrgica Tapalpa. According to the agricultural workers interviewed, the mine Minera Metalúrgica Tapalpa was also operating illegally when it first began operations, well before the company convinced local representatives to change the land use classification for its own benefit. These two events in the area are facilitated by the obvious negligence of local, state and federal authorities who either due to lack of capacity, or to compliance with mining companies are allowing the aforementioned situations to occur.

Dispossession of the Communities

The change in land use facilitated the process of dispossession for the mining company. It not only allowed the mining company to exploit an area in a manner that violated environmental strategies, but the decision was not discussed with the communities, as indicated by my participants. In fact, very few people were aware that there was a mining company extracting minerals in the region. Those community members who saw the mining company begin installation operations believed that the company was given a permit to operate and thus never brought a complaint against them (CODEA e-mail correspondence to author, October 5, 2011). The rest of the people who lived in the region were unaware about the mining company, its operation, and its pollution. In this sense, the elected representatives who are supposed to make decisions that benefit the communities, instead acted in benefit of the mining company, at the cost of the environment and communities whose livelihoods continue to be disrupted by the contamination.

The agricultural workers in the communities of Santa Gertrudis began noticing the ecological devastation when:

Dirty water began flowing down stream, it look liked it was mixed with cement.
We know that when it rains, dirty water flows down the river, but we noticed that

dirty water was running down and it wasn't raining.⁴³ (Personal Interview with affected agricultural worker and cattle rancher in Santa Gertrudis 2011; my translation)

Interviews held with community members also indicate that they noticed that the residues were settling down and that the water appeared clearer and clearer the further south it went, which was likely due to the fact that the sediments were accumulating on the river floor. However, up north the water color variations were more noticeable, and even the rocks appeared to have some slime among other “*cochinadas*” or filthy substances (Personal Interviews with affected agricultural worker in Santa Gertrudis 2011). This is important since many of the people affected are raising livestock and since they do not have their own water wells, the river is used as main source of water for their cattle. The effects of the pollution were noticed on the cows when:

They began having diarrhea. We controlled it because we gave them shots, and one of those cows got better, but it had very stinky diarrhea. They got very skinny, and another cow was doing better and suddenly, at around 11am it looked fine but by 4pm it was already dead. And they only drank water from there.⁴⁴ (Personal Interview with affected agricultural worker and cattle rancher in Santa Gertrudis 2011; my translation)

During 2010, about 13 toxic discharges were noticed and recorded by the villagers in the communities of Santa Gertrudis, San Isidro and El Alpizahuatl. The communities began a process of denunciations to various local authorities, including: Junta Intermunicipal del Rio Ayuquila (JIRA), a decentralized government agency composed of ten municipalities along the Ayuquila River that offers technical and managerial assistance to communities on environmental issues; SEMARNAT, and the

⁴³ “Empezó a bajar agua revolcaba. Como si le revolvieran cemento. Y nosotros cuando llueve vemos que baja el agua sucia, pero vamos a ver que sin llover bajaba el agua” (Personal Interview with affected agricultural worker and cattle rancher in Santa Gertrudis, 2011).

⁴⁴ “Les empezó a pegar chorro, se controlaban porque los inyectábamos y una de ese se controló pero hediondo el chorro. Y se empezó a enflacar feooo una vaca, y se controló un poquito, y de un de repente de andar jalando. Como a las 11 se miraba bien y para las 4 ya estaba muerta. Y pura de esa agua bebía” (Personal Interview with affected agricultural worker and cattle rancher in Santa Gertrudis 2011).

Federal Environmental Protection Agency (PROFEPA, its acronym in Spanish). The agency JIRA confirmed the pollution and toxicity levels during visits and lab tests and supported the work of the community group CODEA in defending water resources. The Comisión de Cuenca del Río Ayuquila Armeria (CCRAA) an auxiliary agency whose objective is to address water management problems also supported CODEA by visiting the affected regions and doing denunciation work.

On March 28, 2011, CONAGUA inspected the mine and conducted more lab tests, but did so through ANASA, a certified lab. CONAGUA then proceeded to close the mine, but three days later the mine company broke the seals and restarted mining activity. CODEA informed the city council and other agencies about the incident but received no response. In April 2011, CONAGUA removed the rest of the seals and an agreement was reached with the company representative allowing the mine to continue operations. On June 26 2011, the biggest toxic discharge was noticed by the residents who had to move their cattle to another area, and a huge quantity of fish was reported dead. The municipal government confirmed the toxic discharge and more denunciations were done, but nothing happened (Community members, participants in plebiscite held on July 21,2011).

The above illustrates the bureaucratic process that communities affected by mining have had to go through in order to stop the pollution. The members had to go through processes of filing complaints, getting lab tests to confirm the pollution levels, filing additional complaints, all while the company continued to operate, extracting as much mineral resources as possible and contaminating the river. The damages reported by the CODEA organization were the following:

According to our records, since July of last year, we have had 9 cattle abortions, 17 dead cattle, 2 bovine malformations, an unquantifiable number of dead fish and over 10 people with epidermal problems after they were in contact with the water that was carrying toxic substances that are discharged by the pipes installed

from the tailing dams to the masonry dam and from there straight to the stream, proven and demonstrated. The economic losses due to the lost cattle are above \$150,000 pesos⁴⁵ [USD\$12,225] (CODEA e-mail correspondence to author, September 24, 2011; my translation)

Furthermore, current procedures for dealing with environmental devastation do not allow communities to discuss and make decisions about the type of development they want in their communities. As we have seen, communities were not consulted or taken into consideration when the mining company decided to explore and exploit the area. The local government was well aware of the possible economic and environmental devastation but still favored the mining activity. In this sense, the communities of Tonaya appear to be experiencing similar conditions to that of colonialism in which colonized peoples inhabited a territory with a government that did not represent them, and as a result experienced conditions of inequality at the hand of dominant elite (González Casanova 2006). Consequently, the community pursued the process of a plebiscite or a public vote to decide on the future of the mine, in which the government as well as the company would have to abide to the decision of the people.

A Drop of Resistance

On July 21 2011, the organization CODEA called a plebiscite in the municipality of Tonaya, Jalisco to discuss the imminent environmental devastation incurred by the mine Minera Metalúrgica Tapalpa. The plebiscite took place in the municipality's main plaza, with a table on the north side of the main plaza that accommodated: Israel Jafet Robles, representative of the organization CODEA; Roberto Santana, the municipal

⁴⁵ “Según nuestro registro, de julio del año anterior a la fecha, van 9 abortos bovinos, 17 muertes bovinas, 2 malformaciones bovinas, incuantificable mortandad de peces y más de 10 personas que presentaron problemas epidérmicos luego de entrar en contacto con el agua que llevaba sustancias residuales de la minera, descargadas expresamente por la tubería instalada de su presa de jales a la represa de mampostería y salida directa al arroyo, comprobado y demostrable. Las pérdidas económicas para los ganaderos afectados, superan los 150,000 pesos” (CODEA email correspondence to author September 24 2011,).

president; Arturo Pizano Portillo, representative of JIRA; Tania Román Guzmán, representative of CCRAA; Jesús Lucio Birruetas of SEMARNAT; Nayeli Lizárraga of PROFEPA; Baltazar Chavez, legal representative of the Minera Metalúrgica Tapalpa; and an empty seat for the CONAGUA representative. On the opposite side of the table sat the people of Tonaya and the mine workers.

The organization CODEA had a series of demands where they made evident they rejected any mining activity that negatively affects the environment and the cycle of life. In addition to these demands, the organization questioned the objectivity of the Procuraduría Federal de Protección al Ambiente (PROFEPA) to act as prosecutor and indicated that CONAGUA's decisions tended to mostly favor the mining company. Their demands included:

1. A definite stop to any mining activity deriving from the company Minera Metalúrgica Tapalpa S.A. De C.V. ⁴⁶
2. For the mining company to be made responsible for the treatment of toxic waste stored in the dams and that the land be returned free of toxic chemical substances foreign to the place; as it is stipulated on page 48 paragraph 2 of the MIA, which states: For the transportation and disposal of hazardous waste it will be necessary to contract the services of authorized companies through the Department of the Environment, and Department of Communication and Transportation. These two are located in Guadalajara, Jalisco and surrounding areas.⁴⁷

⁴⁶ “Que se pare hoy definitivamente la actividad de la Minera Metalúrgica Tapalpa, S.A. de C.V.” (CODEA's representatives, participants in plebiscite held on July 21, 2011).

