

Exploring the impacts of sugarcane expansion in La Montaña, Guatemala: A feminist community-based research project

by

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BA, Huron University College at University of Western Ontario,
2012

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Abstract

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Sugarcane cultivation is expanding throughout the Pacific coast of Guatemala, with political and ecological consequences for subsistence communities. The majority of sugar production occurs in the departments of Santa Rosa, Escuintla, Suchitepequéz and Retalhuleu on the Pacific coast. As sugarcane expands into *fincas* (large plantations owned by an agricultural elite), the amount of land available for rent to landless or land-poor farmers is reduced. Sugarcane expansion provokes various forms of environmental degradation, including deforestation, air pollution, water contamination, and draining of rivers and wetlands. Sugarcane cultivation also provokes health problems for workers and those who live near these sites, including kidney failure, dehydration, and respiratory and skin problems. As sugarcane expands, subsistence communities in the surrounding area are subject to these detrimental effects of sugarcane cultivation. Building academic knowledge on the impacts of sugarcane expansion is necessary in order to be better equipped to be in solidarity with, or support subsistence communities facing this expansion. It is crucial to meaningfully involve subsistence communities in this process of knowledge production since it is the inhabitants of these places, not researchers, who are the experts on these issues.

In this thesis, I describe a feminist community-based research project in the community of La Montaña, Guatemala, on the impacts of sugarcane in their community. The key goals of this research were to 1) collaboratively identify with participants specific areas of interest regarding sugarcane impacts, and investigate these areas; 2) analyse data with an awareness of gender and 3) share research findings with the community to facilitate the possibility of action or critical reflection. I used public group discussions, semi-structured interviews, participant observation and drop-in sessions to collect data. Through this process, the issues of political inaction (as a response to sugarcane) and deforestation (driven by sugarcane) emerged as two key areas of interest which I explore in this thesis. The main finding of my research was that sugarcane cultivation is a divisive force in La Montaña: while community members agree on the negative aspects of sugarcane cultivation, they disagree about how to address this issue. As I find, these divisions occur along the axes of gender and age. These divisions

also constitute an obstacle to a collective political platform to address sugarcane expansion, and a potential site for intra-community violence as sugarcane continues to expand. These findings were presented to the community in a public presentation in February 2015, to provide a space for critical discussion of these issues.

Overall, this research identifies a key difficulty that subsistence communities face in the context of agroindustrial expansion: as the importance of collective action grows, so too do intra-community divisions. This research highlights the need for long-term solidarity-building work in communities on the Pacific coast of Guatemala, in order to be able to achieve the changes that community members feel powerless to enact alone.

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Chapter 1: Introduction

Abstract

In this introduction, I outline the critical context for understanding the impacts of sugarcane expansion in the subsistence community of La Montaña, Guatemala. Sugarcane expansion in Guatemala is a threat to subsistence communities as a result of its numerous negative social and ecological impacts (Alonso-Fradejas 2012, Actionaid 2010). In Retalhuleu, the department where La Montaña is located, sugarcane also displaces landless or land-poor farmers, who formerly rented land in the plantations where sugarcane is cultivated. Through the use of a feminist community-based research methodology, political inaction and deforestation emerged as two key issues related to sugarcane expansion that were of interest to community members. In this thesis I use a feminist political ecology framework to analyse these two areas. Feminist political ecology is an area of research that examines how environmental issues impact gender dynamics and vice versa (Rocheleau et al 1996). The main finding of my research is that while the community agrees on the negative aspects of sugarcane expansion, community members disagree about how to address this issue along the axes of gender and age. I argue that these divisions present an obstacle to collective action and represent the potential for future intra-community violence/divisions. This introduction describes the local context of La Montaña, the broader regional and national context of sugarcane expansion, and finally the methods and methodology I used for this project.

1.0 Introduction

Agroindustrial activity is currently expanding throughout the world, with political, ecological and social consequences. Agroindustries are predicated on a logic of capitalist extraction which externalizes the environmental 'costs' of production and depend simultaneously on the subjugation of ecosystems and the marginalization of subsistence livelihoods (Galeano 1971). As such, these industries often complicate or endanger the subsistence livelihood practices of the people who live at or near these sites, as they adversely affect the ecosystems within which these livelihoods are embedded (McMichael 2012). The encroachment of these industries has also placed subsistence communities into direct conflict with these industries as people assert their right to access land (Borras et al 2010). As agroindustries expand, these communities undeniably bear the brunt of human impact (Blaikie 1985, Carruthers 2008). However, subsistence communities are not homogenous units. As feminist political ecologists point out, environmental pressures affect people differently along axes of power (Agarwal 2001, Campbell and the Women's Group of Xapuri 1996, Miller et al 1996, Truelove 2011). Different material and psychological experiences of agroindustrial activity give people different stakes in environmental conflict, and different orientations to issues of environmental degradation (Gururani 2002, Razavi 2009, Sundberg 2003).

2012, Brent 2015, Cáceres 2015 Edelman & León 2013). This phenomenon reveals a “territorial logic” of power- as the global demand for food and fuel grows, the consolidation of agricultural land is a key way for governments to assert geopolitical and/or regional control (Borras et al 2012). For corporations, favourable global markets and the uncertain status of peasant and Indigenous land rights in many areas of Latin America make large-scale land acquisitions both profitable and relatively easy (ibid). This acquisition of land facilitates the expansion of sugarcane, oil palm, and soy (Alonso-Fradejas 2015, Clements & Fernandes 2013, Hall 2013, Mingorría et al 2014). In Guatemala the sugarcane and oil palm industries are creating immense problems for subsistence maize communities, including the pollution of rivers and wetlands, deforestation, air pollution, soil erosion, and dispossession (Actionaid 2010, Alonso- Fradejas et al 2011, Guereña & Zepeda 2013, SEGEPLAN 2011). In a country where almost the entire rural population subsists on maize cultivation, the expansion of these industries is literally life-threatening. However the response from the national government has been to encourage expansion: indeed in 2008, the government announced that 37% of the country's total arable land was suitable for sugarcane and oil palm cultivation (Alonso-Fradejas et al 2011). In this context, it is crucial to illuminate both the breadth and the depth of how these industries are impacting subsistence communities at a moment in which both sugarcane and oil palm are on course to expand. By breadth, I refer to research which draws together the diverse experiences of subsistence communities throughout the country, to build a critique of the “emergent project of agrarian capitalism in Guatemala” (Alonso- Fradejas 2015, p. 499). By depth, I refer to case studies in geographically specific sites. Among other potential contributions, these 'in-depth' studies can reveal how axes of power in subsistence communities are re-shaped by agroindustrial activity (see Behrman et al 2012, Mingorría et al 2014, Winkler 2013a, 2013b).

In this Master's thesis I address this need for both breadth and depth through a study of the impacts of sugarcane expansion in one subsistence community in southwestern Guatemala. La Montaña is facing the expansion of the sugarcane industry: territorially, as cultivation approaches and encircles the village; environmentally, as the impacts of sugarcane cultivation become more severe and far-reaching; economically, as labour in sugarcane becomes more necessary and maize cultivation becomes more difficult; and politically, as questions of how (and if) to confront sugarcane expansion become more pressing. Research for this thesis began with the broad question: *how is sugarcane expansion impacting the community of La Montaña, particularly in terms of gender relations?* Throughout this thesis I elaborate on the main finding of this research project: community members are aligned in their analysis that sugarcane is a threat to subsistence livelihoods; however, they are divided- primarily along gender lines- on what can or should be done about it.

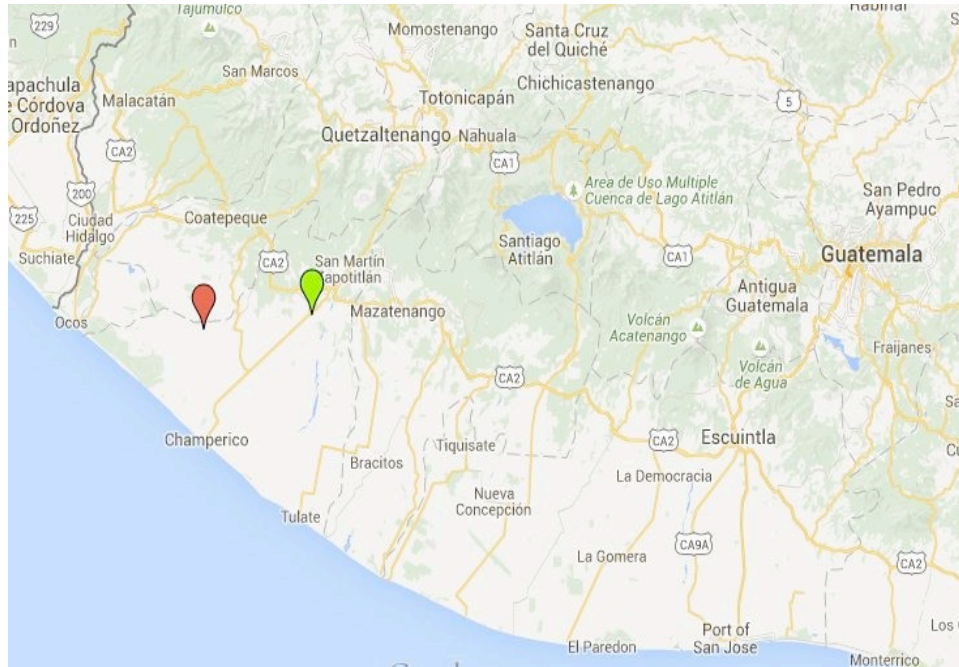
In Chapter 2, I explore the role of these gender divisions in facilitating the community's political inaction on the issue of sugarcane expansion. While *montañeros* state that collective action across gender is their most valuable political tool, collective action to address sugarcane expansion has not emerged as it has in the past to address other political and social issues. I find that while both women and men state a need for action, ideas on what form this action should take are informed by different stakes in the presence/absence of sugarcane cultivation, namely the existence of employment opportunities for men.

Montañeros identify deforestation as a serious issue primarily driven by sugarcane expansion, but with proximate drivers as well. In Chapter 3 I explore *montañeros'* understandings of deforestation, and I find that these understandings are also a site of gender and age divisions. As deforestation threatens *montañeros'* subsistence practices by adversely affecting rain fall patterns, *montañeros* develop different gender- and age-informed understandings of who, and what, should be targeted in efforts to address deforestation. As I argue, these different understandings represent an obstacle to a collective political platform to address deforestation, and reflect the potential for intra-community violence and discrimination as feelings of desperation mount.

Map 1. Retalhuleu (red), Guatemala. Source: Google Maps 2015.



Map 2. La Montana (red) and regional capital of Retalhuleu (green). Source: Google Maps.



The divisions and disagreements that I find along the axes of gender and age are relevant both within and outside the community. The actors who benefit from agroindustrial expansion, also benefit from the division, inertia, or quiescence of communities who are subject to the negative aspects of this expansion (Gaventa 1982). Likewise, those who benefit from the expansion and intensification of the sugarcane industry in Guatemala, also benefit from situations in which intra-community differences and divisions complicate the potential for collectively acting to confront this industry. Indeed, “[a]ctors pushing for agrarian extractivism are aware of the fact that consent and legitimation in the local/territorial scales today are at least as important as in national and international ones” (Alonso- Fradejas 2015, p. 508). In this light, Guatemalan intra-community politics are inextricably linked to the subversion, disruption, or facilitation of agroindustrial activities.

In the remainder of this introduction, I provide the critical context necessary to understand the political, economic and ecological stakes of sugarcane expansion in La Montaña. This critical context is divided into two main sections. In section 2, I describe the feminist community-based methodology and methods I used in this project. In Section 3 I describe the local context of La Montaña, including: my relationship to this place and a physical description; an oral history of the

community from elders Eulalia and Francisco; gender dynamics in La Montaña; and maize cultivation as a primary livelihood strategy. In section 4, I describe the broader political and economic context of sugarcane cultivation, including: an overview of agroindustrial activity in contemporary Guatemala; and the recent expansion of sugarcane in Guatemala, and in Retalhuleu more specifically. This section provides a more structural understanding of what it means to be a campesino in Guatemala in a region where sugarcane cultivation is expanding. In section 5, I summarize the main points and purpose of this introduction.

2.1 A feminist community-based research methodology

Feminist community-based research (FCBR) is one cluster in a larger constellation of participatory research. Ochocka and Janzen (2014) state that regardless of the cluster, the three main functions of community-based research are knowledge production, knowledge mobilization, and community mobilization (p. 20). FCBR builds on these functions and incorporates critical feminist theories that investigate how gender operates as an axis of power (Brydon-Miller et al 2004, Maguire 1987, Reid and Frisby, 2007). FCBR also integrates feminist thinking on the situatedness of knowledge, and the importance of self-location and reflexivity (Haraway 1988). As in other forms of CBR, FCBR entails a commitment to “conducting research that will benefit the participants either through direct intervention or by using the results to inform action for change” (Israel et al 1998, p. 175). FCBR takes a number of shapes on the ground, although with common elements. FCB researchers critically engage the concept of 'community', by demonstrating how community members do not inherently have common goals and interests (Agarwal 2001, Noffke and Brennan 2004, Yoshihama and Carr 2002). FCBR is fundamentally process-oriented, with a democratized approach to knowledge production that includes an acknowledgement of the emergent nature of research design, and the need to be flexible to the changing needs of participants (Barniskis 2013, Cornwall 2003, Lennie et al 2003, McIntyre and Lykes in Brydon-Miller et al 2004). Finally, reflexivity is an important element of FCBR to keep researchers (and participants) accountable and oriented to research goals (Alkon 2011, Langan and Morton 2009).

This research project had three main commitments which were informed by my understanding of the FCBR literature described above, as well as a personal process of reflection in which I drew on my pre-existing knowledge of La Montaña to decide how I needed to conduct myself to be an effective and ethical researcher. These commitments were: 1) to collaboratively identify with participants specific areas of interest regarding sugarcane impacts, and investigate these areas; 2) to analyse data with an awareness of gender and 3) to share research findings with the community to facilitate the possibility of action or critical reflection. In the Methods section I describe the specific process I used to collect data and

honour these commitments, with differing degrees of success.

2.2 Methods

The majority of data collection took place between April-July 2014, and during this time I lived in La Montaña with a local family. The research began with two open-invitation group discussions (one for men, one for women) to introduce the concept of collaboratively researching sugarcane impacts.¹ These discussions also facilitated a public space of discussion regarding important impact areas (i.e. respiratory health, rent prices), as well as the data collection methods best suited to investigating these impacts. Within my research plan, I expected these discussions to provide a clear research question of collective interest. However, despite my extensive canvassing efforts and my network of contacts in the community, only three women attended.² Both I and these women were disheartened by the low attendance, and they discussed reasons: consensus was that I should have held the men's meeting first, so they could "decide if they would let their wives go". The women told me that other women probably did not know me well enough at that stage to feel comfortable speaking with me, especially since I was a foreigner- I should have waited a few more weeks.

This low attendance created the need for alternate means of soliciting early input and direction. I therefore began to attend events organized with the Catholic church and a women's cooking group, and continued to do so throughout my time in the community. Meanwhile, I also received early feedback from discussion participants and other community members regarding the desire for a structured time and place to meet and share comments or concerns. I therefore organized a weekly 'drop-in' at the town bakery which occurred from mid-May until the end of July. This usually lasted 1-3 hours and was attended on average by 2-5 people across a total of seven weeks.³ Through this process, the following impact areas emerged as significant to *montañeros*: deforestation, contamination, land, human health, labour, and gender dynamics. As well, participants articulated an overarching concern regarding the community's political inaction to confront issues related to sugarcane.

After three weeks I drafted a semi-structured interview guide that addressed these areas of concern, and I obtained approval

¹ Separate group discussions were held in consideration of dynamics that I had observed in previous meetings with men and women in La Montana, where women remained largely silent- I felt that a space of just women might make discussion easier and more comfortable.

² Nine men attended the men's group discussion.

³ Feedback revealed that people felt more capable of participating with this 'informal' method of collaborative and incremental decision-making, because it was less intimidating and fit in better with their other time commitments and responsibilities.

for this guide from group discussion and drop-in participants.⁴ I then drafted a data collection plan that centred around these interviews, but also incorporated participant observation and continued drop-in sessions. I conducted semi-structured interviews with 15 female and 13 male community members, as well as a regional agronomist from the ministry of agriculture (MAGA) and a nurse from the community health centre.⁵ These interviews lasted approximately 1-1.5 hours. To select interview participants I used the 'snowball' technique in which I conducted initial interviews with my previous contacts, as well as people who I had met going door-to-door in the first weeks. I then asked each of these initial interviewees for a recommendation of a community member (man or woman) who might be available to participate in a similar interview.⁶ I obtained oral consent for all group discussion, interview, and drop-in participants. Pseudonyms were used for all research participants with the exception of three who explicitly requested the use of their real names.

I held two more informal group discussions (one for men, one for women) at the end of this data collection period; I did not create an agenda for these discussions, but rather treated this time as a space for individuals to ask any further questions or bring up any further issues. These individuals asked me not to record their conversation (although I was allowed to take notes) and data from these discussions does not appear as direct quotes in this thesis.

Participant observation and participation in family life of my host family took place continuously over the course of these three months. This period of data collection ended with a community lunch that I was able to sponsor given the low cost (relative to me) of food in Guatemala. Four women were hired to cook for the event, and they prepared a meal of chicken *mole*, tamales, rice, and watermelon juice. I contributed oatmeal cookies. All participants in the research process and their families were invited, and the afternoon was a way to end data collection on a positive and joyful note.

⁴ Developing consensus entailed contacting all participants of the group discussions, and as many people as possible from the bakery drop-in, and asking for verbal approval of the data collection plan.

⁵ The number of interviews conducted completely reflects my own maximum capacity as a researcher in this window of time rather than an indication of a 'saturation point' of interest among *montañeros*.

⁶ After a few weeks I noticed that I was being directed to a particular type of woman- older, opinionated, outspoken- while being intentionally directed away from young wives, mothers with a large number of children, and women who were not in a position of authority within their household. After two months, I ask my friend Elissa to comment on this. She said, "it would be wrong to send you to a woman's house who couldn't participate, because of her husband or children. She would probably feel bad and do it anyway and then she would be in trouble." The selection of female participants in this research is therefore skewed, since I was unaware that gendered power dynamics operating in the community were restricting the participation of certain women.

Figures 1 and 2: Women preparing the community lunch.



Upon returning to Victoria I began data analysis, which lasted from September 2014 to February 2015. I transcribed interviews into Spanish and wrote a short summary of each interview for quick reference, covering main themes, emerging new themes, and quotes. I then grouped interviews into men and women to facilitate a gendered analysis, of themes and contradictions both within and across gender. I recorded feedback from drop-in sessions as well as participant observations in a research notebook, which I referred to over the course of data analysis. Through this process I identified political inaction and deforestation as the two key issues to analyse, for the amount of discussion they generated in interviews; and the fact that for *montañeros*, these issues raised questions about the very survival of the community. I also noted the significant differences in women and men's responses on these two issues, which indicated the suitability of a gender

analysis.

In February 2015 I returned to La Montaña, to present my research findings, solicit feedback and input, and facilitate a space for critical discussion of these findings. While the public presentation was attended by over 40 people, which I felt demonstrated a continued interest in this project, I was unable to stimulate critical discussion on the gender issues which I highlighted in my presentation. I also conducted a public health information session on the impacts of sugarcane cultivation, based on research that I had done on my own to investigate specifically the risks associated with labour in sugarcane and exposure to harvest burns. This information session was very well received, and I received feedback that *montañeros* felt they could put this information to use and would share it with friends and family.

3.1 Local context

3.2 My relationship to La Montaña

I first came to La Montaña in January 2013 through a volunteer internship as an assistant agronomist with the NGO Semilla Nueva Guatemala, and over the course of four months I formed relationships with many people in the community. The formation of these relationships was the impetus for this Master's research project. As I lived and worked among *montañeros*, I was made aware of a myriad of ways in which expanding sugarcane cultivation was detrimentally affecting peoples' lives. And, as *montañeros* pointed out, it didn't seem as though these impacts were going to go away. I decided to embark on a Master's research project that would co-investigate these impacts with *montañeros*, and returned to La Montaña almost exactly one year later in April 2014. On one of my first days back, I went to interview Don Francisco about the history of the community.⁷ Don Francisco was the sole surviving member of the group that originally petitioned the government for the land to found the town; I knew this discussion would provide invaluable information on the history and formation of La Montaña which was unlikely to be available anywhere else.

⁷ Doña Eulalia, the wife of Don Francisco, became a co-storyteller in this instance, although we had not met in my previous time in La Montaña. I originally approached Francisco because I knew him from the previous year, although Eulalia's contributions on this day and throughout the research process were incredibly important. I found it interesting that community members described Francisco as the 'last' founder- while he was indeed the last of the group that traveled to Guatemala City to secure the land for La Montaña, Eulalia is of course a founder of the community as well.

Figure 3. *Montañeras* 'catching a ride' together on one of my first days in the community



I woke up at 6 am and left the house of my host family on bike. As I biked down the flat dirt road I saw women sweeping their front steps or washing clothes in the *pila* (outdoor sink). Small children played in the dirt- soon their older brothers and sisters would leave the house in immaculate white uniforms for the local elementary school. No matter what, no matter how much dust there was from drought or from the passing sugarcane trucks, these uniforms were always immaculate. Some men had already left to go to the land they rented to cultivate maize, others had left to go to work in the sugarcane or oil palm fields. Many remained, sitting in hammocks or plastic chairs in the shade of trees. Many people neither owned nor could afford to rent land. And with the population growing, the price of rent skyrocketing, and the quantity of available land shrinking, each year there were more men sitting in hammocks at planting time.

The population of La Montaña is approximately 1300, but you would not think so by the small number of houses there and the small area it covers. Many homes, however, house grandparents, parents, and up to 7 or 8 children. I turn right, and the dirt road becomes pavement- I am in the centre of town, which is comprised of one paved block with 2 bakeries, several shops, a canteen, an elementary school, a large town hall, one Catholic church and one Evangelical church. Interspersed

between these are more small wooden homes. Chickens, ducks and pigs wander the yards but are kept off the streets by homemade fences. Maize fields circle the centre of town, although not everyone in La Montaña grows maize. Local land is held by a few *montañeros* who have inherited plots from the original families who founded the town. Land in the fincas is held by absentee landowners who would now rather rent to sugarcane companies than campesinos. The remaining land in the fincas is too expensive; and *montañeros* complain bitterly that local landowners are taking advantage of this situation by raising their prices to match the *finqueros* (finca owners).

Figure 4. Dirt road leading out of La Montaña



I pull up to the home of Don Francisco and Doña Eulalia. They find chair for me, and Francisco and Eulalia tell me their story of the origins of La Montaña.

3.3 Oral History of La Montaña

Francisco: We didn't use to live here, we lived in Caballo Blanco.⁸ Among other people. Without land. I am the only founder [of La Montaña] left. All the others are dead. There were eight of us, we formed a farmer's association in 1964 in Caballo Blanco. We organized a farmer's market there in Caballo Blanco. And then we thought to petition the government

⁸ Caballo Blanco is a small town approximately 15 kilometres from La Montaña.

for five caballerías of land, five caballerías of forest.⁹ So we went to the government in Guatemala City, we entered our plea, and we solicited support from others. We kept pressuring until April 14, 1969 when they accepted our solicitation, and made us 34 parcels of land with nine *manzanas* each.¹⁰ At the start, all of the original families had nine *manzanas*-one parcel per person. And we immediately got to work- building houses, clearing the fields, getting corrugated tin for the roofs. And look how far we've come now, we even have a middle school. But it took four people, petitioning for 40 years to get that middle school. It has been in operation for 5 or 6 years now. The man who owns the pharmacy in town gifted us the land to build it on- that was really great, because there was no money to buy land with.

Eulalia: Before we arrived here, the land was pure bush. We started cutting down the trees and burning areas to put our homes. There was a lot of good wood then, from huge trees- huge and tall, not like you see today.

Francisco: But back to the land- before we got it, it belonged to the government. And before that, to the Germans. But when there was the second World War with Germany, the government threw them out and put them on a boat. From there, it was passed to the big landowners, but then the government took it back again and it was given to us. What we had was called a 'microparcel'- the big parcels of land are of 28 *manzanas*. We got nine *manzanas* each, and no more.

Eulalia: I will tell you another story as well, an important story about our community. We got electricity in 1999. We had to fight for it, but there were only a few who fought- Francisco was one of them. They fought for two years, enduring hunger and cold because they were often traveling back and forth from Guatemala City. For the original families who wanted it, it cost us 1600 quetzales to convince them to install the electricity. After, for the rest of the families, it was very cheap.

Everything has a story, but some of us hold onto it more than others. A long time ago, they fought as well to get the community hall- they disappeared for one month that time! I was friends with another woman in town whose husband went, and we would ask each other every day if the other had heard from her husband. They didn't call us or send us a telegram or anything! We walked around like lost dogs, just waiting to know God's will. Finally after a month, Francisco called saying they had fought hard and had slept in front of the building in Guatemala City until they agreed to build the community hall. He said he would be home in five days. That was a hard thing to go through.

Francisco: The landscape in this community has changed so much through my life. Now there is asphalt on the roads, and pharmacies. Now you can't fish in the river anymore, because there are only tiny fish. There used to be huge mojarra and robalo. We also used to have armadillos, and turtles, which are both delicious. But they are all gone now.

We came here originally because in Caballo Blanco, we didn't own any land. We only made enough money to eat. My father didn't own land either, and had worked his whole life for a big landowner. We wanted a place that could be our own.

⁹ 1 caballeria= 64 manzanas, or 45.16 hectares

¹⁰ 1 manzana= 0.7 hectares

And we had it for a little while, but now there are so many people here that the land isn't enough to sustain us. Think about it, 9 *manzanas* among grandparents, parents, and children. And those who own land and don't want to plant, they take advantage of the desperation by charging high rent. It pains me to think about what may happen in the future. Francisco and Eulalia's account of the formation and trajectory of La Montaña touches on many of the themes that come up throughout this thesis: fear and uncertainty for the future; pride for hard-fought political gains; disappointment over failures to act collectively; concern over environmental degradation and its impacts on subsistence ways of life; and above all a desire to prosper, coupled with knowledge of the forces that work to make this prosperity unlikely. This short oral history provides a glimpse into how these themes permeate life in La Montaña in ways that extend beyond the issue of sugarcane cultivation. However, there are significant omissions in this picture of contemporary life in La Montaña: namely, the ways in which gender operates as an axis of power. Many aspects of life for *montañeros* are determined or informed by gender. As such, bringing in an awareness of gender- both in terms of methodology and analysis- was an important commitment I made for this research project. In the following subsection I describe gender dynamics in La Montaña, to demonstrate the significance of gender in any questions regarding responses to environmental issues.