⁴⁷ “Que se responsabilice a la misma empresa minera, el tratamiento de los residuos que almacenan en la presa de jales y se deje el espacio libre de sustancias químico-tóxicas ajenas al lugar, tal como se encontraba antes de su llegada; conforme a lo estipulado en el párrafo segundo de la página 48 del MIA, que a la letra dice: Para el transporte y disposición de los residuos peligrosos será necesario contratar los servicios de empresas autorizadas para tal fin por la Secretaría del medio Ambiente y Recursos Naturales y

3. We reject the entrance of individual or group interests that go against collective interests and the natural order of life.⁴⁸
4. Compensation for the affected landholders by the mine Metalúrgica Tapalpa, S.A. de C.V. and that the remediation of the environment is to be decided by the people with advice from experts.⁴⁹
5. That the spring source that supplies the mine be given to the communities of Santa Gertrudis and El Alpizahuatl which need the water for their everyday life necessities.⁵⁰
6. That financial support be given from the public budget for the installation of a system that transfers and stores the vital fluid to the aforementioned towns, who are the nearest to the running waters.⁵¹
7. That the mine workers are compensated by the mine as a result of the suspension of mining activity, and for the future potential negative health effects to them and their families brought by the constant exposure and contact with toxic chemical substances while they worked for the company.⁵² (CODEA's representatives, participants in plebiscite held on July 21, 2011; my translation).

a la Secretaría de Comunicaciones y Transportes. Estas serán las localizadas en Guadalajara, Jal. y sus alrededores.” (CODEA's representatives, participants in plebiscite held on July 21, 2011).

⁴⁸ “Vetamos la entrada a la zona de cualquier otro interés individual o grupal, que vaya en contra de los intereses colectivos y del orden natural.” (CODEA's representatives, participants in plebiscite held on July 21, 2011).

⁴⁹ “Que haya una indemnización a los afectados terratenientes, por parte de la empresa Minera Metalúrgica Tapalpa, S.A. de C.V., y que esa remediación del entorno lo decida la población afectada con la asesoría de expertos en la materia.” (CODEA's representatives, participants in plebiscite held on July 21, 2011).

⁵⁰ “Que el manantial que abastecía a la minera, sea concesionado a las comunidades de Santa Gertrudis y el Alpizahuatl, que requerimos el recurso para nuestra vida diaria por necesidad.” (CODEA's representatives, participants in plebiscite held on July 21, 2011).

⁵¹ “Que se apoye de parte del presupuesto público, la instalación de un sistema de traslado y almacenamiento del líquido vital hasta los poblados mencionados, que son los primeros más cercanos de las aguas corrientes.” (CODEA's representatives, participants in plebiscite held on July 21, 2011).

⁵² “Que se indemnice de parte de la minera, a todos los trabajadores mineros del lugar, afectados por estas acciones de suspensión de actividades, y se esté al tanto de las consecuencias que pueda generar en la salud de los mismos y su descendencia, la constante exposición y contacto con sustancias químico-tóxicas

For many of the people who lived in the main town of the municipality, the community gathering marked the first time they had heard of the existence of the mine and of the toxic waste it was discharging into the Tonaya River, the main river of the municipality. At the plebiscite, the community listened in detail to the chronology of the mining conflict. The responsible authorities explained who they represented, and what they did in regards to the mining conflict. At the end, the authorities concluded that they did everything they could (submitting complaints) and that the only thing left to do was to wait. The statements provoked an intense debate among the organization CODEA and the government authorities. The organization representing the communities demanded the immediate closure of the mine. However, the most important response from the environmental government agency SEMARNAT was that for:

The municipality, this is something important that we need to analyze. In the municipality, the elected representatives authorized the change in land use; they allowed the mining activity to be established. I was reading the minutes from one of the council meetings where that part was modified, and they say: yes, we agree that this activity should be performed. These are your elected representatives, who by majority vote decided for the extractive activity to be carried out.⁵³ (Jesús Lucio Birruetas, SEMARNAT representative, participant in plebiscite held on July 21, 2011; my translation)

This statement made by SEMARNAT evidenced the bias of the local government towards the mining company and fortified the community's distrust of local government officials. The government authorities' proposals consisted of four parts: 1) A meeting between CONAGUA and PROFEPA to discuss and interchange their findings and create

mientras laboraban en la empresa.” (CODEA's representatives, participants in plebiscite held on July 21, 2011).

⁵³ “El municipio, esto es parte importante de lo que debemos que ver, el municipio representantes populares autorizaron también el uso del suelo; en donde se podría establecerse la actividad minera, lo estaba leyendo dentro de una acta de cabildo donde ellos modifican esta parte y dicen: sí estamos de acuerdo que se realice esta actividad. Y son sus representantes populares, que por mayoría votaron a favor de que esa actividad se realizara (Jesús Lucio Birruetas, SEMARNAT representative, participant in plebiscite held on July 21, 2011).

a list of violations; 2) A meeting with the industrialists to expose the violations and to get an order of compliance. In this proposed meeting, CODEA, city council members, JIRA and the people can participate as witnesses; 3) That the company does some type of cost-benefit analysis and formulates proposals for compliance; and 4) That an agreement is reached and the communities and the workers are informed of what will be done (Tania Guzmán, plebiscite 2011). The proposal made by government officials was rejected by the community at the plebiscite.

In order to convince the population, the government agencies mentioned another environmental conflict involving the sugar plant Melchor Ocampo, where communities also complained about the pollution created by the sugar industry. They indicated that it took them four years to find a solution but that the sugar industry is no longer contaminating and the people were able to keep their jobs. This concept of job creation as understood by Bebbington (2007) posits “job creation” as a compensation mechanism that provides an easy way out for the conflicts created by mining activity. In other words, the companies and the government make strong emphasis on the discourse of job creation since it allows the company to continue operating and extracting minerals, and eliminates the need to use other violence.

In communities such as Chiquilistlan where employment opportunities are scarce, the job creation discourse is not an issue the communities ignore. Even though, the communities of Tonaya and Tuxcacuesco had been affected by toxic pollution of their river, and were not benefiting from jobs from the mining industry, they demanded the government assist mine workers in finding other jobs with the *invernaderos* or greenhouses:

I propose the indefinite closure of the mine project starting today, that the authorities search for jobs for the unemployed mine workers in the *invernaderos*

that in my perspective will easily hire them in a three month period. For the unemployed mine workers the government should compensate them while they get hired by the *invernaderos*. Lastly, they should solicit the resignations of the agencies that do not do their job.⁵⁴ (Anonymous community member, participant in plebiscite held on July 21, 2011; my translation)

The workers also voiced their opposition to the pollution produced by the mining company, and made evident that their struggle is one of survival. This is a result of living under a regime of colonialism where the relationship of the colonized subject with its environment is not about constructing their world, it is about “staying alive” (Fanon 2004, 232), as illustrated by one mining worker’s comments:

I just have some words to say to the guy in the middle who argues that we work for a \$900 peso salary [\$74 USD]. I have maintained myself and my family for three years. And I don’t want dirty water for anyone, I just want my job. [People on the background are unhappy and yell: ‘how much did they pay you?’] No one is going to give me \$900 pesos, I have to work for them, and as I was saying [the people on the background yell: ‘take the dirty water’] well that’s what I’m saying, I don’t want dirty water for anyone, and hopefully someone has a remedy.⁵⁵ (Anonymous mine worker, participant in plebiscite held on July 21, 2011; my translation)

Towards the end of the debate, the government entities continued to push their proposal as the solution to the conflict. The solution by CODEA, and the communities who insisted on the immediate and indefinite closure of the mine was ignored and the CODEA representative responded:

⁵⁴ “Propongo se cierre definitivamente la mina a partir de hoy, las autoridades soliciten empleo para los trabajadores desempleados de la mina en los *invernaderos*, que a mi punto de vista fácilmente los contratan en un plazo de 3 meses. A los desempleados de la mina que el gobierno les dé una ayuda mientras los contratan en los *invernaderos*. Y por último solicitar las renunciaciones de las dependencias que no hacen su trabajo.” (Anonymous community member, participant in plebiscite held on July 21, 2011)

⁵⁵ “Yo no más unas palabras para el señor ese a medias que dice que un salario de 900 mil pesos. Yo me he mantenido ya tres años y mi familia también, y yo agua sucia no quiero para nadie, ni para usted ni para mí, yo solamente quiero mi trabajo, verdad. [Gente inconforme grita: ‘¿cuánto le pagan?’]. No, él no me va a regalar 900 ni mil pesos, yo a güevo tengo que trabajarlos 'edad, entonces como le digo, [gente grita: ‘llévese el agua mugrosa’] pues es lo que le estoy diciendo, yo no quiero el agua mugrosa ni para usted ni para mí, para nadie, ellos no sé, si pueden tener algún remedio.” (Anonymous mine worker, participant in plebiscite held on July 21, 2011)

Why do you insist on taking this through more paper, revisions, more processes, and meeting next year, the next one, and the one after that one, endlessly, extending the exploitation of the richness of our communities. Understand that the community is asking for one thing. Is it democracy what the State preaches? Is this the democratic system? Well, here is the people's decision, and the people are demanding that you take this message to your superiors and to the mining company. The people are demanding their solution and will continue to insist until it is recognized, and the mining company leaves, that's the only solution to this conflict.⁵⁶ (CODEA's secretary, participant in plebiscite held on July 21, 2011; my translation)

The plebiscite was explicitly to decide the fate of the Minera Metalúrgica Tapalpa; the community was to decide whether it wanted the mining company to continue operating or for it to leave indefinitely. But subtly this space provided the local communities the opportunity to reflect on what type of development had invaded the region, and the following reflection describes in a paragraph the foundational argument of this thesis:

Our culture is ending; we don't harvest any more corn, we don't harvest anymore beans, we don't harvest anymore squash. We allow the agave company to use our land for the production of wine; we drink the wine and we get dumber. We also defend the agave company for offering jobs and we defend the *Ingenio* [sugar mill] because it generates jobs. But it does not generate food, it generates a series of toxic chemicals that stay in our land, and the land ends up infertile. I'm in favor of life, it is that simple. I lament not being able to go to the river to bathe in peace, and drink water without poisoning myself. I think that if the company leaves, that is a good thing. The farmers of Chiquilistlan, the day laborers, I think you can access other forms of employment that are not top-bottom with low wages and unjust conditions. There are still fertile lands; there are still ways of making our life more dignified, without fighting with people, without fighting with the bureaucracy, with PROFEPA or with SEMARNAT, which I repeat are at the service of transnational companies by privatizing our national resources, and it is

⁵⁶ “Porque insisten en llevar esto otra vez a tramites, otra vez a revisiones, otra vez a gestiones, y que nos reunamos, el próximo año, el próximo y el próximo, interminablemente, dando largas a la explotación de la riqueza de nuestro pueblo. Entiendan el pueblo, está pidiendo una cosa, ¿es democracia el sistema que predica este país? ¿Es este el sistema democrático? pues aquí está la decisión del pueblo, y el pueblo está pidiendo, que lleven este mensaje a sus jefes directos y no tan directos, a los de la mina otra vez, que el pueblo está pidiendo y va a insistir en esto, hasta que se haga caso a nuestro plebiscito, de que la minera se valla, solo así, se soluciona, el conflicto de verdad.” (CODEA's secretary, participant in plebiscite held on July 21, 2011)

very sad that we have to battle with them and with industrialists, and it makes me wonder what game we are playing? They and everyone are against us, and even the workers defend the company. We don't defend our culture, we don't defend life, we don't defend our dignity.⁵⁷ (Rodolfo, participant in plebiscite held on July 21, 2011; my translation)

The aforementioned description tells the story I attempt to illustrate by focusing on this mining conflict and on the *invernaderos*. This is a reflection on imposed development, on the region that goes deeper than a dispossession of environmental resources; it also implies a process in which certain ways of life are valued and others, through hegemonic processes, devalued. The beginning of our colonization as we have seen in the background history provided begins that way; the Indigenous people had a way of life that was forced to fit a value system based on the commodification of nature and humans. For Joan Martínez Alier (2004) in the concept of *El ecologismo de los pobres* (Environmentalism for the Poor) not everything can fit in this economic value. In other words, aspects of life such as dignity, the value of culture, and human rights are unquantifiable and do not fit into a measurement of monetary value. In this sense the conflict is done in two different languages, one of monetary value and one of dignity, cultural values, human rights, livelihoods and health.

⁵⁷ “Nuestra cultura se acaba, ya no sembramos maíz, ya no sembramos frijol, ya no sembramos calabaza, nuestra tierra se la prestamos a la empresa agavera para que produzcan vino, nosotros nos tragamos el vino y seguimos todos tontos. Defendemos a la empresa agavera por tener empleos y defendemos al ingenio porque genera empleos pero no genera comida, genera una serie de desechos químicos que quedan en la tierra, la tierra queda infértil. Porque no entonces, yo estoy a favor de la vida, simple y sencillamente, así de sencillo, lamento no poder ir al río, y bañarme tranquilamente, tomar agua sin envenenarme yo creo que la empresa pues si se va, es bueno. Los campesinos de Chiquilistlan, los jornaleros ustedes, yo creo que se pueden tener otras fuentes de empleo que no provengan desde arriba con salarios mínimos y condiciones injustas, hay tierras fértiles todavía, hay formas de hacer nuestra forma de vida más digna, sin pelarnos con la gente, sin pelarnos con la burocracia, con la PROFEPA, con la SEMARNAT, que lo vuelvo a repetir están al servicio de empresas transnacionales, privatizando los recursos nacionales, y es triste que tengamos que pelearnos con los industriales y con ellos entonces, a que jugamos no? Los tenemos en contra a ellos y a todos, y aparte con trabajadores de la empresa defendemos a la empresa, no defendemos nuestra cultura, no defendemos la vida, no defendemos la dignidad.” (Rodolfo, participant in plebiscite held on July 21, 2011).

Consequently, the discussion never reached a concrete agreement; the government proposed to regulate the mining company and the people wanted a thorough investigation of the conflict and for the responsible entities to be made accountable for the destruction they caused. The decision for the mine to continue operations was decided by the local and state government after the plebiscite, but the subsequent events provide insights to the repression that the communities experience when they are struggling against the extractive industry.

The Response

In August of 2011, the municipal president broke apart from the organization CODEA, arguing that the mining conflict was a federal responsibility and therefore outside his jurisdiction. Following, in September, the community reported another toxic discharge. The city council proposed for the mining activity to be regulated, but the community was skeptical and did not agree since the mine company had been doing unregulated mining activity for approximately six years. The organization initiated legal work through the Instituto de Derecho Ambiental (IDEA A.C.). The organization attempted to request documents from the city council to continue with legal processes but the information was denied due to the fact that is classified as reserved information.

In December 2011, the municipal president's brother Miguel Garcia Santana, who at the time was appointed the state's human development secretary, assured that the river was not contaminated and that consequently the mining company would continue mining operations. The organization leader Israel, who was present at the presidential address interrupted with a microphone to oppose the government's official story. The president ignored him, took the microphone away, and promptly closed the event (Aggi Cabrera, December 9, 2011).

The activist, CODEA secretary, claimed that the water in the municipality's river continued to be contaminated by the mining company located in the northern part of the municipality. The activist, indignant over the series of events, went up on the stage and attempted to take over a microphone, but his attempt was thwarted by the sound systems coordinator. After he was taken off stage, he continued to protest and in the midst of this was given a blow by another male and two police officers proceeded to take him away. Ultimately, he was rescued by the reporters (Aggi Cabrera, December 9, 2011). After the incident, the activist and his family were threatened and were forced to leave the community of Santa Gertrudis. These acts and the discourse of the local government asserting that the river was no longer polluted silenced the local movement.

In my interviews with authorities, the municipal government indicated that the mine was not within the municipality of Tonaya, but instead was situated in the municipality of Chiquilistlan. However, the environmental impact assessment and the city council minutes indicate that the mine is located within the municipality of Tonaya limits. The lab tests provided to me indicate that they were conducted within five meters from the discharge zone. Furthermore, it stated that the lab technician was Victor M. Gonzales Castro from the laboratories ANASA and he was accompanied by Diego Ivan Anguiano Frias, a staff member of JIRA. The samples taken indicated that no parameters exceeded the NORM-001, which is the environmental norm for toxic discharge. In addition, the report indicates that the Universidad de Guadalajara (Guadalajara University) through its Centro Universitario de la Costa Sur (South Coast University Center) analyzed the water at the entrance point of Tonaya, and at the exit point of the river in Tonaya, finding that the results do not exceed the NOM-001. However, since the University of Guadalajara, found a high organic charge that was unable to be measured due to the time it takes the sample to get to the laboratory.