2.3 Gender dynamics in La Montaña

I tell my children to study, since they have the opportunity, study I tell them... so that one day they can defend themselves... I myself only studied three years in primary school. Three years, Angela! Because my father said: oh, women find husbands and that's it.

This statement from Elissa demonstrates some of the restrictions placed on women in La Montaña, and at the same time the ways in which women are challenging these restrictions as they raise their own families. Women's mobility in La Montaña is restricted both socially and physically. While Elissa's statement is one example of the changing attitudes in rural Guatemala concerning the education of young girls, girls and women are generally expected to marry, start families, and remain at home. Many women explained that obedience to their husbands is important, and that they find it easier to do what their husbands ask so as not to invite violence or disrupt the family. The physical mobility of women is restricted by the use of domestic violence as a disciplinary measure, and the impunity with which violence against women can occur in Guatemala. Stories of rape, muggings and other kinds of gender violence circulate constantly amongst the women with whom I spoke throughout this project. Indeed, many of the women took an interest in my personal safety, since they believed that as a foreigner and a *gringa* I would be even more of a target for violence.¹¹ Women gave me detailed instructions about which roads I should and should not walk down, and which men could and could not be trusted. For *montañeras*, this kind of

¹¹Gringa is a Latin American slang word for a woman from the United States; however, it is often applied to Canadians, as well as any 'white' looking foreign woman.

knowledge is essential to ensuring their own safety and that of female family members. In this way, women use stories of gender violence as warnings about specific places or situations. However, despite the significant effects of gender violence in women's lives, women often judge it safer to either remain silent about these issues or only discuss them with trusted female friends and relatives. Generally, I observed an absence of critical discussion about gender issues among men in La Montaña- only one male participant in the project brought up gender violence as a concern. Nevertheless, despite these issues, many women express that they feel much safer within La Montaña than outside of it. Women feel that people in La Montaña keep watch on their neighbourhoods, which they believe lowers the incidences of rape compared to other larger villages.¹²

While the above is a very brief summary of the social dimensions of gender in La Montaña, women occupy distinct social spaces and have very different levels of power and mobility. Many women in La Montaña have positions of relative power within their households, and are involved in making agricultural decisions collaboratively with their spouse. I observed that these women are often older, with family members working in the US who sent remittances. This was corroborated by several *montañeras*- one woman, Olympia, explained that she is happy to have so much free time since her children are grown and send her monthly wire transfers from New Jersey. Another woman explained how remittances from her son take the pressure off her husband to have a successful harvest, and she feels she now had more say in household agricultural decisions. In addition, a small number of women own land inherited from original founders of the town; these women are the primary agricultural decision-makers.¹³

Gendered roles in the community regarding daily activities are generally quite rigid; women are responsible for childcare, cooking, maintaining livestock near the home, shopping for grocery items in Retalhuleu, and cleaning. Men conduct the majority of the manual labour required for maize cultivation, although women often help at the time of harvest. Some men also work in sugarcane and oil palm plantations, although these labour opportunities are often short-term and unstable. Amongst women, the food insecurity that accompanied the shift away from maize cultivation to these forms of wage labour is a source of great concern that shapes women's perspectives on the future of their community in relation to sugarcane expansion.

As I have described, gender operates very overtly as an axis of power in La Montaña. An awareness of gender as an axis

¹² I did not ask or find out if *montañeras* believed this neighbourhood watch had any impact on frequency of domestic abuse.

¹³ Throughout this research project, two female participants owned land. Other than these women, I heard about one other woman who owned land in the village.

of power is necessary in research on subsistence communities, in order to avoid invisibilizing the experiences of women or other marginalized groups (Agarwal 2001). An awareness of gender dynamics is necessary in any discussion of sugarcane impacts within this 'community', since *montañeros'* strictly gendered roles inevitably influence *who* in the community is exposed to which impacts, and the stakes that people have in addressing these phenomena. The meaning of environmental degradation is always informed by gendered roles and responsibilities (Rocheleau et al 1996, Elmhirst 2011). In the following subsection I discuss maize cultivation in La Montaña as the last crucial piece for understanding this place and the context of this research project.

3.4 Maize cultivation in La Montaña

Nearly all of *montañeros'* complaints of sugarcane cultivation are framed in terms of its impacts on maize cultivation, which is the principal livelihood strategy for families. The central importance of maize is consistent with patterns throughout Guatemala: according to a national census taken in 2003, 97% of smallholder farmers (defined as farming on less than 3.5 hectares of land) grow maize (INE 2003). The agrarian and anthropological literatures on maize in Guatemala focus largely on the Guatemalan highlands, which are inhabited by Mayan peoples (Isakson 2009, Isakson 2014, Steinberg and Taylor 2002, Steinberg and Taylor 2009, van Etten 2006). In contrast to other areas where seed saving remains common (Isakson 2007), everyone I spoke with in La Montaña uses hybrid seeds developed by Monsanto, Dekalb, and Dupont Pioneer.¹⁴ However despite the loss of traditional farming practices, maize is the foundation of life in La Montaña in terms of diet and culture. Many women told me that even if there is no food to buy anything else, there are always tortillas to feed children: “Sometimes, when there is no more money, all we have to give them is tortillas and a little salt.” However, *montañeros'* taste for tortillas is more profound than simple necessity. Juan Manuel is a farmer and community leader who has been invited to various agricultural conferences in Antigua, Guatemala City and Mexico. He confided, “Sometimes they would give us such fancy things, cereal for breakfast, spaghetti for lunch... but I was always happy to come home, because they don't seem to like to eat tortillas.”

¹⁴ People discussed how almost no one had used *semillas criollas* (native seeds) in decades, since these seeds no longer produced viable yields in the depleted soils.

Figure 5. Beginning of the growing season in La Montaña.



Even without sugarcane cultivation as a complicating factor, maize cultivation in La Montaña requires a great deal of number-crunching, faith, weather and economic forecasting, hard labour, and patience. Planting usually occurs near the beginning of May, although this can vary depending on the year's weather patterns, a farmer's personal preference, the availability of labour, and general customs within the community. In La Montaña, the vast majority of farmers do not have access to irrigation, and therefore the timing of planting as well as the strength and consistency of rains are important factors for a successful maize harvest. After the harvest farmers sell their crop to a *coyote* (middle man), who visits the community and buys for a non-negotiable price. This price often barely covers the cost of fertilizers, pesticides, seed, and extra labour. Sometimes, the need to pay the debt incurred from input costs means that farmers sell the majority of their harvest, leaving an insufficient quantity for home consumption. This means that families must then buy maize later in the year at the market, at an even higher cost than they sold it for. Despite the economic 'irrationality' of cultivating maize in this context, *montañeros* continue to do so (as do the vast majority of Guatemalan campesinos). As I was often told, “we are maize people.”¹⁵

¹⁵ Farmers also expressed that they genuinely enjoy growing their own maize as generations before have done, and that it makes sense for them to grow what they wish to eat the most.

Figure 6. Men discuss planting techniques.



4.1 Regional and national context

In this section, I contextualize this research within broader regional and national trajectories of agroindustrial activity in Guatemala, in order to situate the meaning of this research within larger discourses on agrarian change and land grabbing in Latin America (i.e. Alonso-Fradejas 2012, 2015, Borras et al 2012, Edelman & Leon 2013, Hall et al 2015, Kay 2008).

4.2 Agroindustrial activity in Guatemala: A brief overview of historic and contemporary factors There are two key phenomena that structure the current climate of agroindustrial expansion in Guatemala: 1) the stark inequality of land distribution, and 2) the violent repression of attempts to change this distribution. The Guatemalan civil war and genocide from 1960-1996 is the most horrific and large-scale example of the ramifications of these two political phenomena on the lives of Guatemalan campesinos. A proposed agrarian reform law, introduced by democratically-elected president Jacobo Arbenz, inspired a CIA-sponsored coup d'etat in 1954 in an effort to protect the landholdings of the American-owned United Fruit Company. Following this coup d'état was a string of US-supported military dictatorships that continued to protect the interests of foreign agricultural elites (Schlesinger et al 2005, Wilkinson 2002). In the context of the ensuing repression and poverty amongst rural populations, several leftist guerrilla groups emerged who tried to gain popular support with promises of land redistribution. In the 36 years of violence that ensued, over 200 000 deaths and disappearances occurred, most of whom were civilian Mayan campesinos killed or disappeared by the Guatemalan military (REMHI

1999). To this day, topics of land redistribution and confronting the government with these demands remains taboo in many parts of Guatemala, especially those most affected by violence during the war (Clouser 2009, Wilkinson 2002).

These historical patterns of land inequality continue into the present. According to the most recent national census, the Gini coefficient for the distribution of farmland is 0.84, giving Guatemala the second highest land inequality in Latin America. Indeed, 2% of agricultural landholders own 57% of arable land, and 45% of landholders in the country collectively own 3% of the land (INE 2003). Attempts to redistribute land following the 1996 Peace Accords have been seriously limited (Clark 2000). Nevertheless, communities are actively staking claims to the land and pressuring the government for recognition. At the same time, direct action and occupations of land often result in violent repression from the state (Alonso-Fradejas 2015, GHRC 2014, Granovsky- Larsen 2013).

As land accumulates in the hands of an agricultural elite, export-oriented and extractivist forms of agriculture are thriving (Alonso-Fradejas 2012). A rising global demand for biofuels and commitments by the European Union to lofty biofuel targets have driven the conversion of vast quantities of agricultural land formerly used for subsistence crops to sugarcane and oil palm (Oxfam 2013, Guereña & Zepeda 2013, Upham et al 2011). In the following subsection I trace the expansion of sugarcane throughout Guatemala and its linkages to a wide spectrum of socioenvironmental degradation.

4.3 Sugarcane cultivation in Guatemala

Growing sugarcane is a booming business: sugarcane represents the highest production of any crop in the world in terms of tonnage, and in 2012 this crop was cultivated on 26 million hectares worldwide (Foreign Agricultural Service 2013).

Guatemala is the second largest exporter of sugarcane in Latin America and the Caribbean after Brazil; globally, the country ranks fourth (ASAZGUA 2014). While sugarcane currently occupies 9.61% of the total cultivated land in Guatemala, the government considers 20% of cultivated land as suitable for sugar cane cultivation (Alonso-Fradejas 2012). The sugarcane industry constitutes 31% of the value of Guatemalan agricultural exports and 15.36% of the value of overall exports (ASAZGUA 2014).

In Guatemala, 14 sugarcane companies control 80% of the plantations and 100% of the processing mills (Alonso-Fradejas 2012). In 2000-2001, sugarcane was cultivated on a total of 179 471 hectares; by 2014-2015, this number had grown to 271 313 hectares (CENGICANA 2015). This expansion is concentrated almost exclusively within four departments on the Pacific coast: Retalhuleu, Suchitepequez, Escuintla, and Santa Rosa (CENGICANA 2012).

Map 3. Sugar-producing departments on the Pacific Coast of Guatemala. Red: Retalhuleu, Orange: Suchitepequez, Green: Escuintla, Blue: Santa Rosa. Source: adapted from Wikimedia Commons, File: Retalhuleu in Guatemala.



4.4 Sugarcane cultivation in Retalhuleu

Retalhuleu is located in the southwest of Guatemala with the Pacific Ocean to the west, the western highlands to the north, and the department of Suchitepequez to the south and east. The total area of the department is 1856 km², and the average annual temperature is 26 degrees Celsius; 64% of the population is rural (SEGEPLAN 2011). The department is characterized by fertile volcanic soils stretching across flat land, making this region ideal for intensive forms of agriculture both for the possible yields as well as the ease with which the land can be cultivated (SEGEPLAN 2011).¹⁶ Indeed, both subsistence and commercial forms of agriculture continue to be the primary economic force in the department: in 2008, white and yellow maize combined were cultivated on 43 359 manzanas of land, equal to 16.35% of the department¹⁷ (INE 2008). Maize is the main subsistence crop for the people of Retalhuleu, as in the rest of Guatemala. Meanwhile, in 2008 sugarcane was cultivated on 12 499 manzanas throughout 344 fincas, equal to 4.96% of the department (INE 2008). *Montañeros* report that since 2008 sugarcane has expanded significantly, although official

¹⁶ Despite favourable ecological conditions that provide fertile soils, *montañeros* noted how since the formation of their community in 1969 they have perceived the fertility of soils plummet, which is reflected in the quantity of fertilizers they have to buy to have successful yields. This plummeting fertility across the department is also a concern in the 2011-2025 departmental plan (SEGEPLAN 2011).

¹⁷ 1 manzana= 0.7 hectares.

statistics on this recent expansion were unavailable.¹⁸

Sugarcane in Retalhuleu is grown almost exclusively within the fincas of large landowners who rent land in contracts of 5 to 20 years to sugarcane companies (pers comm, Freddy Pinto). Sugarcane displaces the maize cultivation formerly practiced in these fincas by renting farmers, and both campesinos and policy-makers are concerned about the impacts of expanding agroindustrial activity. As the 2011-2025 official plan for Retalhuleu states,

The department has many important natural resources. However, in recent decades they have been exposed to relentless predation, deriving from the national economy's orientation to agricultural export; as well as from contamination, caused by the solid and liquid waste produced by the population as well as agroindustrial activity.

SEGEPLAN 2011, p. 53

Both *montañeros* and the departmental government are particularly concerned by deforestation: less than 7% of the department remains forested (SEGEPLAN 2011). While throughout this thesis I focus primarily on *montañeros'* descriptions of the impacts of sugarcane cultivation, it is worthwhile to note that the 2011-2025 departmental plan specifically notes the burning of sugarcane as one of the main health threats that rural populations face (SEGEPLAN 2011 p. 57). At the departmental level there is an awareness that sugarcane expansion is having, and will continue to have serious social and ecological consequences.

Currently, the three companies operating in Retalhuleu are Tulula, El Pilar, and La Magdalena (AZASGUA 2014).

Although I was unable to find empirical data or maps on the current landholdings of each of these companies, *montañeros* report that La Magdalena holds the most land in the area surrounding La Montaña, followed by El Pilar. All *montañeros* whom I spoke with who had worked in sugarcane, worked for La Magdalena; as well, everyone who had family members or friends working in sugarcane named La Magdalena as the employer, with the exception of one person. The seasonal, manual labour force of these companies can be divided into two different (male) groups. Locals (including *montañeros*) are employed for planting, irrigating, pesticide application, burning at harvest, and loading and coordinating trucks. The majority of this work takes place in direct sunlight without shade, and labourers may work from 5 a.m until 2 or 3 pm in the afternoon. Some positions entail 24- hour shifts with short breaks to rest. Labourers are paid every 15 days and employment may be limited to one pay period. Only one of 13 companies on the Pacific coast has a union for labourers (AZASGUA 2014); *montañeros* who had worked in, or had family members work in sugarcane production complained of frequent violations of labour laws and worker rights, and the fear of getting 'black-listed' that kept workers from speaking

¹⁸ The 2008 edition of national environmental statistics (INE 2008) was the most recent government data I could find on land use for sugarcane. I contacted La Magdalena, Tulula and el Pilar- the three sugarcane companies operating in Retalhuleu- for information on their landholdings via email and telephone, but I received no replies.

out. La Magdalena has a reputation among *montañeros* as the largest and most efficient sugarcane company, but also the most repressive in terms of preventing workers from organizing or demanding that their rights be observed. *Montañeros* identify the absence of other employment options as a factor that increases their aversion to confronting sugarcane supervisors.

The second group of labourers are cane cutters from the western highlands. Perhaps the most infamous aspect of sugarcane cultivation is the treatment and working conditions of cane cutters (Fairfood 2014, La Isla Foundation 2014). This is a result of the harsh conditions associated with this work in particular; cane cutting is “a grueling task that involves heavy physical activity in shadeless, and soot- covered fields where the cane is burned the night before” (Crowe et al 2013, p. 1158). The sugarcane harvest (*la zafra*) takes place during the six months of the dry season (November-April). During this time, men and children (mostly Mayan) are brought down in company trucks from the western highlands to the Pacific coast and live in company compounds. When I spoke with *montañeros* about this importation of labour, I received different answers from “People from the highlands are better for that sort of work”, “They won't hire you for cutting if you're a local”, and “No one here would want to do it anyway”. When I spoke with a former supervisor, he told me that “It's a barbaric kind of work, no one from here would do it. The people from the highlands are even more desperate than we are.”¹⁹

5.0 Summary

This introduction describes my Master's research project on gender dynamics and the impacts of sugarcane expansion in La Montaña, Retalhuleu, Guatemala. As I note, it is essential to investigate how different groups within subsistence communities understand agroindustrial activity, in order to more clearly articulate the impacts of these industries at the local level. I also connect these gendered intra-community politics to trajectories of agrarian change more broadly, since Guatemalan subsistence communities have the potential to impact sugarcane expansion through either challenges or quiescence in the face of this phenomenon. I used a feminist community-based methodology to conduct this research, and my main finding is the following: while La Montaña is united in its understanding of sugarcane expansion as a threat to subsistence livelihoods, people are divided by gender and age in terms of how, or if, to address this issue. Understanding

¹⁹ According to governmental statistics, in 2011 the percentage of people in poverty in Retalhuleu was 68.6%. Meanwhile, the percentages for departments in the western highlands were 67.3% (Quetzaltenango), 80.6% (Totonicapán), 79.6% (Quiché), 67.6% (Huehuetenango), and 76.4% (San Marcos) (INE 2013). However while these statistics indicate similar levels of poverty with Retalhuleu, the western highlands have a higher Indigenous population than other departments and experience marginalization in a number of ways. For example, rates of illiteracy and chronic malnutrition are significantly higher in these departments than the national average (INE 2013). These factors may contribute to a willingness to endure labour conditions that people from Retalhuleu will not accept.

both the local and national contexts of sugarcane cultivation allows the reader to critically engage with my arguments in the remainder of this thesis: essentially, that sugarcane expansion is activating and reshaping axes of power in La Montaña in ways which exacerbate divisions and undermines the community's collective political capacity.

Bibliography

- ActionAid Guatemala. "El mercado de los agrocombustibles: Destino de la producción de caña de azúcar y palma africana de Guatemala". November 2013. Retrieved from http://www.actionaid.org/sites/files/actionaid/el_mercado_de_los_agrocombustibles.pdf
- Agarwal, B. (2001). Participatory Exclusions, Community Forestry, and Gender: An Analysis for South Asia and a Conceptual Framework. *World Development*, 29(10), 1623–1648. [http://doi.org/10.1016/S0305-750X\(01\)00066-3](http://doi.org/10.1016/S0305-750X(01)00066-3)
- Alkon, A. H. (2011). Reflexivity and Environmental Justice Scholarship: A Role for Feminist Methodologies. *Organization & Environment*, 24(2), 130–149.
- Alonso-Fradejas, A., Caal Hub, J.L., & Chinchilla, T.M. 2011. *Plantaciones Agroindustriales, Dominación y Despojo Indígena-Campesino en la Guatemala del Siglo XXI*.
- Alonso-Fradejas, A. (2012). Land control-grabbing in Guatemala: the political economy of contemporary agrarian change. *Canadian Journal of Development Studies / Revue Canadienne D'études Du Développement*, 33(4), 509–528. <http://doi.org/10.1080/02255189.2012.743455>
- Alonso-Fradejas, A. (2015). Anything but a story foretold: multiple politics of resistance to the agrarian extractivist project in Guatemala. *The Journal of Peasant Studies*, 42(3-4), 489–515. <http://doi.org/10.1080/03066150.2015.1013468>
- Asociacion de Azucareros de Guatemala. (ASAZGUA). (2014). <http://www.azucar.com.gt/>
- Blaikie, P. M. (1985). *The political economy of soil erosion in developing countries*. London ; New York: Longman.
- Borras, S. M., McMichael, P., & Scoones, I. (2010). The politics of biofuels, land and agrarian change: editors' introduction. *Journal of Peasant Studies*, 37(4), 575–592. <http://doi.org/10.1080/03066150.2010.512448>
- Borras, S. M., Kay, C., Gómez, S., & Wilkinson, J. (2012). Land grabbing and global capitalist accumulation: key features in Latin America. *Canadian Journal of Development Studies / Revue Canadienne D'études Du Développement*, 33(4), 402–416. <http://doi.org/10.1080/02255189.2012.745394>
- Brent, Z. (2015). Territorial restructuring and resistance in Argentina. *The Journal of Peasant Studies*, 42(3-4), 671–694.
- Brown, Michael J, D., Jorge, & Hamlin, Katie. (2005). *Guatemala Land Conflict Assessment* (pp. 1–29). USAID. Retrieved from http://pdf.usaid.gov/pdf_docs/PNADC728.pdf
- Brydon-Miller, M., Maguire, P., & McIntyre, A. (Eds.). (2004). *Traveling companions: feminism, teaching, and action research*. Westport, Conn: Praeger.
- Cáceres, D. M. (2015). Accumulation by Dispossession and Socio-Environmental Conflicts Caused by the Expansion of Agribusiness in Argentina. *Journal of Agrarian Change*, 15(1), 116–147. <http://doi.org/10.1111/joac.12057>
- Campbell, C, Women's Group of Xapuri. (n.d.). Out on the front lines but still struggling for voice: women in the rubber tappers' defense of the forest in Xapuri, Acre, Brazil. In *Feminist Political Ecology: Global Issues and Local Experiences* (pp. 27–61). New York: Routledge.
- Carey, D. (2009). Guatemala's Green Revolution: Synthetic Fertilizer, Public Health, and Economic Autonomy in the Mayan Highland. *Agricultural History*, 83(3), 283–322.
- Carruthers, D. (2008). *Environmental Justice in Latin America: Problems, Promise, and Practice*. Cambridge, Mass: MIT Press.
- Centro Guatemalteco de la Investigacion y Capacitacion de la Cana de Azucar (CENGICANA). (2012). *Ubicacion Geografica de la Zona Canera*. Retrieved at: <http://www.cengicana.org/en/mapas-zona-canera/Mapas/Generales/Ubicacion-Geogr%C3%A1fica-de-la-Zona-Ca%C3%B1era/>

- Centro Guatemalteco de la Investigacion y Capacitacion de la Cana de Azucar (CENGICANA). (2015). *2015 Boletín Estadístico Año 16, No. 1 Series Históricas, Agosto*. Retrieved at: <http://www.cengicana.org/es/mapas-zona-canera/Boletines-Estadisticos/>
- Clark, C. (2000). Land tenure delegitimation and social mobility in tropical Peten, Guatemala. *Human Organization*, 59(4), 419–427.
- Clements, E. A., & Fernandes, B. M. (2013). Land grabbing, agribusiness and the peasantry in Brazil and Mozambique. *Agrarian South: Journal of Political Economy*, 2(1), 41–69. doi:10.1177/2277976013477185
- Clouser, R. (2009). Remnants of terror: Landscapes of fear in post-conflict Guatemala. *Journal of Latin American Geography*, 8(2), 7–22. <http://doi.org/10.1353/lag.0.0055>
- Clover, D. (2011). Successes and challenges of feminist arts-based participatory methodologies with homeless/street-involved women in Victoria. *Action Research*, 9(1), 12–26. <http://doi.org/10.1177/1476750310396950>
- Crowe, J., Wesseling, C., Solano, B. R., Umaña, M. P., Ramírez, A. R., Kjellstrom, T., Nilsson, M. (2013). Heat exposure in sugarcane harvesters in Costa Rica. *American Journal of Industrial Medicine*, 56(10), 1157–1164. <http://doi.org/10.1002/ajim.22204>
- Elmhirst, R. (2011). Introducing new feminist political ecologies. *Geoforum*, 42(2), 129–132. <http://doi.org/10.1016/j.geoforum.2011.01.006>
- Foreign Agricultural Service. “Sugar: World Markets and Trade- November 2013.” United States Department of Agriculture, n.d. <http://apps.fas.usda.gov/psdonline/circulars/Sugar.pdf>.
- Galeano, E. (1971). *The Open Veins of Latin America*. New York: NYU Press.
- Gauster, S., & Isakson, S. R. (2007). Eliminating Market Distortions, Perpetuating Rural Inequality: An Evaluation of Market-Assisted Land Reform in Guatemala. *Third World Quarterly*, 28(8), 1519–1536. Retrieved from <http://www.jstor.org/stable/20455015>
- Gaventa, J. (1982). *Power and Powerlessness: Quiescence and Rebellion in an Appalachian Valley*. Chicago: University of Illinois Press.
- Granovsky-Larsen, S. (2013). Between the bullet and the bank: agrarian conflict and access to land in neoliberal Guatemala. *Journal of Peasant Studies*, 40(2), 325–350. <http://doi.org/10.1080/03066150.2013.777044>
- Guatemala Human Rights Commission. (GHRC). “Polochic Evictions: Guatemala Human Rights Commission.” Accessed March 6, 2014. <http://www.ghrc-usa.org/our-work/current-cases/polochic/>.
- Guereña, A, Zepeda, R. (2013). *The power of oil palm: land grabbing and impacts associated with the expansion of oil palm crops in Guatemala: the case of the Palmas de Ixcán company* (pp. 1–64). Boston : Oxfam America. Retrieved from <http://www.oxfamamerica.org/static/media/files/the-power-of-oil-palm.pdf>
- Gunewardena, N. (2010). Bitter Cane: Gendered Fields of Power in Sri Lanka’s Sugar Economy. *Signs: Journal of Women in Culture & Society*, 35(2), 371–396. Retrieved from <http://ezproxy.library.uvic.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=qth&AN=48057502&site=ehost-live&scope=site>
- Gururani, S. (2002). Forests of Pleasure and Pain: Gendered practices of labor and livelihood in the forests of the Kumaon Himalayas, India. *Gender, Place & Culture*, 9(3), 229–243. <http://doi.org/10.1080/0966369022000003842>
- Hall, D. (2013). Primitive accumulation, accumulation by dispossession and the global land grab. *Third World Quarterly*, 34(9-10), 1582.
- Hall, R; Edelman, M; Borrás, S; Scoones, I; White, B; White, W. (2015). Resistance, acquiescence or incorporation? An introduction to land grabbing and political reactions “from below.” *Journal of Peasant Studies*, 42(3-4), 467–488. Retrieved from <http://www.tandfonline->