The conclusion made by the Universidad de Guadalajara is confusing as it posits the agave industry as the source of the organic charge, and it does not make reference to the mine Minera Metalúrgica Tapalpa S.A. de C.V. Furthermore, interviews conducted with community members not only reveal that they distrust the lab tests results and arguments that indicate that the river is no longer polluted, but that they also question the validity of the lab technicians since the process of acquiring lab samples was questionable. According to my participants, the lab technicians never informed the mine company they were going to conduct tests, in fact they never even introduced themselves to the company. Even more questionable was the fact that they hid as soon as they heard the voices of mine workers approaching. For the community, the fact that the lab technicians were afraid was telling of the power of the mine company, making them even more cautious of what they did.

In this chapter, I discussed how the mine Minera Metalúrgica Tapalpa has also dispossessed the communities of El Alpizahual, San Isidro and Santa Gertrudis of their water sources by polluting the municipality's main river. Using secondary sources, I explored briefly the history of mining in Mexico that illustrates that the continuation of structures of domination and exploitation facilitate dispossession through mining legislation. I reconstructed the mining conflict in the community of Tonaya by describing the stakeholders and how the conflict unfolded. I argue that the communities in the municipality of Tonaya are been dispossessed from water sources primarily through water pollution. By illustrating the process of accumulation by dispossession, I demonstrated that the affected communities are forcibly transferred the environmental, economic, and social costs of water pollution. I also illustrated how the response from the Mexican government to the conflict diminished community resistance by threatening a family and forcing them to leave the community.

Chapter 6: Conclusion

In 1953, Juan Rulfo told us about the dark side of the agrarian reform in the Llano en Llamas, depicting the campesinos and their land struggles after the agrarian reform. His stories were just a glimpse of the future struggles campesinos were going to encounter. Almost 60 years after Rulfo, I returned as a researcher to my native community to also write about the struggles of the peasants and this thesis is also my story. As I write this conclusion, I not only reflect on the research I conducted and about its academic contribution, I also reflect on how the research has affected me. For me, writing this thesis has been a very painful process because I recognize the limited capacity of this research to change the situation of dispossession in the region. In other words, while the people in the communities of San Gabriel were dealing with unfair water access, and while the communities of Tonaya were struggling to defend their water, I was sitting at a desk conversing with books, trying to situate them in an academic context. I want to make clear that I am not proposing for researchers to act as “saviors,” I am rather reflecting on my impossibility at conducting a different type of research. In other words, my reflection makes me acknowledge that this research does not provide the subaltern communities of the Llano en Llamas with a tool/instrument they can use to advocate for their own betterment. Through this research I was only able to fulfill my academic responsibility, but I was never required to have some sort of accountability to the communities with whom I worked. I did intend to make myself accountable since I feel I have a personal responsibility, but my academic training was insufficient at showing me how to do this. After this experience, I will no longer conduct research in my native community. I think this research has made me realize that for me it is more important to create and construct alternative ways of development, instead of analyzing

the current ones. I do hope, however, that this research ensures that this part of our history is not forgotten.

This research suggests that the rural communities in the municipalities of San Gabriel and Tonaya are experiencing dispossession of their water sources at the hands of a corporate, socially responsible agricultural company and a mining company. These development projects are not only appropriating themselves of the resources of the region, they are also benefiting from the dispossession rooted in a colonial history that facilitates not only their entrance into the region but also facilitates their access to an available labor force. Creation of jobs in regions that have high unemployment is therefore used as a mechanism that ensures that companies continue with their operations. The communities are then put in a position where no matter what decision they make, they are always at the losing end. If they choose to keep the companies because they provide employment, then they have to deal with the consequences of the dispossession of their natural resources, on the other hand, if they organize against them then, they have to deal with the consequences of not having potential jobs.

I reconstructed the mining conflict in the municipality of Tonaya and argued that dispossession is happening primarily through the pollution of the Tonaya river, which provides water to cattle ranchers in the communities of El Alpizahuatl and Santa Gertrudis. Again, these are communities whose economies are based on cattle ranching and agriculture. The conflict in Tonaya illustrates a reality that is most likely present in other places of Mexico as well. The community was mostly ignored, despite the facts that they followed the bureaucratic protocols to denounce the pollution, and held a plebiscite demanding the closure of the mine. Still, the mine continued with its extractive activity. The peak point of the conflict was when the municipal and state government indicated that the river was no longer polluted, based on lab results. An activist from the

organization refuted the claim, was violently repressed and his family and he threatened and forced to move. After that, the organization fragmented and those that are left only hope that the mine does not continue making toxic discharges into the river.

In this thesis, I described the history of the region that indicates the continuation of colonialism. The haciendas also employed some type of corporate social responsibility discourse. In other words, they also provided workers with housing, food and clothing and the children were taught how to read and write (Zárate Hernández 1997). For the late 1800s that would have been considered exemplary of development, but now those same conditions are considered part of the corporate social responsibility discourse. Again, during this time the haciendas benefited from having an available work force: *peones* (peons) who lived in the haciendas due to the fact that it would be difficult to survive the dry season and an unknown harvest. Interestingly, at the *invernaderos* I heard very similar conditions from the migrant *jornaleros*, primarily Indigenous, who for survival have engaged in contract labor and are the main workforce of the *invernaderos*. I sat down in deplorable houses with a single room shared by two or three families and listened to the stories of their *jornalero* children and their lack of alternatives to contract labor.

It is clear that there is significant need for a decolonial project that values the culture of the *campesino*. In other words, the denial of economic, political and labor opportunities has made being a *campesino* an unwanted profession. As it currently stands, the *campesinos* are the unwanted *rostro* (face) the government and the Mexican elite want to change. In 2011, former president of Mexico Felipe Calderón declared that “the face of the countryside is changed so that it is more productive, worthy, and profitable”⁵⁸

⁵⁸ “se cambia el rostro del campo para que sea más productivo, digno, rentable” (Álvarez Fernández November 10, 2011).

(Álvarez Fernández, November 10, 2011; my translation). According to him, the protective agriculture is a good alternative to increase competition in the rural sector and improve the life conditions of the people (Álvarez Fernández, November 10, 2011). The *invernaderos* are silently dispossessing the communities by extracting water that the community cannot access due to do lack of capital. Even more concerning is the high amount of water that is being extracted in the Llano en Llamas, by the *invernaderos* and by other agricultural and non-agricultural development projects.

Limitations and Future Research

As with any research this study also has its limitations. First of all, the research was conducted in a very short amount of time, by only one person, which limited the number of participants to a specific group of agricultural laborers (i.e. *campesinos*, *ejidatarios* and *jornaleros*), and thus might not represent the views of the majority in the region. However, this did not limit my ability to successfully answer my research questions since these same questions were particular to the aforementioned groups.

The second limitation was related to my limited accessibility to the greenhouse company and the migrant laborers, which could be resolved by going through a public agency such as the health department or the department of education rather than a private entity. The last limitation was more related to the particularities of conducting research in my community, which added layers of complexity. For example, in my family there was fear associated with conducting research about “powerful people” (i.e. the mine company and the greenhouses). Consequently, I was frequently accompanied by a family member when conducting interviews, which sometimes changed the dynamic of the interviews and even sometimes the topic. In other words, the interviews in some instances became a three way interviewing process; I was interviewed, and they asked each other questions.

It was an interesting experience as many times the conversation would go off topic, and I had to figure out a way to bring the conversation back to my topic.

Further research should be conducted to accept or reject the argument of dispossession suggested here. The limitations I encountered dealt with my limited capacity to technically substantiate dispossession (i.e. lab tests, aquifer water measuring). Thus, future research specific to the *invernaderos* should explore the science of semi-hydroponic commercial *invernaderos* as it applies to water consumption in order to shed light on the sustainability of semi-hydroponic production practices. In addition to scholarly work, frequent monitoring of companies' underground water consumption levels and the aquifers sustainable extractability levels should also be conducted since this can help ensure that the companies are not overexploiting groundwater sources.