- Haraway, D. (1988). Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective. *Feminist Studies*, 14(3), 575–599. <http://doi.org/10.2307/3178066>
- INE. 2003. *Censo Nacional Agropecuario- Tomo I*. Guatemala: Instituto Nacional de Estadística. Retrieved from: <http://www.ine.gob.gt/index.php/estadisticas/publicaciones>
- INE. 2008. *Anuario Estadístico Ambiental*. Guatemala: Instituto Nacional de Estadística. Retrieved from: <http://www.ine.gob.gt/sistema/uploads/2014/02/05/BZ8mZWNDmF3qnIzE2T04JEpef4VDokne.pdf>
- INE. 2013. *Mapas de Pobreza Rural en Guatemala 2011: Resumen Ejecutivo*. Guatemala: Instituto Nacional de Estadística. Retrieved from: <http://www.ine.gob.gt/sistema/uploads/2014/01/10/ifRRpEnf0cjUfRZGhyXD7RQjF7EQH2Er.pdf>
- Isakson, S. R. (2009). No hay ganancia en la milpa: the agrarian question, food sovereignty, and the on-farm conservation of agrobiodiversity in the Guatemalan highlands. *The Journal of Peasant Studies*, 36(4), 725–759. <http://doi.org/10.1080/03066150903353876>
- Isakson, S. R. (2014). Maize Diversity and the Political Economy of Agrarian Restructuring in Guatemala. *Journal of Agrarian Change*, 14(3), 347–379. <http://doi.org/10.1111/joac.12023>
- Israel, B. A., Schulz, A. J., Parker, E. A., & Becker, A. B. (1998). Review of Community-Based Research: Assessing Partnership Approaches to Improve Public Health. *Annual Review of Public Health*, 19(1), 173–202. <http://doi.org/10.1146/annurev.publhealth.19.1.173>
- Kay, C. (2008). Reflections on Latin American Rural Studies in the Neoliberal Globalization Period: A New Rurality? *Development & Change*, 39(6), 915–943. <http://doi.org/10.1111/j.1467-7660.2008.00518.x>
- La Isla Foundation. Legal Department. “Anatomy of a Riot.” La Isla Foundation, April 26, 2013. <http://laislafoundation.org/wpcontent/uploads/2013/04/AnatomyOfARiotFullReport.pdf?acd2c6>.
- La Isla Foundation. “Sickly Sweet: Human Rights Conditions for Sugarcane Workers in Western Nicaragua.” La Isla Foundation, August 20, 2014. <http://laislafoundation.org/wpcontent/uploads/2013/04/AnatomyOfARiotFullReport.pdf?acd2c6>.
- Lykes, M. B. (1997). Activist Participatory Research Among the Maya of Guatemala: Constructing Meanings from Situated Knowledge. *Journal of Social Issues*, 53(4), 725–746. <http://doi.org/10.1111>
- Lykes, M. B. (2010). Silence(ing), voice(s) and gross violations of human rights: constituting and performing subjectivities through PhotoPAR. *Visual Studies*, 25(3), 238–254. <http://doi.org/10.1080/1472586X.2010.523276>
- Maguire, P. (1987). *Doing participatory research: a feminist approach*. Amherst, Mass: Center for International Education, School of Education, University of Massachusetts.
- McAllister, C. (2009). Seeing like an indigenous community: the World Bank’s Agriculture for Development Report read from the perspective of postwar rural Guatemala. *The Journal of Peasant Studies*, 36(3), 645–651. <http://doi.org/10.1080/03066150903143038>
- McMichael, P. (2012). The land grab and corporate food regime restructuring. *Journal of Peasant Studies*, 39(3-4), 681–701. <http://doi.org/10.1080/03066150.2012.661369>
- Mingorría, S., Gamboa, G., Martín-López, B., Corbera, E. (2014). The oil palm boom: socioeconomic implications for Q'eqchi' households in the Polochic Valley, Guatemala. *Environment, Development and Sustainability*.
- Ochocka, J., & Janzen, R. (2014). Breathing life into theory: Illustrations of community-based research – Hallmarks, functions and phases. *Gateways: International Journal of Community Research and Engagement*, 7(1), 18–33. Retrieved from <http://epress.lib.uts.edu.au/journals/index.php/ijcre/article/view/3486>
- Ordunez, P., Martinez, R., Reveiz, L., Chapman, E., Saenz, C., Soares da Silva, A., & Becerra, F. (2014). Chronic Kidney

Disease Epidemic in Central America: Urgent Public Health Action Is Needed amid Causal Uncertainty. *PLoS Neglected Tropical Diseases*, 8(8), 1–3. <http://doi.org/10.1371/journal.pntd.0003019>

- Oxfam International. “SUGAR RUSH: Land Rights and the Supply Chains of the Biggest Food and Beverage Companies,” October 2, 2013.
- Peraza, S., Wesseling, C., Aragon, A., Leiva, R., García-Trabanino, R. A., Torres, C., ... Hogstedt, C. (2012). Decreased kidney function among agricultural workers in El Salvador. *American Journal of Kidney Diseases: The Official Journal of the National Kidney Foundation*, 59(4), 531–540. <http://doi.org/10.1053/j.ajkd.2011.11.039>
- Razavi, S. (2009). Engendering the political economy of agrarian change. *The Journal of Peasant Studies*, 36(1), 197–226. <http://doi.org/10.1080/03066150902820412>
- Recovery of Historical Memory Project (REHMI). (1999). *Guatemala, Never Again! Official Report of the Human Rights Office of the Archdiocese of Guatemala*. New York: Maryknoll.
- Rocheleau, D. E., Thomas-Slayter, B. P., & Wangari, E. (Eds.). (1996). *Feminist political ecology: global issues and local experiences*. London ; New York: Routledge.
- Schlesinger, S. C., Kinzer, S., & Coatsworth, J. H. (2005). *Bitter fruit: the story of the American coup in Guatemala* (Revised and expanded edition). Cambridge, Mass. ; London: Harvard University Press.
- SEGEPLAN. (2011). Retalhuleu: Plan de desarrollo departamental 2011-2025. Retrieved at: www.segeplan.gob.gt
- Steinberg, M. K., & Taylor, M. (2002). The Impact of Political Turmoil on Maize Culture and Diversity in Highland Guatemala. *Mountain Research and Development*, 22(4), 344–351. [http://doi.org/10.1659/0276-4741\(2002\)022\[0344:TIOPTO\]2.0.CO;2](http://doi.org/10.1659/0276-4741(2002)022[0344:TIOPTO]2.0.CO;2)
- Steinberg, M. K., & Taylor, M. J. (2009). The Direct and Indirect Impacts of Population Growth and Economic Development on Maize (*Zea mays* L.) Diversity in Highland Guatemala. *Area*, 41(1), 72–81. Retrieved from <http://www.jstor.org/stable/40346170>
- Sundberg, J. (2003). Conservation and democratization: constituting citizenship in the Maya Biosphere Reserve, Guatemala. *Political Geography*, 22(7), 715–740. [http://doi.org/10.1016/S0962-6298\(03\)00076-3](http://doi.org/10.1016/S0962-6298(03)00076-3)
- Truelove, Y. (2011). (Re-)Conceptualizing water inequality in Delhi, India through a feminist political ecology framework. *Geoforum*, 42(2), 143–152. <http://doi.org/10.1016/j.geoforum.2011.01.004>
- Upham, P, Tomei, J., & Dendler, L. (2011). Governance and legitimacy aspects of the UK biofuel carbon and sustainability reporting system. *Energy Policy*, 39(5), 2669–2678. Retrieved from <http://www.sciencedirect.com.ezproxy.library.uvic.ca>
- Van Etten, J. (2006). Molding maize: the shaping of a crop diversity landscape in the western highlands of Guatemala. *Journal of Historical Geography*, 32(4), 689–711. <http://doi.org/10.1016/j.jhg.2005.12.002>
- Wesseling, C., Crowe, J., Hogstedt, C., Jakobsson, K., Lucas, R., & Wegman, D., H. (2013). The Epidemic of Chronic Kidney Disease of Unknown Etiology in Mesoamerica: A Call for Interdisciplinary Research and Action. *American Journal of Public Health*, 103(11), 1927–1930. <http://doi.org/10.2105/AJPH.2013.301594>
- Wilkinson, D. (2002). *Silence on the mountain: stories of terror, betrayal, and forgetting in Guatemala*. Boston: Houghton Mifflin.
- Winkler, K. (2013a). La expansión de la caña de azúcar en Suchitepéquez y su impacto en la subsistencia de la población del altiplano guatemalteco. Coordinación de ONG y Cooperativas (CONGCOOP), Instituto de Estudios Agrarios y Rurales (IDEAR). Retrieved from http://idear.congcoop.org.gt/images/stories/cuaderno_1_congcoop_final-2.pdf
- Winkler, K. (2013b). “La territorialidad tz’utujil frente a la expansión de la caña de azúcar.” Coordinación de ONG y Cooperativas (CONGCOOP), Instituto de Estudios Agrarios y Rurales (IDEAR). Retrieved from: http://idear.congcoop.org.gt/images/stories/CONGCOOP_territorialidad.pdf

Chapter 2

Gendered inaction and land control grabbing: understanding a Guatemalan community's non-response to sugarcane expansion

Abstract

The expansion of sugarcane cultivation along the Pacific coast of Guatemala constitutes a form of land grabbing where land formerly rented to subsistence farmers is increasingly rented to sugarcane companies instead (Alonso-Fradejas 2015). This paper focuses on the community of La Montaña, Retalhuleu, and explores the dissonance between political inaction to address sugarcane expansion and the community's stated ideals (and histories) of collective action as an effective political strategy. This interrogation of political inaction emerged out of a feminist community-based research project in which participants were involved in setting the research agenda and choosing a research focus. I argue that inaction in La Montaña is gendered; while women and men share knowledge of the negative impacts of sugarcane, they have seemingly irreconcilable ideas about the role of sugarcane cultivation in the community's future. In a community where it is believed “they will only listen if we are all speaking together”, this gendered divide represents an obstacle to cultivating collective action. Uncovering gendered inaction as a response to land grabbing illuminates gendered inequalities which will be important to address in order create possibilities for an effective (and collective) political response to this phenomenon.

1.0 Introduction

Along the Pacific coast of Guatemala, the expansion of sugarcane cultivation is systematically displacing the subsistence maize cultivation of landless or land-poor farmers. The amount of land under sugarcane cultivation in Guatemala has increased from 179 471 hectares in 2000-2001 to 271 313 hectares in 2014-2015, and this expansion has been concentrated within four departments on the Pacific coast (CENGICANA 2015). In the department of Retalhuleu sugarcane companies rent from large landowners, many of whom formerly made all or part of their land available to subsistence farmers. Through this phenomenon, control over agricultural land in Retalhuleu is increasingly concentrated in the hands of sugarcane companies. The Guatemalan sugarcane industry is a capitalist accumulation strategy through which profit is extracted from the ground in the form of sugarcane, and the expansion of this crop poses a threat to the subsistence maize cultivation of campesinos (Alonso-Fradejas 2012). As a 2010 ActionAid report explains, “the expansion of sugarcane... involves changes in soil usage, *reduction in the total area used for food production*, destruction of forests, abuse and contamination of water sources and the loss of biodiversity in extensive areas of the country” (p. 7, emphasis added). This expansion thus constitutes a form of land grabbing, as it involves “the capturing of control of relatively vast tracts of land and other natural resources through a variety of mechanisms and forms involving large-scale capital that often shifts resource use to that of extraction” (Borras et al 2012,p.

405).

Drawing on research conducted in a feminist community-based project, in this paper I explore the responses of one subsistence community to this process of displacement and ecological degradation. In La Montaña, Retalhuleu, *montañeros* (residents of La Montaña) have not (yet) undertaken a form of collective action to address the myriad of issues that community members attribute to sugarcane expansion.¹ In a community with a history of collective action and a strong consensus around the negative impacts of sugarcane cultivation, community members are questioning, “why aren't we doing anything about this?” In this paper I argue that the expression of (gendered) diverging political goals vis-a-vis sugarcane expansion is a key element of the current inaction in the community. While men emphasize the positive aspects of employment in the wage economy and tend to advance ideas about collective action in which regulation and negotiation are central goals, women emphasize the dangers of moving away from maize cultivation and reliance on income from employment that they cannot access. These (gendered) divergent goals represent conflicting views about the role of sugarcane cultivation in the community's future. In a community where successful collective actions in the past involve both women and men in distinct ways, understanding the role of gender in the expression of these divergent goals reveals another facet of the divisive nature of sugarcane cultivation. This research provides important insights to the emerging literature on the gender dimensions of reactions to land grabbing more broadly, and makes visible the the intra-community politics that are tied up with the trajectories of agroindustries in Guatemala (Borras and Franco 2013, Hall et al 2015).

In section 2, I discuss sugarcane cultivation on the Guatemalan Pacific coast as a manifestation of land-control grabbing, a term introduced by Alonso-Fradejas (2012, 2015) to refer to land grabbing specifically in the context of sugarcane in Guatemala. I also discuss the relative absence of gender in the discussion of responses to land grabbing, and highlight how bringing gendered inaction into the scope of what constitutes 'political reactions from below' addresses this gap (Hall et al 2015). In section 3, I present my research findings on gendered inaction in La Montaña. In section 4, I describe a return visit to La Montaña to disseminate research findings and receive feedback, an event which formed a critical part of the community-based research process. The insights gained through this process lead me into my discussion in section 5, where I discuss the

¹ In this research project, people did talk about roadblocks taking place outside La Montaña to protest the destruction of roads which people in the area attribute to traffic from trucks carrying heavy loads of sugarcane. However, people explained that these roadblocks took place much closer to the highway than where La Montaña was located- as a result of its location, within the community itself was not a strategic place to conduct a roadblock to interrupt the travel of sugarcane trucks. None of the research participants had participated in past roadblocks, although some knew people who had. In this paper I do not consider these roadblocks as a response of *montañeros*, since in interviews and group discussions participants spoke of these roadblocks as activities organized and largely implemented by surrounding communities. When discussing these other communities, *montañeros* often spoke of a 'culture of resistance' to sugarcane that they felt was missing in their community.

meaning of these research findings for future community organizing efforts to confront land grabs.

2.0 Sugarcane cultivation as land-control grabbing



Map 1. Sugar-producing departments on the Pacific Coast of Guatemala. Red: Retalhuleu, Orange: Suchitepequez, Green: Escuintla, Blue: Santa Rosa. Source: adapted from Wikimedia Commons, File: Retalhuleu in Guatemala.

In this paper I treat 'land grabbing' as a broad umbrella term, and land-control grabbing as a particular kind of land grab that applies to the context of sugarcane in Guatemala. 'Land grabbing' is a highly politicized term. In the Latin American context, an important driver of this debate has been a 2011 study conducted by the Food and Agricultural Organization which defines 'land grabbing' in a way that excludes the majority of Latin America; namely, as “the acquisition of large tracts of land where the purchaser is a *foreign government* or a company linked to it” (FAO 2014 p. 1, emphasis added). By this criterion land grabbing was found in only Argentina and Brazil, out of a total of 17 Latin American case studies including Guatemala (ibid). Indeed, since sugarcane expansion in Guatemala is driven exclusively by Guatemalan companies, this would exclude the sugarcane industry entirely (AZASGUA 2014). Since this report agrarian researchers have 'redefined' land grabbing in Latin America and beyond in other ways to permit more inclusion; for example, as “the acquisition or long-term lease of large areas

of land by investors” (De Schutter 2011, p. 249). Meanwhile, Peluso and Lund (2011) use the term land control to refer to “practices that fix or consolidate forms of access, claiming, and exclusion for some time” (p.). Alonso-Fradejas (2012, 2015) refers to the Guatemalan sugarcane and oil palm industries as examples of 'land-control grabbing', a term he uses to shift attention to *control* of the land as the aspect of greatest importance, rather than changes in legal ownership. This term considers legal, 'short term' and contract-based land acquisitions for sugarcane as practices which are representative of “a distinctive project of agrarian capitalism... which could be aptly described as a financialized and flexible type of *agrarian extractivism*” (p. 491).² Land-control grabbing is thus a useful term to situate the dispossession faced by *montañeros*.

Sugarcane in Guatemala is a highly centralized industry in which 14 companies control 80% of plantations and 100% of processing mills; as such, the industry is almost entirely lacking smallholders (Alonso-Fradejas 2012). In 2012-2013, 75% of sugar produced in Guatemala was exported, primarily to Asia, Oceania, and Africa- indeed, Guatemala is currently the second largest exporter of sugar in Latin America and the Caribbean, and fourth in the world (ASAZGUA 2014, Exportaciones). This export-oriented nature of the sugarcane industry reflects a common element with other forms of land grabs, in that they are driven by “the emerging needs for resources by newer hubs of global capital, especially BRICS and some powerful middle income countries (MICs)” (Borras et al 2012, p. 851). Along the Pacific coast, sugarcane is cultivated through a short-term rental system in which sugarcane companies rent land from large landowners and sign contracts of 5-20 years (pers comm, Freddy Pinto, Ministry of Agriculture representative).³ Landowners traditionally rented a portion of their land to farmers for subsistence maize cultivation; since approximately 2007 this system has been disrupted and threatened as landowners allot more and more land for sugarcane contracts.⁴ Indeed, land-control grabbing for sugarcane is on course to continue. While sugarcane currently occupies 9.61% of Guatemala's cultivated land, the national government considers 20% of arable land as suitable for (future) sugarcane cultivation (Foreign Agricultural Service 2013, Alonso-Fradejas 2012). Currently, cultivation is heavily concentrated in the departments of Escuintla, with 88% of national production, and Suchitepequez with 8% (MAGA 2014). However production is expanding into the neighbouring departments of Santa Rosa and Retalhuleu (where La Montaña is located), which each currently constitute 2% of production (ibid). Three sugarcane companies currently operate in the department of Retalhuleu, including La Magdalena, the largest producer in Guatemala and the most significant company for

² Alonso-Fradejas (2012) explains that this approach “overcome[s] the analytical constraints of what Borras et al. (2012) consider both narrow understandings of land grabbing, like the one used by the UN Food and Agriculture Organisation (FAO)” (p. 510). At the same time, using this term guards against “too-broad definitions” which would place land grabs in the same category as “small- and medium-scale everyday forms of dispossession by differentiation” (Borras et al. 2012, cited in Alonso-Fradejas 2012 p. 510).

³ These landowners are often Spanish, American or Guatemalan.

⁴ Farmers in La Montaña believe that this is due to the fact that sugarcane companies offer more money than landowners traditionally ask for rent, and that landowners are also attracted by the fact they do not need to renegotiate with tenants every year.

montañeros in terms of employment and landholdings (Freddy Pinto, pers comm). Landowners in Retalhuleu are benefiting economically from the expansion of these companies: *montañeros* report that La Magdalena offers two to three times what farmers usually pay as rent. As such, while legal ownership of land remains in the hands of large landowners, *control* over land in Retalhuleu is increasingly held by three sugarcane companies. In La Montaña, this phenomenon of land-control grabbing has raised a host of social, environmental and political concerns among community members, including issues of water contamination, deforestation, air pollution, availability of land for cultivation, and changing gendered power dynamics. In the following section I describe the existing literature on responses to land grabs more broadly, and the importance of building understandings of the gendered dimension of these responses.

2.1 Responses to land control grabbing and the absence of gender

Agrarian researchers have become interested in the question of how rural communities are responding to the land grabbing phenomena (Borras and Franco 2013, Fairbairn et al 2014, McKay et al 2015, Mingorría et al 2014). A recent special issue in the *Journal of Peasant Studies* was devoted to the question: “in the midst of the 'global land grab', what are the political reactions 'from below'?” (Hall et al 2015, p. 467). As Borras and Franco (2013) explain, investigation into this question is necessary since “there is a strong tendency to assume *a priori*, rather than to demonstrate, what the reactions of affected groups are or would be” (p. 1724). Responding to these calls, researchers have begun to document and analyze these political reactions to understand who benefits, who pays, and what is at stake in situations of land grabbing (Moreda 2015, Gingembre 2015, Rocheleau 2015). This research acknowledges that “local communities are socially differentiated and consequently the impact on and within communities will likewise be differentiated” (Borras and Franco 2013, p. 1724), and paints a portrait of communities as dynamic, fragmented sites filled with both conflicting and overlapping political goals and allegiances (du Toit and Neves 2014, Hall et al 2015).

However, Hall et al (2015) note that a consideration of gender as an axis of power remains largely absent in most contemporary analyses of responses to land grabs. Indeed, “work in this area has been slow to emerge, and also the balance of its focus has been on gendered impacts and vulnerabilities resulting from land deals rather than gendered agency, responses and resistance” (Hall et al 2015, p.). White and White (2012) signal the need for “in-depth studies... to better understand how the *expansion of industrial monoculture plantations* has affected gender roles and relations in the emerging agrarian structures, in particular in access and control of land and other natural resources, the shifting gender division of labour and control over incomes, and strategies of survival and resistance” (p. 997, emphasis added). Integrating gender analysis into the literature on responses to land grabbing represents an opportunity to investigate an important facet of how or why these responses are

effective, and who takes part in different kinds of responses. Elsewhere, feminist political ecologists have documented the adverse effects of patriarchy and gender-based discrimination on the efficacy of community organizing efforts (Agarwal 2000, Manchón and Macleod 2010, O'Reilly 2010). Research on gender-based collective action in feminist political ecology reveals that women and men do indeed have gendered responses to socio-environmental pressures (see De Groot and Tadeppally 2006, McCarthy and Kilic 2015, Rocheleau et al 1996).⁵ Exploring how gendered power dynamics influence or limit responses to land grabs gives us a deeper view into the challenges communities face, or the tools they use as they negotiate with and withstand pressures from industry or the state (Bidaseca and Mariotti 2001, Westermann et al 2005). Highlighting gender can also help to disintegrate the black-and-white dichotomies of those who are 'for' and 'against' agroindustrial expansion (or other extractive activities), and account for the axes of power that operate *within* communities and structure politics (Behrman, Meinzen-Dick, and Quisumbing 2012; Fischer and Qaim 2013; White and White 2012). In the context of land grabbing this is relevant, as more research emerges which disassembles the oversimplified idea of unified communities actively resisting agroindustries as a threat to their livelihood (Mamonova 2015, Razavi 2009).

Being attentive to gender is also a way to historicize and contextualize the agrarian context within which these changes take place. As Edelman and León (2013) explain, “particular contexts are characterised by deeply ingrained, historical repertoires of class and gender contention and state repression that shape land conflicts and facilitate or impede large-scale deals” (p. 1698).⁶ At the same time, the expansion of agroindustrial activity is itself a catalyst that can create new political assemblages, alliances, or ways of surviving (Borras et al 2010, Oxfam 2013). Sugarcane along with oil palm represents “an emergent but major transformation in agrarian capitalism” (Alonso-Fradejas 2015 p. 491). Since agrarian communities are gendered spaces, the responses to these transformations merit gender analysis. Moreover, the land acquisitions spurring this “major transformation” are poised for an upward trajectory; in 2008, the Guatemalan government declared 37% of the country's arable land as suitable for oil palm and sugarcane (Alonso-Fradejas et al 2011; see also Brodzinsky 2013, Rosenthal 2013, Vidal 2012). With the continued acquisition of territory for sugarcane in Guatemala, there will invariably be gendered impacts in agrarian communities which will in turn elicit gendered responses. In section 3 I describe the division between responses of women and men to sugarcane expansion. I argue that this division represents an important element of political inaction, since

⁵ Feminist political ecology is a subfield of political ecology which focuses on gender as an axis of power in environmental issues or crises (see Elmhirst 2011, Sultana 2011, Wangari et al 1996).

⁶ Edelman and León (2013) also highlight the importance of looking at the land grabbing phenomena in Central America specifically. They state that while the (relatively) small size of Central America “could be seen as an indication of the region’s irrelevance for understanding trends in global land grabbing, we argue instead that it actually contributes significantly to the discussion by facilitating a rethinking of issues of scale” (p. 1699). Central America is characterized by “grabs that are of modest size by global standards but that have nonetheless generated major agrarian struggles. Indeed, outside of war-torn Colombia, the most acute agrarian conflicts in Latin America today are in the Central American region” (p. 1699).

montañeros state strongly that “they”- meaning the government, the sugarcane industry, and the international community- “will only listen if we are all speaking together”.

3.0 Research site, methodology and methods

The village of La Montaña, in the southwestern department of Retalhuleu, Guatemala, is made up of approximately 1300 people. Subsistence maize cultivation forms the basis of the village's (and the region's) economy; however, less than 10% of *montañeros* own land and must therefore rent from large landowners. The landscape is very flat, and is characterized by fields of maize, pasture, plantain, oil palm, and increasingly- since 2007- sugarcane. Less than 7% of the department remains forested (SEGEPLAN 2011). The region experiences a dry season from November to April, and the majority of farmers in La Montaña do not have access to irrigation. La Montaña itself is comprised of one paved block with 2 bakeries, several small shops, a canteen, an elementary school, a large town hall, one Catholic church and one Evangelical church. Around this block are wooden and cinderblock homes, often housing 3 or 4 generations. People in La Montaña identify as 'ladino', or non-Mayan.⁷

I became acquainted with La Montaña January 2013, as an intern with a local NGO promoting sustainable agriculture techniques. Through conversations and observation, I became aware of the impacts of the expanding sugarcane industry on peoples' health, capacity to engage in subsistence agriculture, as well as on water, air, and soil quality. In April 2014 I returned to La Montaña to conduct a feminist community-based research (FCBR) project on the impacts that people found most important or concerning. FCBR falls within the wider umbrella of community-based research, a methodology based on the principle that the primary goal of academic knowledge production is to serve and be relevant to the communities with whom research is conducted (Freire 1968, Glassman 2014, Heron and Reason 1997). However, FCBR also foregrounds several important theoretical and practical feminist commitments, including the meaningful involvement of women, reflexivity to ensure that the research process is relevant and accessible, and a research process that is sensitive to the implications for gender relations and power dynamics (Brydon-Miller et al 2004, Lykes 1997, Maguire 1987, Williams and Lykes 2003). In this project, a FCBR methodology informed the research in 3 main ways: first, as a commitment to the equal and meaningful participation of women and men. Secondly, the research focus was decided and formed with participants, with a commitment on my part to remain sensitive to gender within this focus. Thirdly, the main goal of the project was to produce knowledge that was 'actionable' and relevant for the community in their struggles to subsist in the face of sugarcane expansion. From a

⁷ See Hale 2006 for a description of the Mayan and ladino ethnic identities in Guatemala and their cultural and social meanings.

feminist perspective, examining if (and how) gender is implicated in maintaining political inaction unearths some of the vast inequalities and social issues which must be resolved *within* communities, before undertaking collective action.