In regards to the mining conflict, I suggest future independent research should be conducted that determines the pollution in the river as a result of the mine's toxic substances as well as the working and living conditions of the mine workers I was unable to reach. Additionally, I suggest that activist research in the communities of the Llano en Llamas be conducted since I believe that activist research can provide fair solutions to the environmental and social problems that face the region. It is my understanding that activist research goes beyond scholarly work by working collaboratively with the affected communities on deciphering the problem and possible solutions (Hale 2006; Speed 2006). Furthermore, I also think it is important for an investigation to be conducted in regards to the repressive response that forces a family to leave the community so that justice is served for this family.

Ultimately, the decision for future development in the region should be made by the communities in the Llano en Llamas not by the companies. It is my view that the greenhouse industry, the mining companies and the modern agave industry in the region

primarily benefit the local, state, and national elite as well as foreign investors and that this benefit is at the expense of campesinos in the region. Throughout the years, I have witnessed how our campesino culture is disappearing. Year after year, it becomes more difficult to live from being a campesino and working the land. The dispossession of their resources including water adds another layer of complexity.

References

- Acuña, René, ed. 1988. *Relaciones Geográficas del Siglo XVI: Nueva Galicia*. México: Universidad Nacional Autónoma de México.
- Agence France Presse (AFP). *Huffington Post*. 2013. "Mexico Rescues 275 Workers From 'Slavery' At Tomato Plant In Toliman." *Huffington Post*, June 12. http://www.huffingtonpost.com/2013/06/12/mexico-workers-slavery-toliman_n_3427120.html.
- Aggi Cabrera, Carmen. 2011. "Ecologista irrumpió lectura de informe en Tonaya." *Milenio*, Dec 9. <http://jalisco.milenio.com/cdb/doc/noticias2011/be0e93a852354ad9e833b2ddff28f5db>.
- "Agua: el Verdadero Tesoro." 2011. Directed by CODEA. Jalisco, México: CODEA. DVD, 14:12 min.
- Álvarez Fernández, Hector. 2011. "Si es posible cambiar el rostro del campo, asevera Calderón." *NOTIMEX*, Nov 10. <http://ezproxy.lib.utexas.edu/login?url=http://search.proquest.com/docview/903179456?accountid=7118>.
- Anonymous community member, participant in plebiscite held on July 21, 2011. Municipality of Tonaya. Author recorded the event.
- Anonymous mine worker, participant in plebiscite held on July 21, 2011. Municipality of Tonaya. Author recorded the event.
- Arevalo Vargas, Lucia. 1979. *Historia de la Provincia de Avalos: Virreinato de la Nueva España*. Guadalajara, México: Instituto Jalisciense de Antropología e Historia.
- Assies, Willem. 2008. "Land Tenure and Tenure Regimes in Mexico: An Overview." *Journal of Agrarian Change* 8 (1): 33–63.
- Aurcana Corporation. 2004. "Diamond Drilling Commences on High Grade Veta Venado Property; Second of five Properties to be Drilled". News Release, May 27. www.cnrp.cnmatthews.com.
- _____. 2005. "Aurcana Corporation Management Discussion and Analysis." Accessed April 4, 2013. <http://www.aurcana.com/i/pdf/MDAYE05.pdf>.

- Babbie, Earl. 2008. *The Basic of Social Research*. 5th ed. California: Wadsworth Cengage Learning.
- Barajas, Manuel. 2009. *Xaripu Community Across Borders: Labor Migration, Community, and Family* Indiana: University of Notre Dame Press.
- Bebbington Anthony., ed. 2007. *Minería, movimientos sociales y respuestas campesinas: una ecología política de transformaciones territoriales*. Lima: Instituto de Estudios Peruanos.
- Bebbington, Anthony, and Denise Humphreys. 2009. “Actores y ambientalismos: Continuidades & cambios en los conflictos socio-ambientales en el Perú.” *Iconos Revista de Ciencias Sociales* 35: 117-128.
- BIMAS S.C. 2006. “Manifestación de impacto ambiental: Planta de beneficio para tratamiento de minerales, Minera Metalúrgica Tapalpa, S.A. De C.V.” Accessed May 31, 2013. <http://sinat.semarnat.gob.mx/dgiraDocs/documentos/jal/estudios/2006/14JA2006MD033.pdf>.
- _____. 2007. “Manifestación de impacto ambiental : Rehabilitación de la unidad minera Tapalpa, Minera Metalúrgica Tapalpa, S.A. de C.V.” Accessed May 18, 2013. <http://sinat.semarnat.gob.mx/dgiraDocs/documentos/jal/estudios/2007/14JA2007M0007.pdf>.
- Cámara Minera de México (CAMIMEX). 2013. “México país minero: Minería responsable.” Accessed January 25, 2013. <http://www.camimex.org.mx/files/1813/6387/8519/Suplemento.pdf>.
- Cerón Núñez, Dario. 2010. “Plan de Desarrollo Municipal Tonaya 2010-2012”. Tonaya: Ayuntamiento de Tonaya 2010-2012.
- Cobián Felipe. 2013. “Empresa mantenía como esclavos a 270 jornaleros en Jalisco.” *Proceso* (México), June 11. <http://www.proceso.com.mx/?p=344623>.
- CODEA e-mail correspondence to author, September 24, 2011 and October 5, 2011.
- CODEA’s representatives, participants in plebiscite held on July 21, 2011. Municipality of Tonaya. Author recorded the event.
- CODEA’s secretary, participant in plebiscite held on July 21, 2011. Municipality of Tonaya. Author recorded the event.

- Community members, participants in plebiscite held on July 21, 2011. Municipality of Tonaya. Author recorded the event.
- Consejo Estatal de Población de Jalisco (COEPO). 2013. “Grupo de coordinación estatal para la atención de los jornaleros agrícolas y sus familias en el estado de Jalisco” Accessed January 25, 2013.
http://coepo.app.jalisco.gob.mx/html/I_Jornalerosagricolas.html.
- Cos Montiel, Francisco. 2000. “Sirviendo a las mesas del mundo: las niñas y niños jornaleros agrícolas en México”. In *La infancia vulnerable de México en un mundo globalizado*. Coordinated by Norma, Del Rio. México: Universidad Autónoma Metropolitana, Xochimilco.
- De Ita, Ana. 2006. “Land Concentration in Mexico after PROCEDE.” In *Promised Land: Competing Visions of Agrarian Reform*, ed. Peter Rosses, Raj Patel and Michael Courville. Berkeley: Institute for Food and Development Policy.
- de Las Casas, Bartolomé. 1882. “De la Nueva España, Panuco Y Xalisco.” In *Breve relación de la destrucción de las Indias Occidentales*. México: Oficina de Don Mariano Ontiveros. In the section “De la Nueva España, Panuco Y Xalisco.88-93.”
- Deininger, Klaus, and Hans Binswanger. 1999. “The Evolution of the World Bank's Policy: Principles, Experience and Future Challenges.” *The World Bank Research Observer* 1999: 247-76.
- Delgado Wise, Raúl and Rubén Del Pozo Mendoza. 2005. “Mexicanization, Privatization, and Large Mining Capital in Mexico.” Translated by Carlos Pérez. *Latin American Perspectives* 32 (143): 65-86. Accessed February 1, 2013.
<http://lap.sagepub.com/content/32/4/65>.
- Deloitte. 2012. “Mining Industry in Mexico.” Canada: Deloitte& Touche LLP. Accessed February 1, 2013. www.deloitte.com/mining.
- Dirección General de Desarrollo Minero. 2012. “Lista de proyectos mineros en México con capital extranjero.” Servicio Geológico Mexicano. Accessed March 22, 2013.
<http://portalweb.sgm.gob.mx/economia/es/mineria-en-mexico/lista-de-proyectos/339-lista-de-proyectos-mineros-en-mexico.html>.
- El Economista*. “Liberan a 275 jornaleros explotados en Jalisco.” 2013. *El Economista* (Mexico), June, 12. <http://eleconomista.com.mx/sociedad/2013/06/12/liberan-275-jornaleros-explotados-jalisco>.

- El Informador*. “Es ilegal la Mina en Tapalpa.” 2009. *El Informador*, August 18. <http://www.informador.com.mx/jalisco/2009/130000/6/es-ilegal-la-mina-en-tapalpa.htm>.
- _____. “Permance pasiva la Profepa ante daños causados en Tapalpa.”2009. *El Informador*, August, 21. <http://www.informador.com.mx/jalisco/2009/130883/6/permanece-pasiva-la-profepa-ante-danos-causados-en-tapalpa.htm>.
- Escobar Olmedo, Armando M. 1997. “*Proceso, tormento y muerte del Cazonzi, último Gran Señor de los tarascos*” por Nuño de Guzmán 1530. Morelia, Michoacán, México: Frente de Afirmación Hispanista A.C.
- Fanon, Frantz. 2004. *The Wretched of the Earth*. New York: Grove Press.
- Fabela, Isidro, Josefina E. de Fabela, Roberto Ramos V. and Comisión de Investigaciones Históricas de la Revolución Mexicana eds. 1970. *Documentos históricos de la Revolución Mexicana: Emiliano Zapata, El Plan de Ayala y su política agraria*. México D.F.: Editorial Jus, S.A. and Fondo de Cultura Económica.
- Flores Magón, Ricardo.1907. “Tierra y libertad.” *Revolución: Semanario Liberal*. Number 8. July 20. Archivo Electrónico. Instituto Nacional de Antropología e Historia. Colección de Estudios Históricos. Accessed March 22, 2013. http://www.archivomagon.net/Periodico/Revolucion/PDF/rev_n8.pdf
- Florescano, Enrique. 1980. “La formación de los trabajadores en la época colonial, 1571-1750.” In *La clase obrera en la historia de México: De la colonia al imperio*, edited by Carmen Valcarce, and coord. Pablo González Casanova. Mexico: Siglo veintiuno editores.
- Forbes. 2013a. “Alberto Bailleres Gonzalez and Family”. Accessed March 22, 2013. <http://www.forbes.com/profile/alberto-bailleres-gonzalez/>.
- _____. 2013b. “Carlos Slim Helu and Family.” Accessed March 22, 2013 <http://www.forbes.com/profile/carlos-slim-helu/>.
- _____. 2013c. “German Larrea Mota Velasco and Family”. Accessed March 22, 2013). <http://www.forbes.com/profile/german-larrea-mota-velasco/>.
- Frente De Defensa Wirikuta Tamatsima Wa Haa. 2011. “Impactos ambientales de la extracción de metales por lixiviación con cianuro, y de la minería por tajo a cielo abierto.” Accessed March 25, 2013. <http://frenteendefensadewirikuta.org/wirikuta/?p=33>.

- _____. 2013. "Wirikuta Sacred Place Fundamental to the Survival of the Wixarika People and to Humanity." Accessed March 25, 2013.
<http://frenteendefensadewirikuta.org/wirikuta-en-bk/?p=1244>.
- Galindo, Ana María and Ricardo Antonio Landa Guevara. 2007. *Así vivimos si esto es vivir. Mexico: Las jornaleras agrícolas migrantes*. México: Universidad Autónoma de México.
- Garduño Velasco, Hector. 2001. "Water Rights Administration: Experience, Issues, and Guidelines." *Food and Agriculture Organization of the United (FAO)*, no. 70. Rome, Italy. Accessed December 19, 2012.
<http://www.fao.org/docrep/003/x9419e/x9419e06.htm>.
- Garibay, Claudio, Andrew Boni, Francesco Panico, Pedro Urquijo, and Dan Klooster. 2011. "Unequal Partners, Unequal Exchange: Goldcorp, the Mexican State, and Campesino Dispossession at the Peñasquito Goldmine." *Journal of Latin American Geography* 10, no.2: 153-176. Accessed accessed March 22, 2013.
http://muse.jhu.edu.ezproxy.lib.utexas.edu/journals/journal_of_latin_american_geography/v010/10.2.garibay.html.
- Gerritsen, R.W. Peter, Jesús Juan Rosales Adame, Arturo Moreno, and Sarah Bowen. 2010. "Descripción socioeconómica de la producción de agave azul en las regiones de Amula y Costa Sur de Jalisco." In *Agave azul, sociedad y medio ambiente*, edited by Peter R.W. Gerritsen and Luis Manuel Martínez Rivera, 43-67. México: Universidad de Guadalajara, Centro Universitario de la Costa Sur, Departamento de Ecología y Recursos Naturales-IMECBIO.
- González Sánchez, Isabel. 1980. "Sistemas de trabajo, salario y situación de los trabajadores agrícolas, 1750-1810." In *La clase obrera en la historia de México: De la colonia al imperio*, edited by Carmen Valcarce and coord. Pablo González Casanova. 125-72. Mexico: Siglo Veintiuno.
- González Casanova, Pablo. [1969] 1980. *Sociología de la explotación*. Reprint. 10th ed. Mexico: Siglo Veintiuno.
- _____. 2006. "Colonialismo interno (una redefinición)". In *La teoría marxista hoy: Problemas y perspectivas*. Edited by Atilio A. Boron, Javier Amadeo and Sabrina González. 409-34. Buenos Aires, Argentina: CLACSO, Consejo Latinoamericano de Ciencias Sociales. Accessed March 22, 2013.
<http://biblioteca.clacso.edu.ar/subida/clacso/formacion-virtual/uploads/20100720075140/20Casanova.pdf>.

- Grammont, Hubert C. de. 1986. *Asalariados agrícolas y sindicalismo en el campo mexicano*. Mexico: Juan Pablos Editors.
- Grammont, Hubert C. de. and Sara Maria Lara Flores. 2005. *Encuesta a hogares de jornaleros migrantes en regiones hortícolas de México: Sinaloa, Sonora, Baja California y Jalisco*. Mexico: Universidad Nacional Autónoma de México Instituto de Investigaciones Sociales.
- Griffin, Nigel, ed & trans. 1992. *Casas: A short Account of the Destruction of the Indies*. London: Penguin Group. Accessed April 4, 2013.
<http://www.columbia.edu/~daviss/work/files/presentations/casshort>.
- Guzmán Mora, José de Jesús. 2013. “Perfil municipal San Gabriel”. San Gabriel: Ayuntamiento de San Gabriel, 2012-2015. Accessed March 2, 2013.
<http://www.sangabrieljalisco.com/gobierno-municipal/perfil-municipal>.
- Hale, Charles R. 2006. “Activist Research V. Cultural Critique: Indigenous Land Rights and the Contradictions of Politically Engaged Anthropology.” *Cultural Anthropology* 21 (1): 96–120. doi:10.1525/can.2006.21.1.96.
- Hart, John Mason. 1997. *Revolutionary Mexico: The Coming and Process of the Mexican Revolution*. 10th ed. Berkeley: University of California Press.
- Harvey, David. 2003. *The New Imperialism*. New York: Oxford University Press. PDF e-book.
- Hickel, Jason. 2012. “The World Bank and the development delusion.” *AlJazeera*, Sep 27. Accessed December 21, 2012.
<http://www.aljazeera.com/indepth/opinion/2012/09/201292673233720461.html>.
- INFOMEX. 2011a. Official response of “Información Parcialmente reservada” [Partially reserved Information] from SEMARNAT with No. 0001600279511 obtained October 31, 2011 through an online public request submitted to the Mexican government’s portal for transparency and access to information:
www.infomex.org.mx.
- _____. 2011b. Official response of “Modificar Información” [Modify Information] from the National Water Commission with file No. 1610100179911 obtained November 9, 2011 through an online public request submitted to the Mexican government’s portal for transparency and access to information: www.infomex.org.mx.
- _____. 2011c. Official response of “Inexistencia de la Información” [Nonexistent Information] from the National Water Commission with file No. 00160027811

- obtained November 28, 2011 through an online public request submitted to the Mexican government's portal for transparency and access to information: www.infomex.org.mx.
- ____. 2011d. Official response of "Información Parcialmente reservada" [Partially reserved Information] from SEMARNAT with file No. 0001600279511 obtained October 31, 2011 through an online public request submitted to the Mexican government's portal for transparency and access to information: www.infomex.org.mx.
- ____. 2012a. Official response of "Inexistencia de la Información" [Nonexistent Information] from the National Water Commission with file No. 1610100129112 obtained January 31, 2012 through an online public request submitted to the Mexican government's portal for transparency and access to information: www.infomex.org.mx.
- ____. 2012b. Official response of "Inexistencia de la Información y entrega" [Nonexistent Information and delivery] from the National Water Commission with file. 1610100040712 obtained April 9, 2012 through an online public request submitted to the Mexican government's portal for transparency and access to information: www.infomex.org.mx.
- ____. 2013. Official response of "Inexistencia de la Información" [Nonexistent Information] from the National Water Commission with file No. 1610100149512 obtained January 2, 2013 through an online public request submitted to the Mexican government's portal for transparency and access to information: www.infomex.org.mx
- Instituto Nacional de Estadística y Geografía. 2013. "Mapas para imprimir." Accessed March 30, 2013. www.cuentame.inegi.org.mx.
- International Finance Corporation: World Bank Group. 2007. *Bioparques: Summary of Proposed Investment*. Project number: 26328. Accessed March 30, 2013. http://www.ifc.org/ifcext/spiwebsite1.nsf/ProjectDisplay/SPI_DP26328.
- Jesús Lucio Birruetas, SEMARNAT representative, participant in plebiscite held on July 21, 2011 Municipality of Tonaya. Author recorded the event.
- Kaliroy Institutional Video .n.d. "Institutional Video." Kaliroy Premium Greenhouse Tomatoes website. Accessed April 25, 2013. <http://www.kaliroy.com>. Or http://www.youtube.com/watch?feature=player_embedded&v=BGi_otmAQ5Q