Research was carried out from April-July 2014. Data collection and relationship-building began with two public group discussions (one for men, one for women), held in my third week in the community to publicly discuss important impact areas and ideas for the research project. A total of 28 semi-structured interviews were conducted with community members (15 women, 13 men), as well as one interview with a nurse from the community health centre and one with a regional agronomist from the ministry of agriculture. Interviews lasted approximately 1-1.5 hours, and used an interview guide approved through consensus. Based on feedback from community members who wanted the chance to speak to me without the time commitment of an interview, I held a weekly drop-in session at the town's bakery from 1-3 hours which was attended by 2-5 people on average, over a total of 7 weeks.⁸ Participant observation, living with a host family, and participation in community life were also important elements of the research process, including my consistent attendance at social events organized by the Catholic church and a women's cooking group. Oral consent was obtained and voice recorded for all group discussion, interview, and drop-in participants.

3.1 Impacts of sugarcane

In this section I show that despite consensus around the negative impacts of sugarcane cultivation, men and women disagree about political goals; this, I argue, facilitates continued inaction. I first outline these negative impacts, in order to demonstrate the numerous ways this phenomenon comes to bear in *montañeros'* daily lives. This description also sets the stage for understanding the gravity of political inaction in the face of this phenomenon.

Table 1. *Montañeros'* descriptions of the impacts of sugarcane cultivation

Water	<ul style="list-style-type: none"> • contamination of river water from pesticide run-off • draining of rivers and wetlands for sugarcane irrigation • household wells drying also as a result of irrigation
Air Quality	<ul style="list-style-type: none"> • air contamination and unbearable heat from harvest burns • bad odour from sugarcane processing plants, linked to headaches
Land	<ul style="list-style-type: none"> • deforestation for sugarcane cultivation, contributing

⁸ A total of 15 people attended these drop-in sessions; many of these people attended more than one week. 6 people were also interview participants.

	<p>to regional climate change</p> <ul style="list-style-type: none"> • overuse of pesticides and fertilizers which is rendering agricultural land infertile • lack of available land in fincas for maize cultivation • degradation of roads from sugarcane trucks
Health	<ul style="list-style-type: none"> • kidney pain/failure among sugarcane workers • respiratory and skin problems linked to falling ash • concerns about pesticide intoxication via air or water • dehydration linked to heat produced by harvest burns • sugarcane transport trucks as a road hazard for children
Economy	<ul style="list-style-type: none"> • provision of seasonal job opportunities for men • increased traffic for local shops • capacity for labourers to purchase motorcycles • 50-75% higher rent prices as a result of the presence of the sugar cane industry • women and children's lack of access to the economic benefits of sugarcane employment

Here I discuss water use, harvest burns and pesticide use in further detail, based on the frequency of mention in interviews. Water use in sugarcane plantations was contentious among *montañeros* for the sheer volume used as well as the fact that sugarcane irrigation occurred straight through the dry season (November to April). People considered the water use for sugarcane cultivation as exemplary of the industry's unwillingness to farm within what was seen as the region's natural agricultural limitations. One woman noted, “To plant maize we wait for the rains to come. And when it is not raining, we let the earth rest. The *cañeros* [sugarcane companies] give their land no rest, and soon it will be too tired to grow anything.” Many people pointed out that most maize farmers only used “the water that fell from above”. This point of waiting for the rains to come and orienting agriculture to the local climate was used as a key way to assert the suitability of maize to the regional ecosystem, compared to sugarcane.

Luis, who had spent the previous 2 years working in sugarcane as a 'burner', recounted: “I've seen their wells, big huge things, with a tube coming out about 10 inches wide. And in the dry season, they're drawing water *day and night*... and our own wells are ten or twelve metres deep. When the water source that they're sucking up is gone, our wells will be dry too.” Since the

majority of data collection took place in the rainy season, dry wells were not an immediate concern; nevertheless, people spoke frequently of concerns that “One day, our buckets will scrape the bottom- the real bottom”. Rolando, a volunteer with the Red Cross and the monitor of the local river, was particularly anxious about water issues related to irrigation. Commenting on the 24-hour irrigation of sugarcane, he noted “we are losing the moisture in the air, and there was a study done on salinization I think they call it, it's where the seawater filters in and mixes with the underground fresh water... but that's closer to the coast. But there will come a time when all that comes here.”

Montañeros discussed sugarcane harvest burns during the dry season as another area of great concern. These burns release huge clouds of black ash and charred sugarcane debris which drift onto the community and into homes. *Montañeros* associate these burns with serious (unknown) health risks, documented respiratory and skin problems, and extreme discomfort from the heat generated. The fact that the long-term impacts of this ash were unknown was a great source of distress. I was told stories of a few incidents of temporary blindness in children, who would look up at the sky, get ash in their eyes, and then rub them. Maria Thelma lamented, “Sometimes when my grandchildren come to visit I spend the whole night fanning them... so they can sleep, and so the ash doesn't fall on them”. The ash and charred pieces of sugarcane that fell on the community were a source of annoyance for all, but for women who were responsible for maintaining the cleanliness of the home this also meant extra work. As Manuel explained, “It makes my wife crazy... in the dry season she will sweep the whole house every morning and the next morning the floor is black”.

Montañeros also emphasized pesticides as an area of concern; more specifically, the quantity applied, the lack of information available to communities regarding health or environmental impacts (and indeed, even the names), and the methods of application. Several former sugarcane workers reported that the labels of the pesticide containers used were pulled off before they accessed them. As Ricardo stated, “Here the problem is the burns, and the chemicals that go through the air when they do that. They fumigate with helicopters, then burn the fields. If you don't breathe it in one way, you get it the other way.” Thus, the pesticide applications were made even more concerning because of the harvesting technique- as Ricardo points out, there is no way to protect oneself against contamination, even for those outside of the work force. Contrasting these cultivation practices to those used in the community, men in the group discussion demonstrated how they walk down the rows of their fields, applying pesticide to maize through a hose with a small container strapped to their back. “You see, we are constrained by what we can carry and what we can afford. The *cañeros* don't have to carry it, and they can afford much more.” Among both men and women, these conversations about pesticide (mis)use often circled back to the idea that the land was becoming 'tired out', and would eventually no longer be fit for agriculture. It was common belief that this was why sugarcane companies

never bought land: “After their ten year contracts are up, I'm sure that they will tell farmers, 'Ok you can go back [to that piece] now!' But nothing will grow there. Nothing.”

When asked in interviews, “Who do you think is the most affected by sugarcane?”, 12 of 28 interview respondents replied 'everyone'. Luis explained, “we all live here. It affects us all the same.” Pascual stated, “We're all farmers. It's that simple.” For Yulma, the most affected were “us, the campesinos.” 10 interview participants felt that although the negative impacts of sugarcane affected the whole community, those who lived closest to the sugarcane fields were more negatively affected. As Maria explained, “They are the ones who get the most ash and pollution when they burn.” Four people felt that the workers were the most negatively impacted, and two said children. Everyone who participated in this research had stories and anecdotes of how sugarcane cultivation was currently negatively affecting either their health, their capacity to farm, or the health of the environment. No discernible gendered differences existed when *montañeros* discussed these (and other) impact areas; the themes of water, air quality, land, and health held equal importance in conversations with women and men.⁹ However, one crucial difference in women and men's interpretation of economic impact exists, contributing to divergent ideas of how (and if) to address this phenomenon. In the next two sections I discuss *montañeros'* concepts and history of collective action followed by a description of this gendered divide, arguing that this divide presents an obstacle to the realisation of the kind of collective action *montañeros* envision.

3.2 Collective action in La Montaña

While *montañeros* agree that sugarcane cultivation is currently impacting their community in a highly detrimental way, they also acknowledge that to date the community has not undertaken any serious collective action to confront these issues. Eladio complained,

We're going from bad to worse... And no one is doing anything... there is no unity... that's the problem, you see. And what they [the sugarcane companies] are doing is bad, and yes, if we unite, or if there was unity, I think that yes, we could have a better life. But as we are... from bad to worse.

Montañeros simultaneously stress the absolute importance of collective action as their sole political tool, while expressing cynicism and low confidence with the community's capacity to mobilize. Various social ills and forms of environmental degradation were pointed out to me to demonstrate the community's political incapacities, both historic and current. These included: uncontested deforestation in the region, rates of alcoholism, the lack of attendance at COCODE meetings (the

⁹ While men often had more detailed knowledge of sugarcane cultivation practices based on former employment or speaking with male friends, this did not increase or decrease how serious they perceived this phenomenon to be, compared to women.

community council), other farmer's detrimental agricultural practices (ex burning fields), and the practice of burning garbage.¹⁰ At the same time, *montañeros* were proud to point out and describe successful incidents of collective action: the power lines that *montañeros* fought for, and were installed in 1999; the town hall, built through petitioning the regional government for funds; the elementary school, which required many trips to the capital city; and the availability of free contraception in the health centre. The common thread throughout these stories of the past was the idea that real political gains only came through the support of everyone in the community. As Juan explained, “We could not do it alone [influence the sugarcane companies]. We need the support of everyone, we need the support of the COCODEs... it would have to be the whole region.”

Montañeros' stories of past collective actions reveal two key points vis-a-vis gender: first, that both women and men are involved in different, gendered ways in all actions. Secondly, men are placed as the main protagonists of these stories. In the stories I was told, men often travel to the regional or national capital to file petitions or meet with NGO representatives. Men often assume roles in which they are able to *represent* the community. It is important to note that these 'official' stories were told similarly by women and men, both of whom also mentioned the contributions of women in supporting roles. For example, when discussing a roadblock a few years past to protest the dismal conditions of the region's elementary schools, Mario explained: “At that time it was only men in the COCODE, so we did all the organizing. But we were all out in the streets, women too, a few even made us a big jug of juice and brought us coconuts because we were all day in the sun.” Many women expressed sentiments of having an equal stake in past actions, and an equal sense of accomplishment with the results despite their 'supporting' roles. Speaking to her community involvement in general, Maria Thelma said “I like to keep myself aware, and help out where I can. By attending things, or watching the children.” Elissa pointed out “We got a school, which is good for everyone. Things have changed in my lifetime... I am proud that today almost all children in La *Montaña* go to school.” While Eulalia was originally reluctant to speak to her own specific contributions, she eventually told me that in the fight to secure electricity, she and several other older women spent several days going door-to-door to garner support for the initiative. As she explained, “The men couldn't do it, they were out in the fields all day. So we left our grandchildren with some other women and went ourselves. Anyway, we like to talk more!” Contrary to some findings in feminist political ecology that describe how women undervalue their own political contributions (ex. Campell and the Women's Group of Xapuri, 1996) *montañeras* (women in La *Montaña*) were aware, and proud, of how their work contributed to past political successes. Despite the fact that these narratives feature men as protagonists with women in supporting roles, *montañeros'* stories of the history and

¹⁰ COCODE stands for *consejo comunitario de desarrollo*, and is the community council for matters relating to development and community well-being. In southwestern Guatemala, COCODEs are seen as the official body for representing communities at the regional and national level.

importance of collective action demonstrate that both women and men are involved in complementary ways.¹¹ Collective action in La Montaña is gendered, and narratives reflect the gendered power imbalances that exist more generally. Nonetheless both men and women repeat, and repeat again that “they will only listen if we are all speaking together.”

3.3 Gender and the question of 'what is to be done'

At the same time as *montañeros* describe a history of collective action that includes cooperation and unity across gender, a fundamental gendered disagreement exists about 'what is to be done' about the sugarcane phenomenon. A key driver of this disagreement is that manual labour opportunities in sugarcane are available exclusively for men in La Montaña. Alonso-Fradejas (2015) refers to sugarcane employment in Central America as a “community-detached, flexible and hyper-commodified labour regime which does not allow workers to make ends meet” (p. 491), a characterization that was accurately reflected in both men and women's discussion of this employment. It is important to note that of 13 male interview participants, only 3 had worked in sugarcane in the past; no participants in the men's group discussion were sugarcane labourers; and among men who dropped in to speak with me or offer insights, hardly anyone admitted to having worked in sugarcane. However, nearly everyone had a family member who did, and I was often told: “Lots of people here work in the *caña*. All the young men.” The fact that I did not in fact speak to many of these men may reflect the limits of accessibility of this research, as I was not sufficiently able to work around men's work schedules. Or, it is possible that these men were simply too tired and busy to be interested in participating. Nonetheless, a general perception existed that sugarcane was an important source of income for many families. *Montañeros* work in various capacities, including: burning, applying pesticides, irrigating, and operating/signaling tractors.

Both men and women worried about the health impacts associated with this employment. Raquel, whose husband currently worked applying pesticides, said “[I worry because] it is very dangerous, they touch poisons... a lot of people have become blind after awhile, because they don't use boots, they don't use gloves, they don't use glasses, they don't use any protection... there is a lot of risk.” Eladio, who was trying to convince his brothers to quit sugarcane employment, told me “How they suffer from kidney pain and fevers... some people have died there you know.” Another former worker expressed that as the local sugarcane company, La Magdalena, expanded and gained control of more land, treatment of workers became worse:

Before the company was, how do I say, the company was more favourable to workers and gave them their rights. Now they punish you more, if you don't want to work very much one day, they fire you right there. But a lot of people now work there anyway, maybe 70% of the men in Caballo Blanco [a nearby town].

Labourers are paid every 15 days, and employment may last for only a few pay periods. Depending on the position, workers

¹¹ While cane cutting has gained notoriety for its links to epidemics of chronic kidney disease of non-traditional causes in workers (Peraza et al 2012, Torres et al 2010), *montañeros* as a rule do not participate in this work.

receive between 900-1000 Quetzales (\$118-131 USD) for up to, and often more than 120 hours of work. Some jobs involve 24-hour shifts with short breaks. When the need for workers ends, companies keep workers' cell phone numbers and may call them when there is more work; *montañeros*, however, have little faith in this system and instead check in regularly with supervisors.

Both men's and women's descriptions of sugarcane employment reveal ambivalence: an understanding of the sacrifices associated with this work and at the same time a sense of inevitability. Luis, who had worked often in sugarcane in the past, spoke candidly of the environmental damage associated with this form of cultivation as well as the danger that he felt as a labourer: "Every time I go, I think about what my health will be in the future." However, Luis felt that this employment was absolutely essential in a region that afforded few other opportunities: "If you have children, it is either the *caña* or the *palma* that you go to- either that, or the US." When I asked him one day if he would return to work in the next harvest season, he replied "Of course- we have to work somewhere... that is the only place." Raquel, who worried about the potential for her husband to go blind, countered "we do have money every fifteen days."

However, despite women's expressions of ambivalence regarding sugarcane employment, the majority of women questioned the possibility of reconciling sugarcane cultivation with a healthy community. Responding to the question, "What must be done to improve the situation in La Montaña with respect to sugarcane cultivation?" 11 of 15 of female interview participants stated unequivocally that sugarcane cultivation in the region must end for life in La Montaña to improve. One participant believed that life could improve as long as sugarcane cultivation did not expand, and three said they could not think of an answer. As Cecilia reflected, "Well the truth is, I don't know if there is any benefit [of sugarcane]... but if there is, I don't see it." In the women's group discussion, one woman responded, "*Que se vayan los malditos cañeros!* (The damn sugarcane industry needs to leave!)", which was followed by roars of laughter, and the agreement of the other women. Among women who attended the drop-in sessions, there were many similar responses. In addition to referencing many of the points listed in Table 1, women explained that sugarcane cultivation contributed to food insecurity by using land formerly allotted to maize farmers, and caused the inflation of rent prices in the region to the point that maize cultivation became economically unviable. A shift away from maize cultivation would mean (and in some cases, already meant) that families would no longer grow their own staple food- or at least, not in sufficient quantities. In this case, families no longer had a store of food in the home to ensure nourishment, regardless of unpredictable economic circumstances. Yulma explained, "Sometimes when times are really bad, all we have to give the children is tortillas and a little salt... Even when there is no money, there are always tortillas to eat." Olympia, an older woman, stated "I remember many times in my life when all there were, were tortillas... When the beans

are gone, when the meat is gone we have tortillas. The Mayans call themselves *hombres de maíz* (men of maize) and I think we are too.” As several women pointed out, “you cannot get full from sugarcane”.

Montañeras sense that this rise in food insecurity is exacerbated by a shift in gendered power relations spurred by the transition toward wage labour at the expense of subsistence agriculture. Since sugarcane employment in La Montaña is exclusively available for men, women see their responsibility to feed their family as unchanged, while their control over their ability to do so is eroded. Although men in La Montaña are often the primary decision-makers regarding agriculture, many women give input, direction and advice to their spouse. These women are usually older and are known to have 'strong' personalities, or be leaders in the community. For example, pointing out at her family's plot, Graciela explained:

My husband wanted to plant at the end of April, and I said no way! Not yet. We were the last around here to plant... and now look, *que buena milpa* [what beautiful maize]. I knew because last year the rains were late as well.

Maize cultivation was an area where women had knowledge that was (sometimes) able to be mobilized to improve harvest yields and thus better provide for their families. While women's influence in agricultural decision-making has to be negotiated with family members, many women nevertheless spoke of their ability to influence these decisions in either minor or major ways.¹⁴ In contrast, women viewed wages from sugarcane employment as controlled by employers thought to have little respect for campesino lives. Yulma explained that her husband (who was currently in the US) had been fired from his job after he complained numerous times about his supervisor's mistreatment of workers. Eventually he could no longer find work, and illegally entered the US to support the family. Yulma cares for her four children with the help of her mother-in-law, and awaits irregular money transfers. She explained, “They have no respect for life, or families... you are just one person and they will replace you. At any time they could stop paying.” As one woman told me, “My husband works in the *caña*... and every time I see a pay cheque I thank God, because you just never know.” A conversation with an elderly bachelor illuminated another issue with this shifting power dynamic: that even in situations of fairly consistent employment, the economic benefits do not necessarily trickle down to the rest of the family. As Juan explained:

It's a disaster... So many men go to work in the *finca*... they get their pay after fifteen days and go straight to the canteen. And everything they've earned, they leave it there, and bring nothing home. And what about the wives and the children? Well, the wives have to go ask around if anyone will lend them money. And sometimes, other men will take advantage of their desperation... Sometimes, I'm ashamed to be a part of this community.

While issues of domestic violence certainly pre-date the arrival of sugarcane cultivation, the expansion of this industry and its increasing importance for La Montaña's economy exacerbate the vulnerability of women and children who are not part of this wage labour economy. During interviews women often told me about incidents in which other women's husbands squandered

¹⁴ Some women felt they tended to make more risk-averse decisions than their spouses, citing their role as primary caregivers as explanation for their preference for a 'sure thing'.

their pay from sugarcane or oil palm; perhaps due to an element of danger, no female participants said that they had experienced this in their own family. Elissa owned the town bakery which was located beside the canteen, and often complained to me about being kept up at night by the sugarcane workers: “It must be them- they are the only ones that have any money this time of year!”¹⁵

This question of 'what is to be done?' drew very different responses from male participants- only 2 of 13 male interview participants named the total cessation of sugarcane cultivation in the region as political goals for the community. The majority discussed possibilities that focused on the meaningful inclusion of communities in environmental management, and the modification of cultivation practices to decrease impacts to the community (see Table 2). While only a sample of interview participants' responses are listed here, these comments are representative of input from other male community members.

Table 2. Male participants' suggestions for mitigating environmental impacts

<p>“Get rid of the debris that falls when they burn. That's the biggest problem... coordinate with the <i>ingenios</i> (processing plants) to eliminate this debris.”</p> <p>“I think if they didn't burn, there would be a lot less complaints from the community. They have the right to work too, but they need to do it with less destruction.”</p> <p>“Give farmers a better price for maize, and help us pay for our expenses... we now have less land to make a living on, and the cheapest product on the market is ours [our maize].”</p> <p>“They too [<i>caneros</i>] have the right to work... But it should be regulated, there should be a collaboration with respect to water extraction... and the environmental laws should be applied. There are laws in Guatemala that say you cannot cut down trees, you cannot take all of the water.”</p> <p>“Well, I think if there was just a little less sugarcane. If they left us enough space to plant and maintain our families.”</p>
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All the men I spoke with were acutely aware of the sacrifices demanded by this form of employment on their time, health, and capacity to cultivate maize. Nevertheless, the idea that “they have the right to work too” came up in many conversations with men, and was tied to men's concept of their own right to work. By suggesting that sugarcane companies conform to regulations or revise certain practices, they felt that both of these 'rights to work' could be met. Of the 3 men interviewed who had worked in sugarcane, two vowed they would never go back, and many men spoke of their attempts to convince family members to quit- while maintaining this 'right' to work was important, men were still very ambivalent about the work itself. However, men

¹⁵ Elissa made this statement in May, when farmers had just planted their fields and paid for seeds, pesticides, fertilizers, and labour. Farming families would have to wait until at least September to sell their maize and receive money.

reaffirmed the necessity of *some* kind of work for the community. As Rolando explained: “A lot of people here now have the basics, and thank God they came to help. These young men need to be able to work.” Rodolfo explained the role of employment in reducing crime: “When there is no money and no work, you can imagine- it is easy to look at the little everyone else has, and want it. When children are hungry people become animals... it is good that the young men have work now.” On a more personal level, men also discussed sugarcane employment as a way to buy a motorcycle, which in recent years had become quite common in La Montaña. A motorcycle was increasingly considered a necessary possession, as a (relatively) inexpensive form of transportation. I noticed that *montañeros* took great pride in their motorcycles, taking care to park them in the shade, wash them regularly, and drive carefully on the rough roads. Having a motorcycle, as Juan Manuel explained, meant “You can go into town and buy the things you can't in the *tiendas*, like vegetables or medicine... you can get to work on time... and say, if we wanted to go visit my mother on Sunday when the buses are infrequent then we could go.” For many men the existence of employment opportunities in sugarcane is important because it offers a way to make money, reduces violent crime spurred by desperation, and creates the opportunity to buy a motorcycle. Employment in sugarcane is thus tied up with masculinity, through the ways that the availability of this employment allows for young men to provide for their families, gain a level of personal autonomy, and avoid criminal activities that other community members believe they might otherwise engage in. Men feel very strongly that as the head of the household, they have a 'right to work'. However *montañeros* did not discuss any benefits of sugarcane beyond those which could conceivably be gained through any sort of wage labour. This reflects a desperate need felt by men for *any* kind of employment, which was corroborated by frequent statements of “if there was anything else... we would do that instead.”

Wage labour in La Montaña is increasingly considered necessary in the context of rising rent and input prices, lack of available land, and the attractiveness of earning bi-weekly. Both men and women attest to this fact. However women also describe a situation in which their food security and capacity to influence household decisions is eroded, which constitutes a shift in gendered power relations associated with sugarcane employment. Thus, even as participants were in agreement over virtually every environmental consequence of sugarcane, the immense sacrifice required for labour, as well as the structural conditions that create the need for this work, a fundamental gendered difference remains regarding goals for action. Given *montañeros'* emphasis on cooperation across gender as central to collective action, these findings have unearthed an obstacle to this (potential) cooperation in the form of a simple problem: men express a need to confront sugarcane cultivation in ways which do not threaten the presence of this employment. Meanwhile, women express a desire for a future which does not include sugarcane cultivation at all. Women perceive their food security, capacity to influence household decisions, and ability to secure a future for their families as dependent upon the family's cultivation of maize, which is threatened by sugarcane.

Women and men have responded differently to the phenomenon of land-control grabbing for sugarcane; I argue that this division is a key site for reconciliation in order to achieve the collective action that *montañeros* profess as necessary, in consideration of the fact that collective action across gender figures so prominently in *montañeros'* political experiences and values.

4.0 Return trip

Beyond producing knowledge for academic audiences, a key aspect of FCBR research is appropriate and accessible dissemination among participants, as well as the facilitation of opportunities for positive social change (Dyrness 2008, Frisby et al 2005, Genat 2009). In the context of this research, this meant asking 'how'- how might *montañeros* actually mobilize the knowledge I have summarized above? Can an awareness of, and critical discussion about these issues lead to a more effective political response?

In February 2015, I returned to La Montaña to conduct a presentation of my research analysis to-date, and generally reconnect with participants and discuss life in the community. The public presentation was attended by 46 people (slightly more women than men), which I felt demonstrated a strong level of interest in this topic despite my months away from the community. I discussed the research findings, showing that although everyone wanted to do *something* about sugarcane cultivation, men and women had very different ideas of what the goals of political action should be. I explained that my analysis stemmed from the different ways that women and men perceived risks and benefits of sugarcane employment. I asked the attendees to raise their hands if they had participated in various forms of political organizing in the past; hands of both men and women were raised each time. “You see,” I concluded, “as you say, 'everyone' must agree on a stance to take in order to be effective; right now women and men do not. What can be done about that?” Discussion began slowly, but entirely avoided the topic of gender that had characterized the bulk of the presentation, focusing instead on other elements. Attendees added to my incomplete portrayal of the environmental impacts of sugarcane, and many statements were made about how the research highlighted the need to *do something*. However, judging by the non-discussion of the gendered divide I outlined, participants at the public event seemed not to consider this as something that was necessary (or acceptable, or possible) to discuss. Afterward, concerned with the accuracy of my presentation, I discussed the issue with some of the women. They reaffirmed the existence of this gendered divide, and said they were satisfied with the presentation- “yes, that is the way it is!” One woman added, “...and it's not going to change!”