- Klepeis, Peter, and Colin Vance. 2003. "Neoliberal Policy and Deforestation in Southeastern Mexico: An Assessment of the PROCAMPO Program." *Economic Geography* 79 (3): 221–240. Accessed January 1, 2013. doi:10.1111/j.1944-8287.2003.tb00210.x
- La Jornada*. Balea edil de San Jose del Progreso a opositores de mina La Trinidad". 2012. *La Jornada* (Mexico). January 19. <http://www.jornada.unam.mx/2012/01/19/estados/035n1est>.
- _____. "Rescatan 270 jornaleros víctimas de esclavitud en San Gabriel." 2013. *La Jornada Jalisco* (Jalisco, Mexico). June 11. <http://www.lajornadajalisco.com.mx/2013/06/11/rescatan-270-jornaleros-victimas-de-esclavitud-en-san-gabriel>.
- Ley de Inversión Extranjera. Published on the Diario Oficial de la Federación on December 27, 1993. Accessed November, 1, 2011. <http://www.diputados.gob.mx/LeyesBiblio/pdf/44.pdf>
- Ley Federal de Transparencia y Acceso a la Información Pública (LFTAIG). Published on the Diario Oficial de la Federación on June 11, 2002. Accessed November, 1, 2011. <http://www.diputados.gob.mx/LeyesBiblio/pdf/244.pdf>.
- Ley Minera. Published on the Diario Oficial de la Federación on June 26, 1992. Accessed November, 1, 2011. <http://www.diputados.gob.mx/LeyesBiblio/pdf/151.pdf>.
- "Ley Reglamentaria del Artículo 27 Constitucional en materia de explotación y aprovechamiento de recursos minerales." Published on the Diario Oficial de la Federación on February 6, 1961. In *Ley Reglamentaria del Artículo 27 Constitucional en materia de explotación y aprovechamiento de recursos Minerales*. Printed in 1962. Mexico: Gobierno de los Estados Unidos Mexicanos, Secretaría del Patrimonio Nacional.
- López, Leon, Canabal Cristiani B., and Pimienta Lastra R. 2002. *Migración, poder y procesos rurales*. Xochimilco: Universidad Autonoma Metropolitana.
- Martinez, Alier Joan. 2004. *El Ecologismo de Los pobres: Conflictos ambientales y lenguajes de valoración*. Peru: Editora D'Marco.
- Martínez , Luis Manuel R, José Luis Olguín L., Demetrio Meza R., Ángel Aguirre G., Brenda Castillo and Samuel García. 2008. "*Diagnóstico de la condiciones de abastecimiento de agua y saneamiento en los municipios de la Iniciativa Intermunicipal de Medio Ambiente para la Gestión Integral de la cuenca aja del*

- Río Ayuquila.*”. Guadalajara: Departamento de Ecología y Recursos Naturales-IMEC BIO.
- Menchaca, Martha. 2011. *Naturalizing Mexican Immigrants: A Texas History*. Texas: The University of Texas Press. PDF e-book.
- Mexican Association of Protected Horticulture (AMHPAC). n.d. “Mexican protected horticulture-quick facts.” accessed March 25, 2013. http://www.amhpac.org/english/index.php?option=com_content&view=article&id=28&Itemid=27.
- Mexican Mining Law. Published on the Diario Oficial de la Federación June 26, 1992. Accessed November, 1, 2011. http://www.economia.gob.mx/files/comunidad_negocios/industria_comercio/ley_minera_mining_law.pdf
- Meyer, C. Michael, Sherman William L., and Susan M. Deeds. 2007. *The Course of Mexican History*. 8th ed. New York: Oxford University Press.
- Mignolo, Walter D. 2011. *The Darker Side of Western Modernity: Global Futures, Decolonial Options*. Durham: Duke University Press.
- MiningWatch Canada.2012. “Publications”. MiningWatch Canada: Mines Alerte. Accessed March 25, 2013. <http://www.miningwatch.ca/publications>.
- Moreno Nahuelpan, Héctor, Herson Huinca Piutrin, Pablo Mariman Quemeando, Luis Cárcamo-Huechante, Maribel Mora Curriao, José Quidel Lincoleo, Enrique Antileo Baeza, Felipe Curivil Bravo, Susana Huenul Colicoy, José Millalen Paillal, Margarita Calfio Montalva, Jimena Pichinao Huenchuleo, Elías Paillan Coñoepan and Andrés Cuyul Soto. 2012. *Ta ññ fije Xipa rarakizuameluwün: Historia, colonialismo y resistencia desde el país Mapuche*. Temuco: Ediciones Comunidad de Historia Mapuche.
- Morett, Gabriel Ch. 1990. *Siguiendo los pasos al General Pedro Zamora*. 1st ed. México, D.F.: author.
- Morett Sánchez, Jesús Carlos, and Celsa Cosío Ruiz. 2004. *Los jornaleros agrícolas de México*. México, D.F: Editorial Diana.
- Morris, Rosalind. *Can the Subaltern Speak? : Reflections on the History of an Idea*. New York: Columbia University Press, 2010. PDF e-book.

- NatureSweet Tomatoes. 2009a. "Sustainability report". Accessed April 25, 2013.
<http://naresweettomatoes.stage.env.fh-digitalsw.com/download/sustainability/2009SustainabilityReport.pdf>.
- _____. 2011b. "Sustainability Report." Accessed April 25, 2013.
<http://naresweet.com/wp-content/uploads/2012/05/Naturesweet-Sustainability-Report-Web.pdf>.
- Navarro Hernández, Luis. 2006. *La laguna: Una nueva guerra del agua en Coahuila*. Mexico D.F.: MBM Impresora.
- Observatorio de Conflictos Mineros de América Latina (OCMAL). "Noticias: campaña contra cianuro." Accessed March 23, 2013. <http://www.conflictosmineros.net/noticias>.
- Olveda, Jaime. 1980. *Gordiano Guzmán: un cacique del siglo XIX*. Mexico: Instituto Nacional de Antropología e Historia.
- Ortiz García, José Luis. n.d. *El andar de Tonaya*. Printed by author. Author has a copy of the book, and book can be found in the municipality of Tonaya.
- Pastor, Manuel, and Carol Wise. 1997. "State Policy, Distribution and Neoliberal Reform in Mexico." *Journal of Latin American Studies* 29, no. 2:419-456. Accessed April 25, 2013. http://journals.cambridge.org/abstract_S0022216X9700474.
- Perramond, Eric P. 2008. "The Rise, Fall, and Reconfiguration of the Mexican ejido." *Geographical Review* 98 no.3: 356-371. Accessed December 22, 2012.
<http://onlinelibrary.wiley.com.ezproxy.lib.utexas.edu/doi/10.1111/j.1931-0846.2008.tb00306.x/abstract>.
- Perreault, Tom. 2012. "Dispossession by accumulation?: Mining, Water and the Nature of Enclosure on the Bolivian Altiplano." *Antipode*, December. Accessed March 22, 2013.
<http://onlinelibrary.wiley.com.ezproxy.lib.utexas.edu/doi/10.1111/anti.12005/pdf>.
- "Plan de Desarrollo Municipal Tonaya, Jalisco." 2007. Ayuntamiento Municipal de Tonaya 2006-2009. Accessed February 3, 2012.
<http://seplan.app.jalisco.gob.mx/files2/PlanesMunicipales2007/Plan%20Municipal%20de%20Desarrollo%202007-2009%20Tonaya.pdf>.
- Price Elizabeth on behalf of Adriana Gomez, IFC communication officer, email message to author, June 14, 2013.