I left the community confused, and wondering about the value of a critique which was apparently accurate but gained no

traction among those whom I hoped would discuss it. *Montañeros* had wondered, 'why aren't we doing anything?' The response I provided, that disagreements across gender needed to be resolved, was simultaneously accepted as true (based on women's feedback) and rejected as un-actionable. It seemed as though I was describing a political impasse which was so pervasive that attendees did not see the value in discussing it. *Montañeros* have visceral and collective knowledge of a wide range of environmental impacts associated with sugarcane, and agree that it represents a threat to maize cultivation. However, this consensus has not been sufficient to stimulate the kind of collective action *montañeros* profess as necessary. Gender plays a role in maintaining inaction around sugarcane. However the non-discussion begs the question, what is the value in revealing this? And since the research project ended with no ascertainable plan of action for the future, does communicating the political incapacities of *montañeros* benefit them, or other communities facing land grabs?

5.0 Discussion and Conclusion

It is important to note that this non-discussion also points to methodological issues specific to this project: namely, the expectation of addressing gendered divides in a context of highly uneven power dynamics, within one return to a research community. Gender divisions are complex, multi-layered issues that cannot be solved in one conversation; at the same time, *montañeras'* engagement in community politics takes place in a context of patriarchal culture and gendered power dynamics (Ogrodnik and Bordzutzky 2011; see also Menjivar 2011). While I did not 'de-brief' with participants regarding this issue after the meeting, it is possible (and indeed likely) that a fear of 'speaking out', and a more general culture of silence around gender issues contributed to the lack of discussion in this specific event.

However beyond the power dynamics of this particular event, research on gendered divisions in an agrarian community brings up other useful questions. These divisions shed light on one potential site for solidarity-building work in agrarian communities facing sugarcane expansion, or environmental pressures more generally. While gendered division is certainly not the only obstacle to collective action in La Montaña- lack of material resources, time constraints, and a culture of fear in response to violence from the state and industry are among other important factors- any efforts to build collective action which ignore these different orientations to sugarcane employment will be limited. A desire for a way to provide for one's family was a universal theme, and for some men sugarcane *is* this way. Sugarcane employment brings important material, social and symbolic benefits for men. At the same time, the meaningful inclusion of women's voices means recognizing that disagreement exists around the suitability of sugarcane as the provider of these benefits; and in turn, recognizing that this disagreement is rooted in gendered roles and responsibilities which make women especially vulnerable to sugarcane expansion. While this recognition may not immediately lead to action or resolution, this research indicates that a failure to recognize this difference is

a failure to recognize the legitimate concerns of women. In situations of land grabbing which involve the provision of gendered employment opportunities, addressing these concerns will be an important, albeit difficult aspect of building collective action across gender.

These uncertainties point to potential areas for future research at the nexus of gender, collective action and responses to land grabbing. Are these processes of resolution underway in other Guatemalan communities- or elsewhere in the world? Is gendered inaction related to certain types of land grabbing? What tools other than collective action are available to communities that are similarly divided along gender lines? The answers to these questions could shed light on the kinds of political work communities are (or are not) engaged in to mitigate the divisive effects of agroindustrial activity. It is predicted that land grabbing will increasingly become a more prevalent part of the global agrarian landscape, given rising global demand for food, fuel and minerals as well as green grabbing initiatives to 'protect' land by expelling its residents (Brent 2015, Hall 2013, Martiniello 2015, Rocheleau 2015). As this trend unfolds, there will be different implications for the wellbeing of rural women, children, and men (Behrman et al 2012). However despite these significant differential impacts, subsistence communities remain sites where people do have common interests, as I learned in La Montaña. As this research demonstrates, when it comes to sugarcane expansion *montañeros* sense that "it affects us all". This, along with the community's strong statements about the value of collective action, demonstrates the importance of seeing gendered responses to land grabbing in a broader context of community. When an investigation of gender divides is grounded in an acknowledgement of the community as a political force that is stronger when united, an additional layer of violence inflicted by land grabs is revealed. Beyond environmental degradation, abusive labour regimes, and the seizure of land, sugarcane expansion in La Montaña is violent through its undermining of the capacity of the community to articulate common political goals acrossgender.

Looking at the perspectives of *montañeros*, there is currently no clear, easy path to reconciling the political goals of women and men. However it is important to note that whether (or how) collective action takes shape at the level of one agrarian community does indeed have an impact on the expanding Guatemalan sugarcane industry. As Alonso-Fradejas (2015) notes, in Guatemala "trajectories of agrarian change are not a story foretold, but are the product of multiple and dynamic politics" (p. 493). In this paper I argue for the consideration of intra-community gendered politics as a site that is impacted by sugarcane expansion in such a way that the possibilities of collective action are complicated. If the trajectory of sugarcane expansion is "not a story foretold", then these gendered politics are both a site for the contestation of this expansion, and an insight into the challenges agrarian communities face in devising collective political strategies. This is not to overstate the capacity of impoverished and marginalized campesinos to shape an entire agroindustry. Rather, by recognizing this relationship I am

communicating a key aspect of how *montañeros* felt in relation to sugarcane: sugarcane expansion is a phenomenon which is both beyond their control (both individually and as a community) and yet demands something from them. What is explicitly demanded is labour, with considerable restrictions and sacrifices. Implicit demands include political quiescence, and the endurance of the erosion of their subsistence livelihood. All community members feel the burden of these demands, and as such this common experience may be a platform for future expressions of protest or collective action. This process will be strengthened and rendered more transparent by an acknowledgement that no matter what kind of action is devised and no matter what the collective political goals are, women and men will need to make different and unevenly distributed sacrifices in order to “speak together” to confront sugarcane expansion.

Bibliography

- ActionAid Guatemala. "El mercado de los agrocombustibles: Destino de la producción de caña de azúcar y palma africana de Guatemala". November 2013. Retrieved from http://www.actionaid.org/sites/files/actionaid/el_mercado_de_los_agrocombustibles.pdf
- Agarwal, B. (2000). Conceptualising environmental collective action: why gender matters. *Cambridge Journal of Economics*, 24(3), 283–310. <http://doi.org/10.1093/cje/24.3.283>
- Alonso-Fradejas, A., Caal Hub, J.L., & Chinchilla, T.M. 2011. *Plantaciones Agroindustriales, Dominación y Despojo Indígena-Campesino en la Guatemala del Siglo XXI*.
- Alonso-Fradejas, A. (2012). Land control-grabbing in Guatemala: the political economy of contemporary agrarian change. *Canadian Journal of Development Studies / Revue Canadienne D'études Du Développement*, 33(4), 509–528. <http://doi.org/10.1080/02255189.2012.743455>
- Alonso-Fradejas, A. (2015). Anything but a story foretold: multiple politics of resistance to the agrarian extractivist project in Guatemala. *The Journal of Peasant Studies*, 42(3-4), 489–515. <http://doi.org/10.1080/03066150.2015.1013468>
- ASAZGUA. (2014) Economía. Retrieved from: <http://www.azucar.com.gt/economia3.html>
- ASAZGUA. (2014) Exportaciones. Retrieved from: <http://www.azucar.com.gt/economia2.html>
- Behrman, J, Meinzen-Dick, R., & Quisumbing, A. (2012). The gender implications of large-scale land deals. *Journal of Peasant Studies*, 39(1), 49–79. Retrieved from <http://www.tandfonline-com.ezproxy.library.uvic.ca/doi/abs/10.1080/03066150.2011.652621>
- Bidaseca, K., & Mariotti, D. (2001). Old and new actors in rural protests in Argentina: a reflection from the gender viewpoint. *Sociologias*, (5), 148–189. <http://doi.org/10.1590/S151745222001000100008>
- Borras, S. M, & Franco, J. C. (2013). Global land grabbing and political reactions 'from below'. *Third World Quarterly*, 34(9), 1723.
- Borras, S. M; McMichael, P; Scoones, I. (2010) The politics of biofuels, land and agrarian change: editors' introduction. *The Journal of Peasant Studies*, 37:4, 575-592, DOI: 10.1080/03066150.2010.512448.
- Borras, S. M., Kay, C., Gómez, S., & Wilkinson, J. (2012). Land grabbing and global capitalist accumulation: key features in Latin America. *Canadian Journal of Development Studies /Revue Canadienne D'études Du Développement*, 33(4), 402–416. <http://doi.org/10.1080/02255189.2012.745394>
- Borras, S. M; Franco, J. C; Gómez, S; Kay, C; Spoor, M. (2012b) Land grabbing in Latin America and the Caribbean, *The Journal of Peasant Studies*, 39:3-4, 845-872, DOI: 10.1080/03066150.2012.679931.
- Brent, Z. (2015). Territorial restructuring and resistance in Argentina. *The Journal of Peasant Studies*, 42(3-4), 671-694.
- Brodzinsky, S. (2013, June 23). Guatemala's sugar cane land rush anything but sweet for corn farmers. *The Guardian*. Retrieved from <http://www.theguardian.com/global-development/2013/jun/26/guatemala-sugar-land-corn>
- Brydon-Miller, M., Maguire, P., & McIntyre, A. (2004). *Traveling companions: feminism, teaching, and action research*. Westport, Conn: Praeger.
- Centro Guatemalteco de la Investigacion y Capacitacion de la Cana de Azucar (CENGICANA). (2015). *2015 Boletín Estadístico Año 16, No. 1 Series Históricas, Agosto*. Retrieved at: <http://www.cengicana.org/es/mapas-zona-canera/Boletines-Estadisticos/>
- de Groot, W. T, & Tadepally, H. (2006). Community action for environmental restoration: a case study on collective social capital in India. *Environment, Development and Sustainability*, 10(4), 519–536. <http://doi.org/10.1007/s10668-006-9078-8>

- capital in India. *Environment, Development and Sustainability*, 10(4), 519–536. <http://doi.org/10.1007/s10668-006-9078-8>
- du Toit, A. & Neves, D. (2014). The government of poverty and the arts of survival: mobile and recombinant strategies at the margins of the South African economy. *The Journal of Peasant Studies*, 41(5), 833–853. <http://doi.org/10.1080/03066150.2014.894910>
- Dyrness, A. (2008). Research for Change versus Research as Change: Lessons from a Mujerista Participatory Research Team. *Anthropology & Education Quarterly*, 39(1), 23–44. <http://doi.org/10.1111/j.1548-1492.2008.00003.x>
- Edelman, M & León, A. (2013). Cycles of Land Grabbing in Central America: an argument for history and a case study in the Bajo Aguán, Honduras. *Third World Quarterly*, 34:9, 1697-1722, DOI: 10.1080/01436597.2013.843848
- Elmhirst, R. (2011). Migrant pathways to resource access in Lampung’s political forest: Gender, citizenship and creative conjugality. *Geoforum*, 42(2), 173–183. <http://doi.org/10.1016/j.geoforum.2010.12.004>
- Fairbairn, M., Fox, J., Isakson, S. R., Levien, M., Peluso, N., Razavi, S, Sivaramakrishnan, K. (2014). Introduction: New directions in agrarian political economy. *The Journal of Peasant Studies*, 41(5), 653–666. <http://doi.org/10.1080/03066150.2014.953490>.
- Fischer, E., & Qaim, M. (2012). Gender, agricultural commercialization, and collective action in Kenya. *Food Security*, 4(3), 441–453. <http://doi.org/10.1007/s12571-012-0199-7>
- Food and Agriculture Organization of the United Nations (FAO) (2014). *The land market in Latin America and the Caribbean: concentration and foreignization*. Sergio Gómez (Ed.) Santiago: Food and Agriculture Organization.
- Freddy Pinto. (July 12, 2014). Personal communication, Retalhuleu, Guatemala.
- Freire, P. (1968). *Pedagogy of the oppressed*. Harmondsworth: Penguin.
- Frisby, W., Reid, C., Millar, S., & Hoerber, L. (2005). Putting “Participatory” Into Participatory Forms of Action Research. *Journal of Sport Management*, 19(4), 367. Retrieved from <http://ezproxy.library.uvic.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=18447834&site=ehost-live&scope=site>
- Genat, B. (2009). Building emergent situated knowledges in participatory. *Action Research*, 7(1), 101–115. <http://doi.org/10.1177/1476750308099600>
- Gingembre, M.(2015). Resistance or participation? Fighting against corporate land access amid political uncertainty in Madagascar, *The Journal of Peasant Studies*, 42:3-4, 561-584, DOI: 10.1080/03066150.2015.1022867
- Glassman, Michael, E., Gizem. (2014). Participatory Action Research and Its Meanings: Vivencia, Praxis, Conscientization. *Adult Education Quarterly*, 64(3), 206–221. <http://doi.org/10.1177/0741713614523667>.
- Gunewardena, N. (2010). Bitter Cane: Gendered Fields of Power in Sri Lanka’s Sugar Economy. *Signs: Journal of Women in Culture & Society*, 35(2), 371–396. Retrieved from <http://ezproxy.library.uvic.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=qth&AN=48057502&site=ehost-live&scope=site>
- Hale, C. R. (2006). *Más que un Indio =: More than an Indian: racial ambivalence and neoliberal multiculturalism in Guatemala*. Santa Fe, N.M: School of American Research Press.
- Hall, D. (2013). Primitive accumulation, accumulation by dispossession and the global land grab. *Third World Quarterly*, 34(9-10), 1582.
- Hall, R; Edelman, M; Borrás, S; Scoones, I; White, B; White, W. (2015). Resistance, acquiescence or incorporation? An introduction to land grabbing and political reactions “from below.” *Journal of Peasant Studies*, 42(3-4), 467–488. Retrieved from <http://www.tandfonline.com/ezproxy.library.uvic.ca/doi/full/10.1080/03066150.2015.1036746#abstract>

- Heron, J., & Reason, P. (1997). A Participatory Inquiry Paradigm. *Qualitative Inquiry*, 3(3), 274–294. <http://doi.org/10.1177/107780049700300302>
- Lykes, M. B. (1997). Activist Participatory Research Among the Maya of Guatemala: Constructing Meanings from Situated Knowledge. *Journal of Social Issues*, 53(4), 725–746. <http://doi.org/10.1111>
- Maguire, P. (1987). *Doing participatory research: a feminist approach*. Amherst, Mass: Center for International Education, School of Education, University of Massachusetts.
- Manchón, B. G., & Macleod, M. (2010). Challenging gender inequality in farmers' organisations in Nicaragua. *Gender & Development*, 18(3), 373–386. <http://doi.org/10.1080/13552074.2010.521984>
- Martiniello, G. (2015). Social struggles in Uganda's Acholiland: understanding responses and resistance to Amuru sugar works. *Journal of Peasant Studies*, 42(3-4), 653-669.
- McCarthy, N., & Kilic, T. (2015). The nexus between gender, collective action for public goods and agriculture: evidence from Malawi. *Agricultural Economics*, 46(3), 375–402. <http://doi.org/10.1111/agec.12170>
- McKay, B; Sauer, S; Richardson, B; Herre, R. (2015). The political economy of sugarcane flexing: initial insights from Brazil, Southern Africa and Cambodia, *The Journal of Peasant Studies*, DOI: 10.1080/03066150.2014.992016.
- Menjívar, C. (2011). *Enduring violence: Ladina women's lives in Guatemala*. Berkeley, Los Angeles: University of California Press.
- Mingorría, S., Gamboa, G., Martín-López, B., Corbera, E. (2014). The oil palm boom: socioeconomic implications for Q'eqchi' households in the Polochic Valley, Guatemala. *Environment, Development and Sustainability*.
- Ministerio de Agricultura, Ganadería y Alimentación (MAGA). (2014). El Agro en Cifras 2014. Retrieved from: <http://web.maga.gob.gt/download/lagro-cifras14.pdf>
- Moreda, T. (2015). Listening to their silence? The political reaction of affected communities to large-scale land acquisitions: insights from Ethiopia, *The Journal of Peasant Studies*, 42:3-4, 517-539, DOI: 10.1080/03066150.2014.993621
- Ogrodnik, C., & Borzutzky, S. (2011). Women under Attack: Violence and Poverty in Guatemala. *Journal of International Women's Studies*, 12(1), 55–67. Retrieved from <http://ezproxy.library.uvic.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=qth&AN=65172692&site=ehost-live&scope=site>
- O'Reilly, K. (2010). Combining sanitation and women's participation in water supply: an example from Rajasthan. *Development in Practice*, 20(1), 45–56. <http://doi.org/10.1080/09614520903436976>
- Oxfam International. "SUGAR RUSH: Land Rights and the Supply Chains of the Biggest Food and Beverage Companies," October 2, 2013.
- Pan-American Health Organization / World Health Organization (2013). Chronic Kidney Disease in Agricultural Communities in Central America. CD52/8 (Eng.) Washington, 17 July 2013. Retrieved at: http://www.paho.org/hq/index.php?option=com_content&view=article&id=8833&Itemid=40033&lang=en
- Peluso, N, & Lund, C. (2011). New frontiers of land control: Introduction. *Journal of Peasant Studies*, 38(4), 667–681.
- Peraza, S., Wesseling, C., Aragon, A., Leiva, R., García-Trabanino, R. A., Torres, C., ... Hogstedt, C. (2012). Decreased kidney function among agricultural workers in El Salvador. *American Journal of Kidney Diseases: The Official Journal of the National Kidney Foundation*, 59(4), 531–540. <http://doi.org/10.1053/j.ajkd.2011.11.039>
- Price, L. (2010). "Doing it with men": feminist research practice and patriarchal inheritance practices in Welsh family farming. *Gender, Place & Culture*, 17(1), 81–97. <http://doi.org/10.1080/09663690903522438>

- Razavi, S. (2009). Engendering the political economy of agrarian change. *The Journal of Peasant Studies*, 36(1), 197–226. <http://doi.org/10.1080/03066150902820412>
- Rocheleau, D., Thomas-Slayter, B.P., & Wangari, E. (Eds). (1996). *Feminist Political Ecology: Global Issues and Local Experiences*. Routledge: New York.
- Rocheleau, D. (2015) Networked, rooted and territorial: green grabbing and resistance in Chiapas, *The Journal of Peasant Studies*, 42:3-4, 695-723, DOI: 10.1080/03066150.2014.993622.
- Rosenthal, E. (2013, January 5). As biofuel demand grows, so do Guatemala's hunger pangs. *New York Times*. New York . Retrieved from <http://www.nytimes.com/2013/01/06/science/earth/in-fields-and-markets-guatemalans-feel-squeeze-of-biofuel-demand.html>
- SEGEPLAN. (2011). Retalhuleu: Plan de desarrollo departamental 2011-2025. Retrieved at: www.segeplan.gob.gt
- Sultana, F. (2011). Suffering for water, suffering from water: Emotional geographies of resource access, control and conflict. *Geoforum*, 42(2), 163–172. <http://doi.org/10.1016/j.geoforum.2010.12.002>
- Torres, C., Aragón, A., González, M., López, I., Jakobsson, K., Elinder, C.-G., ... Wesseling, C. (2010). Decreased kidney function of unknown cause in Nicaragua: a community-based survey. *American Journal of Kidney Diseases: The Official Journal of the National Kidney Foundation*, 55(3), 485–496. <http://doi.org/10.1053/j.ajkd.2009.12.012>
- Vidal, J. (2012, July 5). Guatemala farmers losing their land to Europe's demand for biofuels. *The Guardian* . Retrieved from <http://www.theguardian.com/global-development/2012/jul/05/guatemala-land-europe-demand-biofuels>
- Wangari, E. Thomas-Slayter, B., & Rocheleau, D. (1996). Gendered visions for survival: semi-arid regions in Kenya. In *Feminist Political Ecology: Global Issues and Local Experiences* (pp. 127–154). New York: Routledge.
- Westermann, O., Ashby, J., & Pretty, J. (2005). Gender and social capital: The importance of gender differences for the maturity and effectiveness of natural resource management groups. *World Development*, 33(11), 1783–1799. <http://doi.org/10.1016/j.worlddev.2005.04.018>
- White, J, White, B. (2012). Gendered experiences of dispossession: oil palm expansion in a Dayak Hibun community in West Kalimantan. *Journal of Peasant Studies*, 39(3-4), 995–1016. Retrieved from <http://www.tandfonline.com.ezproxy.library.uvic.ca/doi/abs/10.1080/03066150.2012.676544>
- Williams, J., & Lykes, M. B. (2003). Bridging Theory and Practice: Using Reflexive Cycles in Feminist Participatory Action Research. *Feminism & Psychology*, 13(3), 287–294. <http://doi.org/10.1177/0959353503013003002>
- Winkler, K. (2013a). La expansión de la caña de azúcar en Suchitepéquez y su impacto en la subsistencia de la población del altiplano guatemalteco. Coordinación de ONG y Cooperativas (CONGCOOP), Instituto de Estudios Agrarios y Rurales (IDEAR). Retrieved from http://idear.congcoop.org.gt/images/stories/cuaderno_1_congcoop_final-2.pdf
- Winkler, K. (2013b). La territorialidad tz'utujil frente a la expansión de la caña de azúcar. Coordinación de ONG y Cooperativas (CONGCOOP), Instituto de Estudios Agrarios y Rurales (IDEAR). Retrieved from http://idear.congcoop.org.gt/images/stories/CONGCOOP_territorialidad.pdf

Chapter 3

Exploring how gender and age inform understandings of deforestation in a Guatemalan agrarian community

Abstract

Along the Pacific coast of Guatemala, deforestation driven primarily by sugarcane expansion is a serious concern for subsistence communities. In La Montaña, Retalhuleu, community members are particularly concerned because local knowledge suggests that forest cover is necessary to attract the rains needed for subsistence maize cultivation. Drawing from a feminist political ecology framework, I explore understandings of deforestation in La Montaña, focusing on the way these understandings are differentiated along axes of power, especially gender and age. While the community is aligned in opposition to deforestation, these differentiated understandings of the problem represent an obstacle to a collective political action to address the problem. In a region that receives far less conservation and research attention compared to other areas of Guatemala, my research highlights the need for political, legal and research support for communities on the Pacific coast in order to avoid intra-community violence spurred by unchecked regional deforestation.

1.0 Introduction

It's around noon, and I am sitting on the back porch with Antonio, Maria and Graciela. I am conducting a feminist community-based research project on the impacts of sugarcane expansion in their community of La Montaña, in southwestern Guatemala. We are sitting in the shade of a withered lemon tree, which Maria uses as an example to explain the relationship between sugarcane cultivation, deforestation, and drought.

I have always had lemon trees, with big, beautiful lemons... we used to sell them, the trees would fill up so much. Graciela here remembers. But for the last few years, they flower, and then the flowers die and drop off. They don't fruit anymore. That's how I realised it. Since the sugarcane came. Yes. In this way it has affected us, the lemons don't grow, because not enough water is getting to the roots... Antonio thinks it's from the pesticides they use... but I've seen the clouds that don't fall, black clouds in the rainy season, but no rain. They just pass over. And they [sugarcane companies] are cutting down all the forests, so the rain has nowhere to fall. And there have been no lemons at all for two years.

Deforestation is a serious issue in La Montaña. While fields of sugarcane, pasture, maize, and oil palm dominate the landscape, the name La Montaña- which literally translates to 'the mountain' but also has a regional meaning of 'dense forest' - indicates the considerable change in forest cover that has occurred since the community was founded in 1969. As one farmer explained, "Everyone asks that... why do you say La Montaña when there is no *montaña*? Well, the old ones tell us there used to be." This change is particularly serious because local knowledge suggests that forest cover is necessary to ensure regular rainfall. The majority of *montañeros* (residents of La Montaña) do not have irrigation for their subsistence maize cultivation, so the community depends on the rains (and thus the remaining forest) for survival. Deforestation emerged as a central concern in my study of the impacts of sugarcane expansion and *montañeros* identify sugarcane as the primary contemporary driver in the region. Deforestation across a landscape is a complex process with multiple drivers and multiple actors (Aide et al 2013, Carr

2005); people are affected by, and react differently to changing forest regimes depending on gender, age, economic and political status (Agarwal 2009, Dey et al 2014, Elmhirst 2011b, Taylor 2012). As Maria's story shows, people also have different ideas about what outcomes are linked to deforestation, and therefore how deforestation needs to be addressed.

In this paper I describe how gender and age inflect different understandings of deforestation in La Montaña. These understandings also represent an obstacle to the establishment of a collective platform to address deforestation, since they reflect different ideas about who and what drives deforestation. I further argue that differentiated understandings of the source of the deforestation hold potential for discrimination and violence, especially if sugarcane expands and deforestation continues apace. Investigating the role of gender and age in these understandings reveals the pre-existing power dynamics which exist in La Montaña, dynamics activated and intensified by sugarcane expansion and deforestation. Since the Pacific coast has largely remained absent from the literature on deforestation in Guatemala, this research also contributes an important regional perspective.¹ By generating knowledge on how subsistence communities (and different members within them) are impacted by agroindustries in a wider range of contexts, the human dimensions of agroindustrial expansion in Guatemala becomes clearer.

I begin by outlining a conceptual framework for this research in relation to work in feminist political ecology around gender and deforestation (Section 2.0). I then provide context on the research community of La Montaña, as well as the context of sugarcane cultivation and deforestation in the department of Retalhuleu (Sections 3.0, 3.1, 3.2). Following a description of my methods and methodology (Section 4.0), in Section 5.0 I present my data and analysis. I first situate sugarcane as a primary driver of deforestation. I then describe how gender and age inform understandings of deforestation in ways that draw in other proximate drivers of deforestation. As sugarcane expansion continues, *montañeros* feel an increasing pressure to address deforestation. As I show, gender and age influence the political and economic systems or the specific practices that *montañeros* look to as part of the problem of deforestation. I discuss the implications of these understandings for intra-community relations and a collective political stance vis-a-vis deforestation. In Section 6.0 I conclude with a discussion of the significance of these understandings in the broader political context of agrarian change in Guatemala.

2.0 Conceptual framework for exploring deforestation in Retalhuleu: feminist political ecology

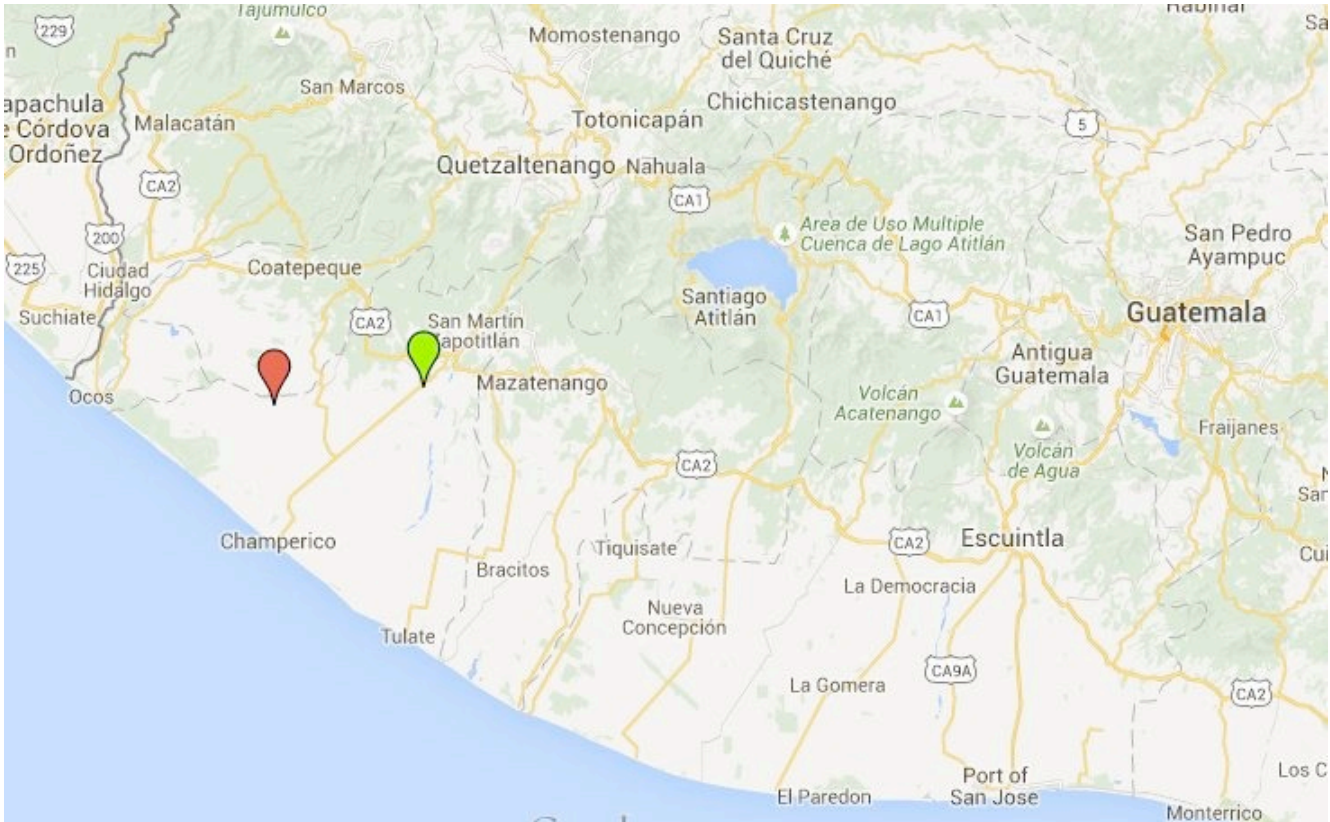
Feminist political ecology scholarship provides a useful conceptual framework for understanding the relationship between

¹ Throughout this paper, when I refer to the 'region' in which La Montaña is located I am referring to the Pacific coast of Guatemala which includes the departments of Retalhuleu, Suchitepequez, Escuintla, and Santa Rosa. I use the word department to refer specifically to Retalhuleu.

perceptions of deforestation and different axes of power in an agrarian community. Feminist political ecology is “a subfield that brings feminist theory and objectives to political ecology, which is an analytical framework built on the argument that ecological issues must be understood and analysed in relation to political economy (and vice versa)” (Sundberg, forthcoming; see also Rocheleau et al 1996). Feminist political ecologists have established the importance of critically examining how extractive industries and the resulting environmental pressures shape community dynamics and politics (Campbell and the Women's Group of Xapuri 1996, Elmhirst 2011a, 2011b, Gunewardena 2010, Mingorria et al 2014). As well, feminist political ecologists have demonstrated that peoples' material experiences of resource conflicts and environmental processes more generally are often determined along axes of power (Buckingham and Kulcur 2009, Harris 2006, O'Reilly 2010). Specifically in the context of deforestation, reforestation, or changes in forest regimes, poor and/or agrarian communities experience these phenomena in ways that are materially and emotionally differentiated by gender (Agarwal 2001, Gururani 2002, Nightingale 2003, Sundberg 2004). Indeed, gendered roles and responsibilities play a role in producing diverse perspectives on the use/misuse of forests (Dey et al 2014, Radel 2012, Rocheleau 1997). As individuals express and act upon these diverse perspectives, gender relationships are reshaped (Mollett 2010, Veuthey and Gerber 2010).

This body of work thus builds an understanding of deforestation as a dynamic process that takes place within a landscape that is already structured along various axes of power. As I explain further in section 5.0, in La Montaña gender and age are important variables for how people understand this dynamic process across scales and power structures. As I argue, the different understandings of deforestation which emerge show potential for gender and age divides to become exacerbated if deforestation driven by sugarcane continues.

3.0 Critical context: La Montaña



Map 1: La Montaña on the Pacific Coast of Guatemala. La Montaña= red, department capital city of Retalhuleu= green. Map modified from Google Maps, 2015.

La Montaña (population 1300) is located in the southwestern department of Retalhuleu, Guatemala. I was first introduced to this community in January 2013 through a position as an intern agronomist in a local non-governmental organization promoting sustainable agriculture techniques. During this time I formed several close relationships, and decided to return and conduct research in April 2014 on the impacts of sugarcane expansion.

La Montaña is in some ways dissimilar from communities commonly described in the Guatemalan agrarian literature, which focuses heavily on the Mayan communities of the western highlands and migrant communities in the Petén (eg. Gould et al 2006, Grandia 2009, Isakson 2009, Isakson 2014, Sundberg 2003, Taylor 2007, 2010). While I cannot speak authoritatively of the ethnic composition of the village, all research participants identify as *ladino* (non-Mayan or 'Guatemalan').² In terms of

² During my field research I did not see anyone in the village wearing the traditional Mayan *traje* (traditional dress) that is prevalent in other parts of the country. When I asked elders about their ancestry, most answered that their families had been landless farmers in the nearby town of Caballo Blanco for several generations before settling in La Montaña. Many community members were unwilling to identify with any Mayan ancestry- racism toward Mayan peoples is quite overt in southwestern Guatemala which may have contributed to this. I encountered a few families who had fled Huehuetenango or Quiché, departments in the northwest of the country, during the violence of the civil war and genocide (these areas experienced high levels of violence). However these families explained that they had not maintained ties with their family in the highlands and

climate the region is extremely hot and humid, with average high monthly temperatures of 33-36 degrees celsius. As in most of southwestern Guatemala, farmers in La Montaña grow primarily maize and sesame. Maize is the staple food of *montañeros*, and the maize and sesame harvests are often the primary source of income for families. However the majority of households do not own any land on which to farm, and instead rent land from local fincas (large tracts of agricultural land owned by foreign nationals or Guatemalan elite). However with the expansion of sugarcane and oil palm into neighbouring fincas, *montañeros* report increasing difficulties in finding available land to rent, as well as a 50-75% increase in rent since 2004. Other important sources of income include wage labour for men in sugarcane or oil palm plantations, or remittances from family members in the United States or Canada.

Gender dynamics in La Montaña are characterized by many of the same roles, responsibilities and issues of violence that have been widely documented in other Guatemalan communities (Menjívar 2008, 2011, Ogrodnick and Borzutzky 2011). Based on my conversations with women, domestic violence and sexual abuse are common in the community. In La Montaña, women state that they experience more freedom and safety than women who live in larger towns or cities; however, it is still considered dangerous to walk alone at night through the village. Women often confided in me about violent incidents with other individuals in the community or situations in which they felt unsafe, so that I could be more vigilant about my own safety as a woman and an outsider. In general, there is a division of labour along gendered lines: women are responsible for cooking, cleaning, and childcare, while men are often the head of the household and the agricultural decision-makers with the most authority. However, some women own land inherited from their family, and in this case have decision-making power. Some women also advise and participate in decision-making with their spouse. Women in La Montaña note that employment opportunities for their husbands (ie sugarcane or oil palm) have been a double-edged sword: on one hand, several women are happy with the 'free' time it gives them in the house, as well as the chance for the family to earn more money in the low season for maize. On the other hand, many women find it distressing that wage labour jobs are eroding food security, as families have less capacity and land to cultivate maize.

3.1 Political economy of sugarcane in Retalhuleu

The expansion of sugarcane cultivation in Guatemala occurs alongside a national pattern of land tenure in which campesinos' legal claims to land in many areas of the country are either tenuous or non-existent (Alonso-Fradejas et al 2011, Granovsky-Larsen 2013). Indeed, many *montañeros* note that sugarcane expansion is facilitated by rental agreements with finca owners, and that *montañeros* themselves often do not own any land which greatly impairs their capacity to influence sugarcane

they felt they had integrated into *ladino* culture.

expansion. The industry is also highly centralized and commercialized: fourteen companies control 100% of the processing mills and 80% of the land cultivated with sugarcane (Alonso-Fradejas 2012). The Guatemalan sugarcane industry cites its high productivity per hectare and the steady increase in area cultivated as the key factors that have allowed Guatemala to become the second largest exporter of sugar in Latin America and the Caribbean (ASAZGUA 2014). Manual labour opportunities are seasonal, involve long, hard days under the hot sun, and are exclusively for men. Since the 1980s, the expansion of sugarcane in Guatemala has been associated with violent dispossession and serious health concerns for workers and surrounding communities (Oglesby 2013, Polochic 2014, Ordunez et al 2014, Wesseling et al 2013). The impact of the expanding sugarcane industry on Guatemalan subsistence communities in sugar-producing areas has been transformative, and in some cases has drastically interrupted subsistence agriculture practices (Winkler 2013a).

While commercial agriculture is not new to the department, *montañeros* state that they have only seen sugarcane cultivation around their community since approximately 2007. Other important plantation crops in the region include oil palm, plaintain, and banana. Sugarcane, however, is particularly resented by *montañeros* for a number of reasons including: the burning of fields in the dry season, which increases heat and causes ash to blow into homes, the increased day-and-night traffic of massive trucks carrying cane to processing plants, which damages roads, endangers schoolchildren and prevents sleep, labour practices which endanger male labourers and are believed to be linked to kidney failure, unsustainable water extraction practices, aerial pesticide applications, and deforestation. I focus on deforestation because men and women in the community identified this as one of the most pressing issues they face. Deforestation as an area of interest emerged in the course of my community-based research approach that I outline in section 4.0. Focusing on this issue also made it possible to examine gender, since the responses of women and men differed significantly.

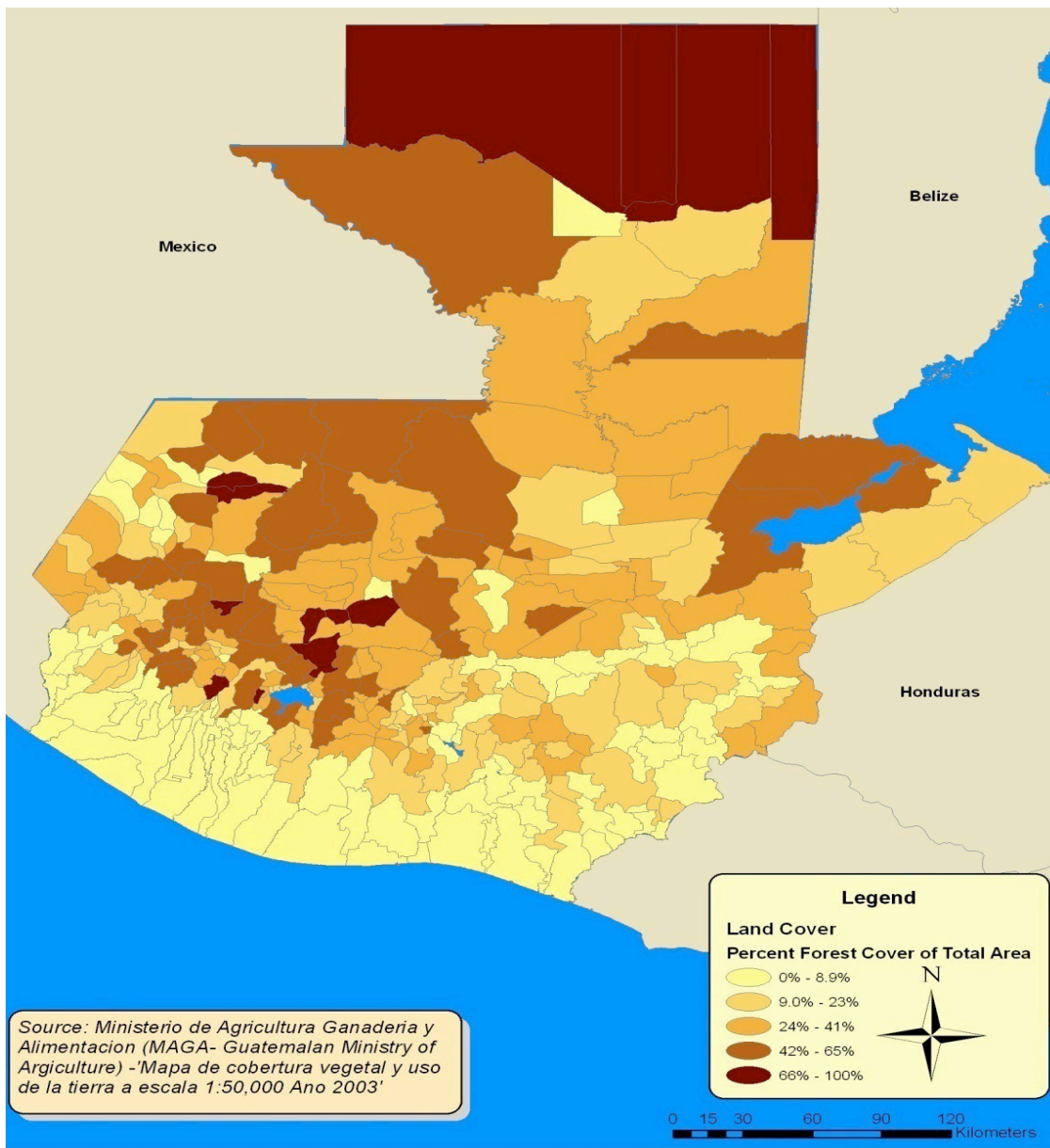
3.2 Deforestation in Retalhuleu

While overall the literature on gender and deforestation is extensive, deforestation is under-explored along the Pacific coast of Guatemala (important exceptions include Winkler 2013b). Bowen et al (2015) explain that “In Guatemala, sociopolitical, economic, demographic, and physical landscapes vary by region, and thus contributing factors for deforestation likely differ spatially as well” (p. 202). As such, analyses of deforestation in one region are not necessarily applicable to other regional contexts. The overwhelming majority the literature on deforestation in Guatemala focuses on the northern lowlands of the Petén which contains 52% of Guatemala's forests, and where a relatively recent influx of commercial agricultural interests and displaced migrants are linked to dramatic trends in deforestation (Carr 2008, Clark 2000, FAO 2006, Grandia 2009, Quezada et al 2013, SEGEPLAN 2013, Shriar 2011, 2014, Sundberg 1998). The most recent national statistics on land

distribution in Guatemala report a Gini coefficient of 0.54 in the Petén where 1.0 indicates perfect inequality (INE 2003). In Alta Verapaz and Quiché, departments where deforestation has also garnered some research attention, the coefficients are 0.66 and 0.53 respectively (ibid, Bowen et al 2015, Zilverberg et al 2009). However as Map 2 indicates, the entire Pacific coast has significantly lower percentages of forest cover relative to the rest of the country; this reflects a long history of commercial agricultural interests in this region and a plantation-style system of land tenure which differs significantly from the context of the Petén or the central highlands (Alonso-Fradejas et al 2011). In 2011 Retalhuleu reported a total of 7% forest cover (13 249 ha), one of the lowest out of all Guatemalan departments (SEGEPLAN 2011). Out of Guatemala's 259 protected areas, only 2 are located in Retalhuleu (World Database 2014). In the specific subsector of Retalhuleu were La Montaña is located, the Gini coefficient for land distribution is 0.91 (FAO 2006). As these statistics demonstrate, Retalhuleu is one of the most inequitable areas of the country in terms of land ownership and has been subjected to extensive deforestation. However, both the research literature on deforestation as well as conservation efforts have largely focused on other areas of the country. This paper therefore contributes a crucial regional perspective from inhabitants of the Pacific coast living in landscapes which are on course for further deforestation driven by agroindustrial expansion.

3.3 Trajectories of sugarcane in Retalhuleu

The official development report of Retalhuleu for 2011-2025 specifically identifies sugarcane cultivation as a key driver of departmental deforestation, and the report notes that in 2008 sugarcane covered 8749 ha (SEGEPLAN 2011). While Retalhuleu currently comprises only 2% of the national production of sugarcane, the climate and topography of this region are considered ideal for this crop (ibid, MAGA 2014). In July 2014 *montañeros* reported seeing the first stages of construction on a major sugarcane processing plant approximately 10 kilometres from the community, which people assume will herald an acceleration of the acquisition of land for sugarcane. Meanwhile, in 2012 the national Guatemalan government identified that sugarcane is currently cultivated on only 64% of what is considered 'suitable' arable land, while the quantity considered 'suitable' is equal to 20% of the country's total arable land (Alonso-Fradejas 2012). This definition of 'suitable' is unlikely to be shared with many of the subsistence communities along the Pacific coast, judging by the riots incited by the presence of the sugarcane industry in other areas of Central America and Guatemalan communities which are already mobilizing to confront this encroachment (La Isla Foundation 2013, Alonso-Fradejas 2015). While the Retalhuleu departmental report expresses that increasing forest cover from 7 to 15% by 2025 is a key goal, it is unclear how this will be achieved in light of the national government's and the industry's intentions to expand sugarcane cultivation in Retalhuleu (Alonso-Fradejas 2012, SEGEPLAN 2011).



Map 2: Forest cover in Guatemala, 2003. Source: Ministerio de Agricultura, Ganaderia y Alimentacion (2003) www.maga.gob.gt

4.0 Methods and methodology

This research project used a feminist community-based methodology (FCBR) to devise a research focus of interest and relevance to the community and collect data. A FCBR methodology entails the meaningful involvement of women, a commitment to consider gender as an axis of power, and the inclusion of opportunities across the trajectory of the research for participants to determine the research focus/data collection methods (Brydon-Miller et al 2004). Research is viewed as a means to co-produce knowledge with participants on an issue that is of interest and relevance to the community, informed by feminist theory and objectives (i.e Haraway 1988, Lykes 2010, Maguire 1987). This research began in April 2014, when I

arrived in La Montaña.³ Upon arrival I hosted two open-invitation group discussions (one for men, one for women), which introduced the broad concept of investigating sugarcane impacts and facilitated a public space of discussion regarding impact areas of interest (ie respiratory health, deforestation, rent prices), as well as the data collection methods best suited to investigating these impacts. As only three women and nine men attended these discussions, I developed an alternate means of soliciting early input and direction. I began to attend events organized with the Catholic church and a community women's cooking group.⁴ This involvement lasted throughout the data collection process (until the end of July 2014). Based on feedback from community members of the need for a structured time and place to meet and give comments or concerns, I organized a weekly 'drop-in' at the town bakery. This usually lasted 1-3 hours and was attended on average by 2-5 people. Feedback revealed that people felt more capable of participating with this 'informal' method of collaborative and incremental decision-making, because it was less intimidating and fit in better with their other time commitments and responsibilities. In this way, by the end of May 2014 I created a data collection plan to move forward; I then approached participants of the group discussions and the weekly drop-in again to obtain approval. This data collection plan included a summary of the methods that I would use (semi-structured interviews and participant observation) as well as a statement on the important impact areas to focus on. I conducted semi-structured interviews from May-July 2014 with 15 female and 13 male community members, as well as a regional agronomist from the ministry of agriculture (MAGA) and a nurse from the community health centre. Interviews were based upon a guide approved through consensus with group discussion participants and lasted 1-1.5 hours. In addition to these forms of data collection, I lived with a local family from April-July 2014 and participated in many aspects of family and community social life.

5.0 Causes of, and responsibility for deforestation: laying the groundwork

The tables below lay the groundwork for understanding in broad strokes how *montañeros* attribute the causes of, and responsibility for deforestation, with sugarcane situated as a primary driver. Tables 1 and 2 show interview responses to the questions, “What causes deforestation in Retalhuleu?” and “Who is responsible for deforestation?” out of a total of 28 interviews with community members. If a participant gave multiple responses, I included them all; no participants gave more than three responses.

3 I first became acquainted with La Montaña in January 2013, as an intern agronomist in the local NGO Semilla Nueva which promotes and helps farmers implement sustainable agriculture techniques in Retalhuleu and Suchitupéquez (see <http://semillanueva.org>). I spent four months in this role, and much of this time was spent in La Montaña. During these months I formed close relationships with several families. I was struck by the limitations of promoting sustainable agriculture techniques in a context where the majority of farmers rented land which was increasingly being converted to sugarcane cultivation. I was also struck by the absence of information available to community members on the impacts of this industry. These factors, as well as a request from one particular family, convinced me to return to La Montaña for my Master's research.

4 I attempted to become involved with an Evangelical church as well, but was unable to contact the reverend since he lived far outside of town.

Table 1. Interview responses: “What causes deforestation in Retalhuleu?”

Response	Frequency of mention in interviews
Sugarcane cultivation (plantations)	20
People need wood for cooking	7
Maize cultivation (plantations)	6
Farmers cutting down trees to improve crop yield on owned land	6
Palm oil (plantations)	2
People selling wood from owned land for money	6
Other crops (plantations: mango, watermelon, plantain, etc)	7
Population growth (clearing land for homes)	2

Table 2. Interview responses: “Who is responsible for deforestation?”

Response	Frequency of mention in interviews
Everyone (“all of us”)	4
Sugarcane companies	16
Other industries (cotton, palm, mango)	3
Finca owners	13
Farmers who own land	5
'Ignorant' landless farmers	2
Government	3
'Rich people'	2

In La Montaña, all participants state that deforestation is a serious and observable trend. Specifically, this phenomenon is perceived as a threat to subsistence maize agriculture, since local knowledge posits nearby forest cover (i.e. within sight) as a

necessary requirement for rain to fall on a field. Since the focus of my inquiry was understandings of deforestation, I did not empirically investigate the 'truth' of this local knowledge against regional trends of rainfall. Indeed, because this knowledge describes a relationship that is extremely geographically specific, I am not sure that regional climate data would have been of use. From a political ecology perspective, *who* is allowed to know *what* is a key component of environmental conflicts as actors compete for legitimacy (Elmhirst 2011, Hornborg et al 2012). *Montañeros'* knowledge that deforestation causes irregular rainfall is an important piece of their struggle to assert that sugarcane is detrimental to subsistence livelihoods. Having the legitimacy to make this assertion is important in a context where the research on sugarcane in Guatemala remains sparse, and land acquisition for sugarcane continues (Alonso-Fradejas 2012, 2015).

The strength of *montañeros'* local knowledge is evident from the interview results. 100% of interview participants described a relationship between the destruction of forest cover and the irregularity of rainfall in recent years. For *montañeros*, trees attract the rain, the rains arrive 'via' the trees, and trees 'allow' the rain to fall. All participants in interviews, group discussions, and drop-in sessions (with the exception of one) stated that there was significantly less forest cover in the region compared to five years ago.⁵

Montañeros also described why sugarcane specifically was a primary driver of deforestation, compared to other crops. Deforestation caused by sugarcane expansion is highly visible to *montañeros* because it often entails the clear-cutting of large swaths of forest at one time.⁶ These forests are located within fincas and neighbour the fields in which farmers either formally cultivated, or continue to cultivate, maize. Many participants pointed out that “la caña necesita puro sol”-sugarcane needs pure sunlight to grow- an expression which has become common knowledge based on watching the cultivation practices of this industry. As Pascual explained, “Even the trees around the perimeter... They don't want any. Any little bit of shade means less money.”

Montañeros also acknowledge that deforestation at different scales corresponds with different levels of power, and thus with

5 When speaking of the 'region' in the context of deforestation, montañeros refer to the land from the regional capital of Retalhuleu to La Montaña, and from La Montaña to Champerico on the Pacific coast. The distance between Retalhuleu and Champerico is approximately 40 kilometres. La Montaña is approximately 15 kilometres to the west of the main road that joins the two.

6 Knowledge of the details of these practices was highly gendered: male farmers, as those who typically went to cultivate rented land in the fincas and spoke with other tenants, often shared anecdotes of specific quantities of land being cleared on specific days, while women generally had knowledge based on their own observations or anecdotes from male relatives. To contextualize the scale of these instances in the minds of *montañeros*, the following story was standard in my interviews with men: Venancio rented land every year in a nearby finca. When he returned to plant this year, 40 manzanas (28 hectares) of forest had been cleared to plant sugar cane. Farmers typically rent 1-2 manzanas (0.7-1.4 hectares) to sustain their families.

different levels of responsibility. Deforestation takes place at both the local and the regional scale: local includes the cutting of trees within the community (ie along roadsides), the agricultural practices of small farmers, and family practices of wood-gathering near homes. Regional includes the clearing of land in fincas for sugarcane and other crops. These two observational scales thus correspond to different practices observed in different locations, as well as who is monitored as taking part in these practices. These 'local' and 'regional' scales therefore have both geographical and political meaning. As a result of the unequal distribution of land, *montañeros* are segregated outside of fincas, and their access to land is therefore limited.

Montañeros recognize that campesinos' systematic exclusion from accessing land puts them less at fault for deforestation throughout the department. As Maria Thelma explained, “one [cause of deforestation] is that we need wood... and, as they say, having wood overrides everything... the truth is that I lament it. It isn't ignorance, because we understand well. But we are fools because we go on cutting down the trees.” However, when asked about responsibility, she responded that “I will blame my neighbour when they cut down a tree. But it is the *cañeros* [sugarcane companies] who cut down forests.” This distinction between cutting down a tree versus a forest situates both campesinos and sugarcane companies as drivers of deforestation, but for different motives and to significantly different degrees. Discussions of responsibility also reflect pragmatic understandings of different stakeholders' motivations in addressing deforestation. For example, four individuals who mentioned sugarcane cultivation as a cause did not list sugarcane companies as responsible for deforestation. I mentioned this discrepancy to one of these individuals. He replied that the 5-10 year land rental system and mobile nature of the sugarcane industry made it unlikely for them to have any interest in preserving forests- so there was no point to “making them responsible”. This made me aware that more participants may have interpreted 'responsibility' in this very pragmatic sense.