- Quijano, Aníbal. 1999. "Colonialidad del poder, cultura y conocimiento en América Latina." *Dispositio* 24 (51):137–148. Accessed April 25, 2013.
<http://www.jstor.org.ezproxy.lib.utexas.edu/stable/41491587>.
- _____. 2000. "Coloniality of Power and Eurocentrism in Latin America." *International Sociology* 15 (2) (June 1): 215–232. Accessed April 25, 2013.
<http://iss.sagepub.com.ezproxy.lib.utexas.edu/content/15/2/215.short>.
- Red Interinstitucional de Equidad de Género y Migración en Jalisco (RED). 2010a. "Red de género y migración en Jalisco." Accessed February 8, 2013.
<http://redgeneroymigracionjalisco.org/sitio/>.
- _____. 2010b. "Programa para niños migrantes (PRONIM,SEP)." Accessed February 8, 2013. <http://redgeneroymigracionjalisco.org/sitio/?p=144>.
- Registro Público de Derechos de Agua (REPGA). 2013. "Consulta a la base de datos del REPGA." CONAGUA. Accessed April 25, 2013. <http://www.cna.gob.mx/Contenido.aspx?n1=5&n2=37&n3=37>.
- Reynoso, Salvador ed. 1961. *Pleito del Marques del Valle contra Nuño de Guzmán, sobre aprovechamiento de Pueblos de la Provincia de Avalos*. Jalisco, Mexico: Librería Font, S.A.
- Rivera Cusicanqui, Silvia. 2010a. "Ch'ixinakax utxiwa: una reflexión sobre prácticas y discursos descolonizadores." Buenos Aires: Tinta Limon. March 22, 2013.
<http://nilavigil.files.wordpress.com/2012/06/chixinakax-utxiwa-silvia-rivera-cusicanqui.pdf>.
- _____. 2010b. *Oprimidos pero no vencidos: Luchas del campesinado aymara y qhechwa de Bolivia, 1900-1980*. 4th ed. Bolivia: La Mirada Salvaje. Accessed March 22, 2013.
<http://www.encuentroredtoschiapas.jkopkutik.org>.
- Rodolfo, participant in plebiscite held on July 21, 2011. Municipality of Tonaya. Author recorded the event.
- Romero de Solís, José Miguel. 2004. *Archivo de la Villa de Colima de la Nueva España Siglo XVI: Tomo II*. Colima: Archivo Histórico del Municipio de Colima, Universidad de Colima.
- Rosenthal, Elisabeth. 2011. "Organic Agriculture May be Outgrowing Its Ideals." *The New York Times*. December 30. Accessed March 22, 2013.
<http://www.nytimes.com/2011/12/31/science/earth/questions-about-organic-produce-and-sustainability.html>.

- Rulfo, Juan. 1953. *El Llano en Llamas*. Mexico: Biblioteca Plaza Janés.
- Rulfo, Juan. 1995. *The Burning Plain: And Other Stories*. Translated by George D. Schade. Texas: University of Texas Press.
- Sauer, Carl. 1948. *Colima of New Spain in the Sixteenth Century*. Berkeley: University of California Press.
- Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación (SAGARPA). 2012. “Agricultura: Agricultura protegida, 2012.” Accessed March 22, 2013. <http://www.sagarpa.gob.mx/agricultura/Paginas/Agricultura-Protegida2012.aspx>.
- Secretaría de Desarrollo Social (SEDESOL). 2003. “Atención a jornaleros agrícolas.” Accessed March 22, 2013. http://www.sedesol.gob.mx/es/SEDESOL/Atencion_a_Jornaleros_Agricolas.
- _____. 2013. “Dirección general de atención a grupos prioritarios.” Last updated March 26, 2013. <http://www.cipet.gob.mx>.
- Secretaría de Economía. n.d. “PROMEXICO inversión y comercio: Como invertir en México.” Accessed December 21, 2012. <http://www.economia.gob.mx>.
- Secretaría General del Ayuntamiento Constitucional de Tonaya, Jalisco. 2007. “Libro de actas no.1”. Session no. 03 and no. 05. Administration for 2007-2009.
- Servicio de Información Agroalimentaria y Pesquera (SIAP). 2010. “Inventario nacional de agricultura protegida, 2010.” Accessed March 22, 2013. <http://www.siap.gob.mx>.
- Servicio Geológico Mexicano. 2011. “Panorama minero del estado de Jalisco”. Accessed March 22, 2013. <http://www.sgm.gob.mx/pdfs/JALISCO.pdf>.
- Speed, Shannon. 2006. “At the Crossroads of Human Rights and Anthropology: Toward a Critically Engaged Activist Research.” *American Anthropologist* 108 (1): 66–76. doi:10.1525/aa.2006.108.1.66.
- Svampa, Maristella, Lorena Bottaro, and Marian Alvarez Sola. 2010. “La problemática de la minería metalífera a cielo abierto: modelo de desarrollo, territorio y discursos dominantes.” In *Minería transnacional, narrativas del desarrollo y resistencias sociales*, 2nd ed. Edited by Maristella Svampa and Antonelli A. Mirta. Argentina: Editorial Biblos Sociedad.

- Teichman, Judith. 2004. "The World Bank and Policy Reform in Mexico and Argentina." *Latin American Politics and Society* 46 (1): 39–74. Accessed April 11, 2012. doi:10.2307/3177081.
- Tonaya registry. 2011. "Padron de licencias: Fabricas de mezcal y sucursales." Unpublished government document. Ayuntamiento de Tonaya, Jalisco.
- Trujillo Gonzalez, Enrique. 1975. *San Gabriel y su historia a través del tiempo*. n.p: printed by author.
- UNICEF Mexico.2007. "Diagnóstico sobre la condición social de las niñas y niños migrantes internos, hijos de jornaleros agrícolas." Accessed March 22, 2013. http://www.unicef.org/mexico/spanish/mx_resources_diagnostico_ninos_jornaleros.pdf.
- United Nations Global Compact.n.d. "Overview of the UN Global Compact." Accessed November 18, 2012. <http://www.unglobalcompact.org>.
- United States Department of Agriculture (USDA). 2012. "Tomatoes". Accessed November 18, 2012.<http://www.ers.usda.gov/topics/crops/vegetables-pulses/tomatoes.aspx>.
- Univision. 2013. "Rescatan a 275 jornaleros que eran explotados en México." Univision, June 12. Accessed June 31, 2013. <http://noticias.univision.com/mexico/noticias/article/2013-06-12/rescatan-275-jornaleros-mexico#axzz2ZQhPLbIJ>.
- Uriás, Humberto. 1981. *¿Quién controla la minería mexicana?*. Mexico: Instituto de Estudios y Defensa de los Recursos Naturales y Culturales de México.
- Uribe Salas, José Alfredo. 1998. "La explotación del cobre en Nueva España." In *La minería mexicana de la colonia al siglo XX*, edited by Inés Herrera Canales, 46-72. Mexico: Instituto de Investigaciones Historicas-UNAM.
- Velasco Ávila, Eduardo Flores Clair, Alma Aurora Parra Campos, and Edgar Omar Gutiérrez López. 1988. *Estado y minería en México (1967-1910)*. México, D.F.: Fondo de Cultura Económica, S.A. de C.V.
- Wilder, Margaret, and Romero Patricia Lankao. 2006. "Paradoxes of Centralization: Water Reform and Social Implications in Mexico." *Rescaling Governance and the Impacts of Political and Environmental Decentralization*, 34 (11): 1977-1995. Accessed April 12, 2012. doi:10.1016/j.worlddev.2005.11.026.

- World Bank. 1985. *Mexico: Second Small and Medium Scale Mining Development Project*. Washington D.C: World Bank.
- _____. 1991. *Mining Sector Restructuring Project*. Washington, D.C: World Bank.
- _____. 1994. *Second Water Supply and Sanitation Sector Project*. Washington D.C: World Bank.
- Yunez-Naude, Antonio. 2003. "The Dismantling of CONASUPO, a Mexican State Trader in Agriculture." *The World Economy* 26 no.1: 97-122. Accessed March 22, 2013. doi: 10.1111/1467-9701.00512
- Zárate Hernández, José Eduardo. 1997. *Procesos de identidad y globalización económica: El Llano Grande en el Sur de Jalisco*. México: El Colegio de Michoacán.
- Zepeda Castañeda, Luis. 2005. *La vida en San Gabriel*. Jalisco, México: Secretaría de Cultura del Gobierno de Jalisco.