In the following subsections I examine more specifically the ways in which gender and age inform understandings of deforestation. I begin by examining gendered perspectives on the land tenure system and its role in deforestation.

5.1 Gendered perspectives on the role of the land tenure system in deforestation

An important part of understanding deforestation, or addressing it for that matter, is identifying who is recognized as entitled to the land on which it occurs- and, in turn, the power structures that legitimize this entitlement (Blaikie 1985). In La Montaña, gender is important in how people make sense of the entitlement of landowners to cut down trees, and the legitimacy of the land tenure system that facilitates deforestation. There is a common understanding among *montañeros* that sugarcane cultivation in Retalhuleu takes place exclusively within fincas, and therefore on land that is not owned by campesinos. After sugarcane companies, *montañeros* cite finca owners as the second most responsible group for

deforestation, and there are many interpretations of how finca owners could (or should) be expected to protect forest cover. Many people express disappointment, incredulity, and resignation regarding the disappearance of forests within fincas. As Eliodoro explained, “now, the *caneros* show up at whatever finca, and they chop it all down... sugar cane needs pure sunlight... and the fincas let them do it! They rent the land for 10 years, and somehow that means they can cut down the trees. I don't know how they can let them. Money, I guess.” Pascual said: “There used to be a little forest in the finca just across the road... the finca owner's son inherited it, and now it's all sugarcane. I don't think his father would have done that.” Similar expressions reflect *montañeros'* judgments of finca owners' land use decisions as ill-advised, short-sighted and determined by profit. Others note the differential treatment and restrictions placed on farmers versus sugarcane companies in the fincas. Emy expressed visible anger in saying, “We rented land at [the finca] Tomatales... you see, there's a law in Guatemala that says you cannot cut down trees. At all, or they will fine you. And can you imagine, if I cut down a tree at Tomatales... the police would already be there taking me down to the station.” Venancio also noted the general climate of legal impunity that finca owners enjoyed. He explained that he had recently seen a truck remove a trailer full of chopped ceiba, the national tree of Guatemala, from a finca. When I asked to confirm that ceiba was a protected species he responded, “But here they do that! I don't know what happens with our authorities! Yes- there's a national thing, apparently it's illegal to cut a ceiba- but here they don't respect that you see. You see how bad it is.” These conversations reveal the general negative perceptions among *montañeros* of deforestation within fincas, and more specifically an awareness that the differential application of legal systems facilitates deforestation.

However, men and women differed in whether or not they named this entitlement as an issue that was driving deforestation. While many men describe the actions of sugarcane companies and finca owners as ecologically and economically short-sighted, they also express a belief that private ownership confers a high level of autonomy over land use decisions. The importance of this autonomy is reinforced through analogies of finca owners as 'farmers' or 'neighbours': “how beautiful it would be if we all thought the same way, if we were all on the same page. But if my neighbour wants to burn his fields, or cut down his trees, I cannot tell him what to do.” Some men assert that 'speaking out' against the clearing of forests in fincas conflicts with their beliefs about their own right (and the right of fellow *montañeros*) to make autonomous decisions over their land and livelihoods: “It's the owners of the land who make the decisions, what to plant, when to harvest.” Additionally, these sentiments often go beyond land ownership, toward a general discomfort with any environmental critique directed at specific individuals. To make these critiques is seen as a threatening to the 'freedom' of those criticized. For example, in response to the question, “What do you think of the way that the community takes care of the environment?”, men responded in the following ways: “People care about the trees, they care about the water.” “Some people are better than others.” “We do

what we can.” When I pressed for specificity, one person responded uncomfortably: “I know my own business- here in my family we bury the garbage instead of burning it. But I can't say it's wrong what another man does. Each one of us knows his own business.” Most men discuss sugarcane simultaneously as an industry with “the right to earn their money, just like us”, and a personal choice made by specific individuals (finca owners).

However, there are significant cultural and political factors which may contribute to the absence of criticism of this land tenure system, which extend beyond gender. The Guatemalan civil war from 1960-1996 was sparked by massive land distribution inequalities, and the legacies of violence left by this conflict still permeate Guatemalan society today (see Nelson 1999, Wilkinson 2002). Indeed, attempts by communities in other parts of Guatemala to address sugarcane expansion through reclaiming land has resulted in the burning of homes, police brutality and death (Polochic, 2014). A pervasive fear of provoking 'the rich' or the government existed among *montañeros*, who are acutely aware of the impunity with which violence could be committed against campesinos in Guatemala. As Yulma stated, “Bullets aren't expensive in Guatemala. We are always afraid- always! The fear invades us, you know.”

Perhaps for these reasons, during this research no one advocated sweeping, radical changes to land distribution or land tenure. Women, however, express different sentiments toward finca owners which challenge the idea of them as 'neighbours' or 'farmers' with the autonomy and entitlement that those would imply. Instead, some women frame the importance of forest cover as something that supersedes the otherwise-accepted boundaries of private property and autonomous decision-making. This is in fact an argument based around the serious implications of local climate change for maize cultivation. As one participant in the women's discussion group noted, “When it doesn't rain, we all suffer. It affects us all.” Indeed, many of my conversations with women centred on their frustrations that their 'control' is limited to miniscule plots of (usually already deforested) land, while patterns of deforestation on broader landscapes affect their lives in so many ways. In discussions, women focused on the discrepancy between those who bear the brunt of local climate change (instigated through deforestation) and those who are involved in large-scale land use decisions. During a visit on her front porch, Maria Thelma described another layer of complexity she perceives in the issue of deforestation and local climate change:

I still think we [campesinos] are fools, you know, for cutting down so many trees. And I think a lot about how we could change this, but then I get angry because they [*cañeros*] cut down so much more... And I think, like we said before [in group discussion], we will all suffer when the rains no longer come. But then I realised they won't suffer! Because, you know, they have irrigation.

While the concentration of land and their personal lack of control are problems that many women highlighted, Maria Thelma also points out that the climatic impacts of deforestation will not be the equalizing factor in the way that some women expect. Vast inequalities in access to resources such as irrigation, fertilizers, as well as other sources of food or income mean that not

everyone will 'suffer' to the same degree. All *montañeros* understand that differential legal treatment, marginalization, and the prioritizing of commercial agriculture over subsistence agriculture contribute to deforestation (see Wilkinson 2002). However, women in La Montaña question whether finca owners should be entitled to cut down trees, while men did not ask these questions.

Gender, and not simply one's status with regard to land ownership, influences *montañeros* perspectives on how the land tenure system facilitates deforestation. The vast majority of men in La Montaña do not own land, and as Emy pointed out, had little control over the land they rented. As Jose explained, "Almost no one here owns land. It's all fincas, all rich people, some Spanish, some Guatemalan." In La Montaña, men's unwillingness to link the land tenure system to deforestation cannot be explained by a simple assessment of their individual position within this system, as most did not benefit from the current distribution of land. In Retalhuleu where land inequality is high, these gendered perspectives are significant. The sugarcane industry on the Pacific coast benefits from a context in which the legal control of land remains almost exclusively in the hands of finca owners and other elites, who have thus far been receptive to sugarcane cultivation (Winkler 2013b). By extension, this industry benefits when the entitlement of finca owners to cut down trees for sugarcane goes unchallenged (Gaventa 1982). Women's arguments against the entitlement of landowners to clear forests reveals dissent from the current land tenure system (Hall et al 2015). However, since men do not express the same perspective, this could result in strained gender relationships as the perceived gravity of deforestation increases. At the same time, it is possible that men's perspectives will be re-shaped as *montañeros* sense an approaching ecological 'threshold' past which subsistence maize cultivation will become impossible. In a region with less than 7% forest cover remaining and the continued expansion of sugarcane cultivation within fincas, these gendered perspectives reflect conflicting ideas about whether the land tenure system should be a site of contestation in the struggle to address deforestation.

5.2 Deforestation within La Montaña and the role of community members

As Tables 1 and 2 show, *montañeros* place the responsibility for deforestation primarily with the sugarcane industry and finca owners. As I explain above, women see the land tenure system as a key component that drives deforestation at the regional scale, and question the entitlement of large landowners to cut down trees. However, *montañeros* also consider behaviours within the community to be important proximate drivers of deforestation, and demonstrate gendered understandings of which practices constituted deforestation and how much they contributed to the overall issue. While men did express an unwillingness to appear critical of other community members or to force their own beliefs on their neighbours, I argue that this monitoring of community practices has the potential to result in future intra-community violence as ecological pressures

increase. This monitoring is also ineffective in that *montañeros* focus attention away from broader patterns of deforestation instigated by more powerful actors.

The need to pay attention to deforestation within La Montaña was linked to the idea that regional ecosystems were approaching a perceived 'threshold', past which farmers will not be able to rely on the rains. *Montañeros* also sense that sugarcane cultivation will continue to expand throughout the department, based on the construction of a nearby sugarcane processing plant and the rapid increase in land acquisition. This has contributed to an urgent sense that deforestation must be confronted, even in small or incremental ways. For *montañeros*, deforestation is highly visible at both the regional and the local scale- farmers share detailed stories about how many *manzanas* (0.7 hectares) are cleared by finca owners each year for sugarcane, as well as stories of neighbours' misuse of their *bosques* (stands of trees). The distress that is caused by this high visibility is compounded by feelings of a general lack of control over deforestation at both scales. Participants felt that they only had an impact over their own actions, and those of their immediate family. This sense of disempowerment and lack of control was historical as well: Francisca noted that important decisions about agriculture or land use had always been made without the consent or involvement of campesinos. "Before [sugarcane], it was cattle... before that it was cotton. I don't know how the *finqueros* decide what they want to grow, maybe they are told by the president [laughs]... but at least with the cattle, there was food, and fertilizer, and milk." Pascual commented, "At least with the oil palm, when they grow oil palm, there are trees." For *montañeros*, deforestation for sugarcane cultivation is another example in a lengthy history of regional land use decisions from which they are excluded.

As *montañeros* observe unchecked deforestation at the regional scale, attention turns to practices at the local scale which they consider within the realm of control. Recognition of the gravity of the rate of forest cover loss made many participants bitter about the inability of fellow community members to react appropriately, and this was expressed often and vehemently during the research.⁷ When I asked "How are people in La Montaña dealing with deforestation?", women in the group discussion expressed that they felt that land-owning local farmers (the majority of whom are men) needed to take broader environmental trends into account when making decisions in their fields: "They still cut down trees around the perimeter, so shade doesn't affect the maize. They don't realise that every tree is one more tree gone." Elissa also noted, "When my father farmed, he cut down a lot of trees... except the ceibas, he could have cut down ceibas but he didn't."⁸ But there was more land then, and no sugarcane. Each tree now is more important". Women often discussed deforestation on owned land as something done by men,

7 This was most evident during the men's group discussion, as well as during many informal social gatherings in the community where people would make long lists of grievances that others would add to.

8 The ceiba is the national tree of Guatemala and is a protected species.

despite the fact that several of the land-owning farmers in the community were women. However, I did not investigate whether male and female landowners managed land differently, since only seven participants were landowners. One female landowner was proud of her ability to retain a bit of forest, despite the pressure to provide land for her children and grandchildren: “My father came to La Montaña to live in the forest. I want to continue to do the same.” Times have changed, and many women are frustrated with the inability of land-owning farmers to 'catch up' to this reality. Women often use the word “regrettable” to express the felling of trees on land owned by other small farmers.

When I brought up local responses to deforestation in the men's discussion group, several men suggested that families use gas stoves instead of the traditional wood fire for cooking, to reduce the rate of local deforestation.⁹ However, when I mentioned this idea a few weeks later in at a cooking group meeting, the women were visibly annoyed: “We need wood, for cooking certain things like *nixtamal*¹⁰. You can't do that on the stove... Do they want us to stop cooking?” In interviews with men, wood-gathering for cooking remained a popular and consistent source of discussion as a site in which the community might have a measurable impact in reducing deforestation. Luis talked about his family's wood-gathering practices as having less of a detrimental impact: “We go through the forest over there, and drag out all the dead wood. Or I will cut a few branches off each tree... people don't complain about the trees being gone but it's more work. But then the trees last for longer.” Venancio explained, “I think about the forests cut down in the fincas, and then I watch our own families chopping trees for the fire... It's a shame, we don't have to. We could use gas.” Rigoberto noted, “Smart families manage their trees by trimming the branches and using that for the fire.” However, the ability to manage one's trees is dependent on having trees around one's home, which is only the case for a fraction of households. Additionally, building and tending to cooking fires is the task of women in La Montaña, who point out the difficulty of doing this work exclusively with small, often green tree branches. Sonya stated “The years when we have a little bit more money, we buy firewood. The trees we buy burn better and longer than the trees in the yard.” Luisa also added that “I don't know what to do about all the forests disappearing... because we all need wood for cooking, and wood comes from trees, and we can't make *tortillas* without fire”.

These findings demonstrate concerning potential for intra-community conflict, violence or gender discrimination, based on the intense annoyance, anger and pessimism *montañeros* expressed regarding the actions of other community members.

Montañeros' understandings of cause and responsibility for deforestation are generally informed by a structural understanding of the power dynamics between finca owners, sugarcane companies, land-owning and landless farmers. However, the proximity of other community members (both physically and in terms of positionality in larger power structures) and a sense

9 This suggestion was also present with Retalhuleu's development plan for 2011-2025: see SEGEPLAN 2011.

10 Nixtamal is limed and soaked maize that is ready to be ground into *masa*, or meal.

of powerlessness in the face of sugarcane expansion are important factors which draw *montañeros'* attention to community practices. This research builds on the work of feminist political ecologists who note that environmental pressures produce situations in which certain groups or genders are held disproportionately responsible for environmental degradation (Sultana 2009, 2011, Truelove 2011). In particular, the attention paid to practices of wood-gathering shows potential for this to be a site of future conflict, both between women and across gender. While both women and men gather firewood, women have a greater stake in the quality of the wood because they use it to cook. As Sonya explains, women are therefore likely to prefer wood purchased from *fincas*- who often sell their wood after they clear cut for sugarcane- or from larger trees. As deforestation continues at the regional scale, womens' attempts to secure high quality wood for cooking may become a site of gendered tensions as men consider these activities as a contributing factor in deforestation.

This discussion also represents a disproportionate amount of attention paid to deforestation committed by community members, relative to how *montañeros* attribute cause and responsibility for deforestation more broadly. Other research finds that subsistence communities reflect on and monitor their own role in deforestation, including in situations in which they feel powerless to stop this phenomenon (Hoefle 2013, Durand and Lazos 2008, Vadjunec 2011). The monitoring I observed in La Montaña also dovetails with discourses observed elsewhere in Guatemala in which governments or conservation groups name peasants as primary drivers of deforestation (Sundberg 1998, 2009, Shriar 2014). While women and men in La Montaña recognize the difference between regional and local deforestation, the emotions and perceptions that circulate within the community do not 'perfectly' reflect a rational assessment of these differences. When the stakes of losing forest cover are high, and when the power dynamic between the community and the primary drivers of deforestation seem insurmountable, more holistic understandings of deforestation collapse and gender emerges as a key dividing line among community members.

5.3 The role of age in understanding political capacity to address deforestation

As *montañeros* consider their own (and each other's) practices in relation to deforestation, they also wonder if the community has the collective political capacity to address this issue both at the regional and local scales. Beliefs about political capacity were primarily expressed through stories, and in La Montaña, age gives authority. At community events and informal social gatherings, elders are called on first to tell stories of the past, or historically contextualize a particular event. When I first arrived in the community for this research, despite my continued efforts to clarify my position as a graduate student, one elder explained my arrival as demonstrative of the will of the Canadian government to send aid to La Montaña. The amount of time and effort it took me to thoroughly dispel this belief among *montañeros* shows the power of stories in this small community.

Francisco, the only living original founder, had many stories of participation in past political struggles to improve the lives of *montañeros* in material ways. Indeed, the original settlement of La Montaña was made possible by eight people from a nearby town petitioning the government for land for five years, finally organizing a large group to sit on the steps of the land titling office in Guatemala City until their petition was heard. Other stories told in the community included the 40-year fight to secure a middle school, as well as the construction of a town hall which *montañeros* are proud to announce is the best in the area. Elders tell these stories to reaffirm the importance of engaging in collective action, and to show that successes are possible; these stories were also told to me by *montañeros* for whom these events happened long before they were born. However elders also used these stories to describe how hard it is to unite the community, and how some always refuse to pull their weight.

Eulalia told me,

We got electricity in 1999. We had to fight for it, but there were only a few who fought- Francisco was one of them. They fought for two years, enduring hunger and cold because they were often traveling back and forth from Guatemala City. For the families who wanted it, it cost us 1600 quetzales to convince them to install the electricity.¹¹ After, for the rest of the families, it was very cheap. Everything has a story, but some of us hold onto it more than others.

Some elders drew parallels between the current inaction to address deforestation and their own past failures in attempting to organize the community. Others spoke of their longstanding disappointment with the lack of desire in younger generations to work toward change and make sacrifices, and linked this to an inability to combat deforestation in recent decades. Francisco stated,

These people just aren't interested. To work for the community, you have to endure hunger. You lose time. You have to go out into the streets... you have to go out and see what you can do for the community, without any chance of earning... The trees? They won't look anywhere where you can't find money.

Older *montañeros* drew from a lifetime of observation to inform ideas about the 'hopeless' political and ecological prospects of the future. These sentiments were echoed by younger *montañeros*, who felt there were significant differences between their daily realities and the stories and lessons they received from their parents and grandparents. Many of these stories centred around the name of La Montaña, which I explain in the introduction. In many interviews, participants told stories from their childhood or passed down from their parents about the size of local forests, and the range of wildlife that could be found. In these stories, the current level of deforestation is used as proof that the community is incapable of effective political action, planning for the future, and protecting the legacy of subsistence farming that was made possible by previous generations. Indeed, the rapid pace of sugarcane expansion was used to demonstrate the 'consequences' of *montañeros'* political inaction. As Eliodoro told me, "I went to the States for 5 years. When I left, no sugarcane... you can imagine what I saw when I came home... and no one did anything!"

11 The quetzal is the national currency of Guatemala. Currently, 1 quetzal= 0.17 Canadian dollars approximately.

Many younger *montañeros* expressed frustration that this mistrust and disbelief in the possibility of addressing deforestation had become a self-fulfilling prophecy. These individuals tended to be men and women in their 30s who were involved in, or had been involved in the past with the *consejo comunitario de desarrollo* (community council, known as the COCODE). Former COCODE members spoke of the lack of dialogue between the COCODE and the community to illustrate their frustrations with the political pessimism they believed plagued the community. This lack of dialogue was confirmed by *montañeros* who were not associated with the COCODE, but who instead blamed the council's longstanding corruption, disorganization, and mismanagement for their unwillingness to participate in community council politics. Mario had spent two years as a council member, before quitting. He stated, "The COCODEs can try to move on something, but the community doesn't support... they say, meeting at such and such time.. sometimes thirty go, sometimes seventy. But that's not the community! But if nine hundred came..." Saul added, "they complain that the COCODE does nothing. But without them we have no voice." Marisol noted that even when the COCODEs in other communities had successes with the sugarcane industry, it was never on environmental issues. "People only come together, only do roadblocks to force the *cañeros* to fix the roads they destroy with their big trailers. Who knows why, but when it's the environment, we wait until the sky is falling down on us." Eliodoro stated emphatically, "They [*cañeros*] will come to a meeting, if we [the COCODE] call them... But we tell the community about the meeting, and only a few come... so they [*cañeros*] will never listen to what we ask."

In this inquiry about deforestation, stories were used by elders both to show the importance of political action as well as to criticize the perceived unwillingness and inability of younger generations to collectively organize. As feminist political ecologists have noted, rural communities build understandings of their relationship to the forest through narrated histories and oral accounts (Campbell and the Women's Group of Xapuri 1996, Gururani 2002). In La Montaña deforestation has become proof in a powerful narrative that *montañeros* do not care about the environment, despite the many discussions throughout this research that indicate otherwise. This finding carries an important insight about the pivotal role of elders in a community's process of 'internalizing' environmental degradation. In La Montaña the perspectives of older *montañeros* gained weight and importance in this process, for reasons of respect and an acknowledgement of the wealth of experience they possess. However the stories that elders are telling have inspired expressions of pessimism about the community's political will to address sugarcane, as well as divided opinions among different age groups concerning the community's political capacity.

7.0 Conclusion

This paper examined how gender and age inform *montañeros'* understandings of deforestation. Neither deforestation nor the sugarcane expansion driving it has produced these divisions. *Montañeros'* gendered roles and responsibilities pre-date the

arrival of sugarcane, as do the authority of elders as storytellers. Rather, sugarcane-driven deforestation has activated pre-existing axes of power in ways which divide *montañeros* around if and/or how to address deforestation.

Guatemalan intra-community politics and trajectories of agroindustrial activity are intimately connected, and despite the considerable power inequalities that exist between subsistence communities and agroindustrial forces, each has the capacity to influence the other (Alonso-Fradejas 2015, Guereña and Zepeda 2013, Klepek 2012). However, *montañeros*' sense of their capacity to influence the process of deforestation is seriously limited; instead, *montañeros* express frustration, pessimism, and a great deal of despair. Alonso-Fradejas (2015) notes that strategic litigation and successful defense of territory in Guatemala “involves grounded practices of resistance exerting pressure ‘from below’, together with politico-juridical advocacy ‘from above’, and support from research and social communication ‘from the sides’” (p. 506). Through this research *montañeros* reported a total lack of support 'from above'- instead, they reported legal impunity for finca owners and sugarcane companies. While the government of Retalhuleu seeks to increase forest cover to 15% in the next ten years, for *montañeros* there is no indication that these efforts are (yet) underway, or that the political will is indeed genuine. The sparse support that exists 'from the sides' in Guatemala that documents the impacts of sugarcane on forest cover has not reached La Montaña in any meaningful way; elders reported never having had a researcher in the community before my arrival, and research interest and NGO presence in Retalhuleu has historically been low compared to other areas of the country. Simply for these reasons, it is perhaps unsurprising that pressure 'from below' to address deforestation has not emerged. In the context of these absences of 'external' support, I have identified three ways in which gender and age inform perceptions of deforestation such that there is the potential for intra-community divisions to widen if deforestation for sugarcane cultivation continues. At the same time, it is impossible to predict if and how people will collectively respond to environmental pressures approaching a threshold. As perceptions of desperation and material experiences of irregular rainfall increase, it is possible that *montañeros* will organize around the considerable common ground that they share- namely, that within the community “When it doesn't rain, we all suffer”. In any case, support 'from above' and 'from the sides' is sorely needed in this southwestern Guatemalan community facing the impacts of deforestation on land they do not own. but are completely tied to. At the same time, any such political movement will need to engage with considerable community divides, especially along gender and age.

Bibliography

- Agarwal, B. (2001). Participatory Exclusions, Community Forestry, and Gender: An Analysis for South Asia and a Conceptual Framework. *World Development*, 29(10), 1623–1648. [http://doi.org/10.1016/S0305-750X\(01\)00066-3](http://doi.org/10.1016/S0305-750X(01)00066-3)
- Alonso-Fradejas, A., Caal Hub, J.L., & Chinchilla, T.M. 2011. *Plantaciones Agroindustriales, Dominación y Despojo Indígena-Campesino en la Guatemala del Siglo XXI*.
- Alonso-Fradejas, A. (2012). Land control-grabbing in Guatemala: the political economy of contemporary agrarian change. *Canadian Journal of Development Studies / Revue Canadienne D'études Du Développement*, 33(4), 509–528. <http://doi.org/10.1080/02255189.2012.743455>
- Alonso-Fradejas, A. (2015). Anything but a story foretold: multiple politics of resistance to the agrarian extractivist project in Guatemala. *The Journal of Peasant Studies*, 42(3-4), 489–515. <http://doi.org/10.1080/03066150.2015.1013468>
- Asociacion de Azucareros de Guatemala. (ASAZGUA). (2014). <http://www.azucar.com.gt/>
- Bee, B. A. (2014). “Si no comemos tortilla, no vivimos:” women, climate change, and food security in central Mexico. *Agriculture and Human Values*, 31(4), 607-620. doi:10.1007/s10460-014-9503-9.
- Blaikie, P. M. (1985). *The political economy of soil erosion in developing countries*. London ; New York: Longman.
- Borras, S. M., Kay, C., Gómez, S., & Wilkinson, J. (2012). Land grabbing and global capitalist accumulation: key features in Latin America. *Canadian Journal of Development Studies / Revue Canadienne D'études Du Développement*, 33(4), 402–416. <http://doi.org/10.1080/02255189.2012.745394>
- Brydon-Miller, M., Maguire, P., & McIntyre, A. (2004). *Traveling companions: feminism, teaching, and action research*. Westport, Conn: Praeger.
- Buckingham, S., & Kulcur, R. (2009). Gendered Geographies of Environmental Injustice. *Antipode*, 41(4), 659–683. <http://doi.org/10.1111/j.1467-8330.2009.00693.x>
- Campbell, C, Women's Group of Xapuri. (n.d.). Out on the front lines but still struggling for voice: women in the rubber tappers' defense of the forest in Xapuri, Acre, Brazil. In *Feminist Political Ecology: Global Issues and Local Experiences* (pp. 27–61). New York: Routledge.
- Carr, D. (2008). Migration to the Maya Biosphere Reserve: why place matters. *Human Organization* 67 (1), 47-48.
- Clark, C. (2000). Land tenure delegitimation and social mobility in tropical Peten, Guatemala. *Human Organization*, 59(4), 419–427.
- Dankelman, I. (ed.). (2010). *Gender and climate change: An introduction*. London: Earthscan.
- Denton, F. (2002). Climate change vulnerability, impacts, and adaptation: Why does gender matter? *Gender and Development* 10: 10–21.
- Dey, S., Resurreccion, B. P., & Doneys, P. (2014). Gender and environmental struggles: voices from Adivasi Garo community in Bangladesh. *Gender, Place & Culture*, 21(8), 945–962. <http://doi.org/10.1080/0966369X.2013.832662>
- Durand, L., & Lazos, E. (2008). The local perception of tropical deforestation and its relation to conservation policies in Los Tuxtlas Biosphere Reserve, Mexico. *Human Ecology [H.W. Wilson - SSA]*, 36(3), 383.
- Elmhirst, R. (2011a). Introducing new feminist political ecologies. *Geoforum*, 42(2), 129–132. <http://doi.org/10.1016/j.geoforum.2011.01.006>
- Elmhirst, R. (2011b). Migrant pathways to resource access in Lampung's political forest: Gender, citizenship and creative

conjuality. *Geoforum*, 42(2), 173–183.
<http://doi.org/10.1016/j.geoforum.2010.12.004>

FAO (2004). VI Censo Nacional Agropecuario, Características Generales de las Fincas Censales y de Productoras y Productores Agropecuarios, Resultados Definitivos, Vol. I. Guatemala. Rome, United Nations Food and Agriculture Organization: 78–79, <http://www.fao.org/docrep/013/i1595e/i1595e01.pdf>

FAO (2006). Global Forest Resources Assessment 2005– progress towards sustainable forest management- FAO Forestry Paper No. 147. Rome.

Gaventa, J. (1982). *Power and Powerlessness: Quiescence and Rebellion in an Appalachian Valley*. Chicago: University of Illinois Press.

Granovsky-Larsen, S. (2013). Between the bullet and the bank: agrarian conflict and access to land in neoliberal Guatemala. *Journal of Peasant Studies*, 40(2), 325–350. <http://doi.org/10.1080/03066150.2013.777044>

Gould, K. A., Carter, D. R., & Shrestha, R. K. (2006). Extra-legal land market dynamics on a Guatemalan agricultural frontier: Implications for neoliberal land policies. *Land Use Policy*, 23(4), 408–420.
<http://doi.org/10.1016/j.landusepol.2005.08.002>

Grandia, L. (2009). Raw hides: Hegemony and cattle in Guatemala’s northern lowlands. *Geoforum*, 40(5), 720–731.
<http://doi.org/10.1016/j.geoforum.2009.01.004>

Guereña, A, Zepeda, R. (2013). *The power of oil palm: land grabbing and impacts associated with the expansion of oil palm crops in Guatemala: the case of the Palmas de Ixcán company* (pp. 1–64). Boston : Oxfam America.
Retrieved from <http://www.oxfamamerica.org/static/media/files/the-power-of-oil-palm.pdf>

Gunewardena, N. (2010). Bitter Cane: Gendered Fields of Power in Sri Lanka’s Sugar Economy. *Signs: Journal of Women in Culture & Society*, 35(2), 371–396. Retrieved from
<http://ezproxy.library.uvic.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=qth&AN=48057502&site=ehost-live&scope=site>

Gururani, S. (2002). Forests of Pleasure and Pain: Gendered practices of labor and livelihood in the forests of the Kumaon Himalayas, India. *Gender, Place & Culture*, 9(3), 229–243. <http://doi.org/10.1080/0966369022000003842>

Hall, R; Edelman, M; Borrás, S; Scoones, I; White, B; White, W. (2015). Resistance, acquiescence or incorporation? An introduction to land grabbing and political reactions “from below.” *Journal of Peasant Studies*, 42(3-4), 467–488. Retrieved from <http://www.tandfonline-com.ezproxy.library.uvic.ca/doi/full/10.1080/03066150.2015.1036746#abstract>

Haraway, D. (1988). Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective. *Feminist Studies*, 14(3), 575–599. <http://doi.org/10.2307/3178066>

Harris, L. M. (2006). Irrigation, gender, and social geographies of the changing waterscapes of southeastern Anatolia. *Environment and Planning D: Society and Space*, 24(2), 187 – 213. <http://doi.org/10.1068/d03k>

Hoefle, S. W. (2013). Beyond carbon colonialism: Frontier peasant livelihoods, spatial mobility and deforestation in the Brazilian Amazon. *Critique of Anthropology*, 33(2), 193-213.

Isakson, S. R. (2009). No hay ganancia en la milpa: the agrarian question, food sovereignty, and the on-farm conservation of agrobiodiversity in the Guatemalan highlands. *The Journal of Peasant Studies*, 36(4), 725–759.
<http://doi.org/10.1080/03066150903353876>

Isakson, S. R. (2014). Maize Diversity and the Political Economy of Agrarian Restructuring in Guatemala. *Journal of Agrarian Change*, 14(3), 347–379. <http://doi.org/10.1111/joac.12023>

Lykes, M. B. (2010). Silence(ing), voice(s) and gross violations of human rights: constituting and performing subjectivities

through PhotoPAR. *Visual Studies*, 25(3), 238–254. <http://doi.org/10.1080/1472586X.2010.523276>

- Maguire, P. (1987). *Doing participatory research: a feminist approach*. Amherst, Mass: Center for International Education, School of Education, University of Massachusetts.
- Menjívar, C. (2008). Violence and Women's Lives in Eastern Guatemala: A Conceptual Framework. *Latin American Research Review*, 43(3), 109–136. Retrieved from <http://www.jstor.org.ezproxy.library.uvic.ca/stable/20488152>
- Menjívar, C. (2011). *Enduring violence: Ladina women's lives in Guatemala*. Berkeley, Los Angeles: University of California Press.
- Mingorría, S., Gamboa, G., Martín-López, B., Corbera, E. (2014). The oil palm boom: socioeconomic implications for Q'eqchi' households in the Polochic Valley, Guatemala. *Environment, Development and Sustainability*.
- Mollett, S. (2010). Está listo (Are you ready)? Gender, race and land registration in the Río Plátano Biosphere Reserve. *Gender, Place & Culture*, 17(3), 357–375. <http://doi.org/10.1080/09663691003737629>
- Nelson, D. M. (1999). *A finger in the wound: body politics in quincennial Guatemala*. Berkeley: University of California Press.
- Nightingale, A. (2003). Nature-society and development: social, cultural and ecological change in Nepal. *Geoforum* 34 (4), p. 525-540.
- Oglesby, Elizabeth. "'We're no longer dealing with fools': Violence, labor and governance on the south coast," in *War by Other Means: Aftermath in Post-Genocide Guatemala*, ed. Carlota McAllister and Diane M. Nelson, 143-169: 2013. <http://dx.doi.org/10.1215/9780822377405>.
- Ogrodnik, C., & Borzutzky, S. (2011). Women under Attack: Violence and Poverty in Guatemala. *Journal of International Women's Studies*, 12(1), 55–67. Retrieved from <http://ezproxy.library.uvic.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=qth&AN=65172692&site=ehost-live&scope=site>
- Ordunez, P., Martinez, R., Reveiz, L., Chapman, E., Saenz, C., Soares da Silva, A., & Becerra, F. (2014). Chronic Kidney Disease Epidemic in Central America: Urgent Public Health Action Is Needed amid Causal Uncertainty. *PLoS Neglected Tropical Diseases*, 8(8), 1–3. <http://doi.org/10.1371/journal.pntd.0003019>
- O'Reilly, K. (2010). Combining sanitation and women's participation in water supply: an example from Rajasthan. *Development in Practice*, 20(1), 45–56. <http://doi.org/10.1080/09614520903436976>
- Oxfam International. "SUGAR RUSH: Land Rights and the Supply Chains of the Biggest Food and Beverage Companies," October 2, 2013.
- "Polochic Evictions: Guatemala Human Rights Commission." Accessed March 6, 2014. <http://www.ghrc-usa.org/our-work/current-cases/polochic/>.
- Poole, A. (2009). Landscape and memory in peasant-state relations in Eritrea. *The Journal of Peasant Studies*, 36(4), 783–803. <http://doi.org/10.1080/03066150903353926>
- Radel, C. (2012). Gendered livelihoods and the politics of socio-environmental identity: women's participation in conservation projects in Calakmul, Mexico. *Gender, Place & Culture*, 19(1), 61–82. <http://doi.org/10.1080/0966369X.2011.617905>
- Rangan, H., & Kull, C. A. (2009). What makes ecology "political"? rethinking "scale" in political ecology. *Progress in Human Geography*, 33(1), 28–45. <http://doi.org/10.1177/0309132508090215>
- Rocheleau, D., Thomas-Slayter, B.P., & Wangari, E. (1996). *Feminist Political Ecology: Global Issues and Local Experiences*. Routledge: New York.

- Rocheleau, D. (1997). Women, men and trees: gender, power and property in forest and agrarian landscape. *World Development* 25 pp. 1351–1371
- SEGEPLAN, 2011. Retalhuleu: Plan de desarrollo departmental 2011-2025. Guatemala City, Guatemala: Secretaría General de Planificación y Programación de la Presidencia.
- SEGEPLAN, 2013. Diagnóstico Territorial de Petén. Guatemala City, Guatemala: Secretaría General de Planificación y Programación de la Presidencia.
<http://www.segeplan.gob.gt/downloads/PDI%20Pet%C3%A9n%202032%20Diagn%C3%B3stico.pdf>
- Shriar, A. J. (2014). Theory and context in analyzing livelihoods, land use, and land cover: Lessons from Petén, Guatemala. *Geoforum*, 55, 152–163. <http://doi.org/10.1016/j.geoforum.2014.06.002>
- Sultana, F. (2009). Fluid lives: subjectivities, gender and water in rural Bangladesh. *Gender, Place & Culture*, 16(4), 427–444. <http://doi.org/10.1080/09663690903003942>
- Sultana, F. (2011). Suffering for water, suffering from water: Emotional geographies of resource access, control and conflict. *Geoforum*, 42(2), 163–172. <http://doi.org/10.1016/j.geoforum.2010.12.00>
- Sundberg, J. (1998). Ngo landscapes in the Maya Biosphere Reserve, Guatemala. *Geographical Review*, 88(3), 388–412. <http://doi.org/10.2307/216016>
- Sundberg, J. (2003). Conservation and democratization: constituting citizenship in the Maya Biosphere Reserve, Guatemala. *Political Geography*, 22(7), 715–740. [http://doi.org/10.1016/S0962-6298\(03\)00076-3](http://doi.org/10.1016/S0962-6298(03)00076-3)
- Sundberg, J. (2004). “Identities-in-the-Making: Conservation, Gender, and Race in the Maya Biosphere Reserve, Guatemala.” *Gender, Place and Culture: a journal of feminist geography*, 11(1): 44-66. doi:10.1080/0966369042000188549.
- Sundberg, J. (Forthcoming). “Feminist Political Ecology”. *The International Encyclopedia of Geography*. (ed. Douglas Richardson). Wiley-Blackwell & American Association of Geographers.
- Tandon, N. (2007). Biopolitics, climate change, and water security: Impact, vulnerability, and adaptation issues for women. *Agenda* 27: 4–20.
- Taylor, P. L. (2010). Conservation, community, and culture? New organizational challenges of community forest concessions in the Maya Biosphere Reserve of Guatemala. *Journal of Rural Studies*, 26(2), 173–184. <http://doi.org/10.1016/j.jrurstud.2009.09.006>
- Taylor, P. L. (2012). Multiple forest activities, multiple purpose organizations: Organizing for complexity in a grassroots movement in Guatemala’s Peten. *Forest Ecology and Management*, 268, 29–38. <http://doi.org/10.1016/j.foreco.2011.05.007>
- Truelove, Y. (2011). (Re-)Conceptualizing water inequality in Delhi, India through a feminist political ecology framework. *Geoforum*, 42(2), 143–152. <http://doi.org/10.1016/j.geoforum.2011.01.004>
- Vadjunec, J. M. (2011). Extracting a livelihood: Institutional and social dimensions of deforestation in the Chico Mendes Extractive Reserve, Acre, Brazil. *Journal of Latin American Geography*, 10(1), 151-174. doi:10.1353/lag.2011.0007
- Veuthey, S., & Gerber, J.-F. (2010). Logging conflicts in Southern Cameroon A feminist ecological economics perspective. *Ecological Economics*, 70(2), 170–177. <http://doi.org/10.1016/j.ecolecon.2009.09.012>
- Wesseling, C., Crowe, J., Hogstedt, C., Jakobsson, K., Lucas, R., & Wegman, D., H. (2013). The Epidemic of Chronic Kidney Disease of Unknown Etiology in Mesoamerica: A Call for Interdisciplinary Research and Action. *American Journal of Public Health*, 103(11), 1927–1930. <http://doi.org/10.2105/AJPH.2013.301594>
- Wilkinson, D. (2002). *Silence on the mountain: stories of terror, betrayal, and forgetting in Guatemala*. Boston: Houghton

Mifflin.

Winkler, K. (2013a). La expansión de la caña de azúcar en Suchitepéquez y su impacto en la subsistencia de la población del altiplano guatemalteco. Coordinación de ONG y Cooperativas (CONGCOOP), Instituto de Estudios Agrarios y Rurales (IDEAR). Retrieved from http://idear.congcoop.org.gt/images/stories/cuaderno_1_congcoop_final-2.pdf

Winkler, K. (2013b). La territorialidad tz'utujil frente a la expansión de la caña de azúcar. Coordinación de ONG y Cooperativas (CONGCOOP), Instituto de Estudios Agrarios y Rurales (IDEAR). Retrieved from http://idear.congcoop.org.gt/images/stories/CONGCOOP_territorialidad.pdf

World Database on Protected Areas (2014). "Guatemala, Latin America and Caribbean." Retrieved from: <http://www.protectedplanet.net/country/GT>

Chapter 4

Conclusions

1.0 Introduction

This feminist community-based research (FCBR) project examined the impacts of sugarcane expansion on the intra-community politics of La Montaña, Guatemala. In La Montaña community members report an extensive list of negative environmental impacts associated with sugarcane expansion, including: unsustainable water use for irrigation through the dry season; deforestation; air pollution from harvest burns; and the damage to local flora and fruit trees from aerial pesticide applications. *Montañeros* (inhabitants of La Montaña) also see sugarcane encroaching into land formerly rented to maize farmers, making it harder to find land for subsistence agriculture. These observations support research in other areas of Guatemala that find that sugarcane expansion is negatively affecting subsistence communities throughout the country (Alonso-Fradejas 2012, 2015, SEGEPLAN 2011, Winkler 2013a, 2013b). When one looks more closely, there is more to this story. My thesis shows that community members understand sugarcane expansion differently across gender and age. As I argue, these divisions subvert the community's collective political capacity and create the potential for intra-community violence.

In this chapter, I review the goals of this project and discuss what my research contributes to understandings of agrarian change. I then summarize the principle ways in which this research has been mobilized, and reflect on key limitations of the project. Finally I discuss future areas of research and action.

2.0 Feminist community-based research goals in La Montaña

Community-based research entails the co-production of knowledge with research participants who are involved in determining the research process, with a goal of producing knowledge that will first and foremost benefit research participants (Israel et al 1998). To these goals, feminist community-based research adds an awareness of gender and a commitment to the meaningful inclusion of women specifically (Clover 2011, Maguire 1987). The overall goals of this FCBR project with *montañeros* were to 1) collaboratively identify with participants specific areas of interest regarding sugarcane impacts, and investigate these areas; 2) to analyse data with an awareness of gender and 3) to share research findings with the community to facilitate the possibility of action or critical reflection. Through this process several areas of interest emerged; in this thesis I analyse two of these areas, each of which forms a substantive chapter in this thesis. I selected these areas based on the amount of discussion they generated in data collection and because these issues were particularly inflected by gender differences.

3.0 Political inaction as a response to sugarcane expansion

Chapter 2 examines political inaction in La Montaña in response to sugarcane. I find that political inaction in La Montaña is gendered since women and men express diverging perspectives on the role of sugarcane cultivation in the future of La Montaña. Men emphasize the importance of retaining employment opportunities in sugarcane, while women emphasize the threat that sugarcane poses to subsistence maize cultivation and express a belief that sugarcane cultivation is fundamentally incompatible with the health of the community. In a community where collective action across gender has historically been important, these diverging perspectives represent an obstacle to cultivating effective political action around sugarcane expansion. These findings highlight the capacity for sugarcane expansion to stimulate different responses from different community members, stemming primarily from the gendered labour opportunities associated with this industry.

4.0 Understandings of deforestation and its relationship to sugarcane cultivation

In addition to the problem of political inaction, *montañeros* identified deforestation as one of the most concerning forms of environmental degradation associated with sugarcane cultivation. In Chapter 3 I explore three gender- and age-informed discourses that *montañeros* used to express their understandings of deforestation and its relationship to sugarcane cultivation, the land tenure system, their own practices, and their community histories. Key findings from these discourses include that 1) women and men express different understandings of the entitlement of finca owners to deforest, 2) participants' definitions of which community practices constitute 'deforestation' reflect gendered roles and responsibilities, and 3) older generations transmit community histories in a way that produces negative and pessimistic messages about the community's political will and capacity to confront deforestation. Based on these findings, I conclude that current trajectories of sugarcane expansion and deforestation in Retalhuleu could lead to intra-community political divisions or violence. However, these discourses also reflected significant common ground shared by *montañeros* around the importance of protecting forest cover to ensure regular rainfall, an acknowledgement of which will be important in any actions to address deforestation.

5.0 Main implication for knowledge on agrarian change

The main implication of this thesis for the agrarian literature is my finding that sugarcane expansion has a detrimental impact on the community as a *collective*. Sugarcane expansion is a phenomenon with different meanings across gender and age, and thus elicits differentiated responses which complicate the potential for collective action. Feminist political ecologists note the need to critically engage the concept of 'community' as a heterogeneous place, given the fact that individuals experience environmental issues in ways that are differentiated along axes of power (Dey et al 2014, Elmhirst 2011, Sultana 2009). However, as I find in this thesis, in the context of sugarcane expansion *montañeros* have ample

reason to aspire to 'community' as a cohesive political unit. In La Montaña, people believe “they will only listen if we are all speaking together.” This is the result of many factors, including the community's history of collective action and the knowledge of the incredibly unequal power dynamic between campesinos and the sugarcane industry. Differentiated responses to sugarcane are therefore not only reflections of different stakes in confronting this phenomenon. In La Montaña, they also throw into question whether it will even be possible to confront this phenomenon at all, given the factors I mention above. This finding demonstrates that community solidarity is simultaneously important and difficult to achieve in the context of agroindustrial expansion. In La Montaña, while *montañeros* aspire to this solidarity, it has thus far eluded the community partly as a result of gender and age divisions. While exploring differentiated responses is crucial to shed light on how pre-existing inequalities are stimulated by agroindustrial expansion, in the end for *montañeros* what matters is if and how these differences will be overcome.

6.0 Mobilizing research findings after data collection

In February 2015 I returned to La Montaña for a two-week stay in which I re-connected with research participants, and held a public presentation where I presented my preliminary analysis of the research that forms Chapters 2 and 3. After the presentation, I opened up the space for discussion and reflection. While feedback was generally positive and several women confirmed that they found my portrayal of gender issues to be accurate, critical discussion did not emerge around gender and instead the conversation was dominated by debate around the role of older generations in perpetuating negativity that I identify in Chapter 3. This was disappointing, given the central role of gendered divides in this thesis and my public presentation. I discuss this issue further in section 7.0 on limitations.

Based on a request from some *montañeras* at the end of my first research trip, I also conducted a public health presentation on the impacts of sugarcane as this information was not readily available to them. In order to fulfill this request I conducted research and compiled a presentation on the known health risks associated with manual labour in sugarcane, as well as the health risks of sugarcane harvest burns. This presentation described the epidemic of Chronic Kidney Disease of Non-traditional Causes (CKDnT) that is currently sweeping the sugar-producing regions of Central America and is linked to labour conditions in sugarcane.¹ My presentation on the health risks associated with harvest burns drew on an interview I conducted with the local nurse, and included a list of recommendations on how to protect

¹ Chronic Kidney Disease of Non-traditional Causes (CKDnT) is believed to be linked to chronic dehydration plus exposure to agrochemicals used in sugarcane cultivation (Ordunez et al 2014, PAHO 2013). In other areas of Central America, the appearance of this disease has been linked to cane cutting labour (Peraza et al 2012). For the most part, *montañeros* do not participate in this work. Nevertheless, these other forms of labour in sugarcane also involve extremely demanding physical labour in the hot sun, and *montañeros* believed there was a link between sugarcane work and the increasing complaints of kidney pain in friends and male family members.

oneself and one's children from contamination from falling ash. I also conducted a workshop with the staff of the local NGO Semilla Nueva on the dangers associated with exposure to the ash from harvest burns, and the importance of hydration in avoiding CKDnT. In this workshop I provided staff with infographics in Spanish to distribute amongst communities in Retalhuleu. I was asked to conduct this presentation in the other 24 communities in which Semilla Nueva operates; however due to time and resource constraints, I was unable to do so.

7.0 Reflecting on limitations

From the start, the impetus for this research has been the desire of participants in La Montaña to build knowledge on the impacts of sugarcane expansion so that the community is better equipped to survive and continue subsistence agriculture practices. By this criterion, in some ways this project was successful and in some ways it was limited. The first considerable limitation was time. While I conducted a total of 28 interviews with community members, as I was leaving the community some people were asking to participate. In contrast, another limitation was the time constraints of certain community members. The conditions of poverty and precarity in La Montaña meant that often, people who were interested in this project could not commit to an interview, or if they did often they had to cancel. This took on an added layer of difficulty for women, many of whom had to ask their husband's permission to take part in activities outside the daily routine.

A further limitation which I also identify in Chapter 2 and briefly above was the lack of critical discussion amongst community members regarding the role of gender in political divisions. It is likely that a single public presentation was not a realistic venue for holding this critical discussion, in a highly patriarchal agrarian context where discussing gender issues is uncommon. However, it was also interesting to see the difference between the non-discussion of the critical analysis that I presented, versus the lively and engaged response of participants in the health information session. For me, this raised serious questions around whether it is realistic to expect collaborative reflection on and mobilization around a gendered critique, in the context of a short-term community-based research project. Minkler (2004) and Huisman (2008) note the considerable time investment required to build the trust that is needed for collaborative reflection. And, what does this gendered critique mean if it does not produce a measurable improvement in the lives of participants? While a gendered analysis is important for expanding academic understandings of the political ecological dimensions of sugarcane expansion, it was unclear at the end of this project *how* or *if* the community would make use of this knowledge. It is possible that access to knowledge that has been made legitimate through this research will enable and/or empower community members, and especially women, to engage in future conversations around the issues I discuss in this thesis.

However I cannot definitively state that this will be the case. Meanwhile, the act of putting together a health presentation from pre-existing research has provided participants with information on health and safety that was relevant to their lives, and elicited a hugely positive response. While the critique produced in this FCBR project was geared to be relevant to the community, the discrepancy between the lack of engagement it provoked versus the engagement garnered from a small 'service project' raises questions about the long-term, rooted, and collaborative work that is required to enact real social change (Williams and Lykes 2003). This in turn raised questions for me about whether short-term community-based projects should have goals that are more geared toward the delivery of concrete benefits. Returning to the community to reconnect, disseminate research and provide a health workshop was an important element of maintaining a reciprocal relationship. However, in the end I returned to my home on Vancouver Island, and whether or if I will work with La Montaña in the future is uncertain. As such, I am left with questions around a researcher's responsibility to relationships with research communities after the conclusion of research; especially when the community is geographically distant, and does not have access to Internet (see Banks et al 2013, Etmanski and Pant 2007, Huisman 2008).

8.0 Further Research

In Guatemala, the landscape of research attention and NGO presence is highly uneven. In this uneven landscape, the Pacific coast of Guatemala and Retalhuleu specifically are 'blank spots' compared to other areas of the country such as the Petén and western highlands, where cultural and ecological issues receive widespread attention (eg. Isakson 2009, 2014, Shriar 2014, Sundberg 1998, 2003, Taylor 2010). In Retalhuleu, one by-product of this lack of engagement from agrarian researchers is a lack of documentation of environmental injustices. In La Montaña specifically, the absence of research attention was evident in the fact that *montañeros* had no access to information on the ecological or health outcomes of sugarcane cultivation, beyond their own observations. As such, I identify two areas for further intervention on the Pacific coast. First, training in participatory systematic environmental monitoring would allow communities to set research agendas and build scientific knowledge in the absence of 'outside' research interest or NGO support. Several participants in this study specifically mentioned an interest in receiving tools and training on how to monitor river water quality. In tandem with the potential for participatory science, there is a broader need for knowledge translation to agrarian communities on the Pacific coast. The extremely positive reception of my health presentation was heartening, but also telling in that it reflects the degree to which this information is not available elsewhere. While research on the health and environmental impacts of sugarcane does exist, it has not been made available to people in La Montaña. There is thus a need for this research to be compiled and shared with agrarian communities in a culturally- and contextually-appropriate manner.

Finally, this research revealed a need for further, longer-term research on the impacts of sugarcane expansion on gender dynamics along the Pacific coast. This research offers insights into the interaction between sugarcane and community gender dynamics, at a moment when sugarcane cultivation in Retalhuleu is still limited to 2% of national production. However, this industry is on pace to expand and many *montañeros* hold dire predictions of the future of their community. As such, these dynamics could potentially change in ways that increase the vulnerability of women and children, as other researchers have observed in marginalized communities facing mounting environmental pressures (Sultana 2011, Truelove 2011).

Overall, this project represents my effort to honour my relationships to the community of La Montaña, by investigating the impacts of sugarcane expansion and maintaining an awareness of the uneven power dynamics that exist inside and outside the community. However this project represents only one small contribution in what will need to be a much larger structure of support, advocacy and research, if subsistence communities on the Pacific coast are to survive sugarcane expansion. In this vein, I will end with a quote from elder Don Francisco which for me reinforces the importance of continuing to conduct research with subsistence communities *especially* when a path to a more socially and ecologically just future is not apparent or not easy.

We [old people], we're already walking that way toward death. But it's the daughters and sons who are going to stay. And every day now it's worse... it's a sad life, being poor. Fighting every day, fighting to the limit. We managed to get this little piece [of land], and it was more or less enough, and we were happy, because we had our own place to live. And since it's all we have, really, it's everything.

Bibliography

- Agarwal, B. (2001). Participatory Exclusions, Community Forestry, and Gender: An Analysis for South Asia and a Conceptual Framework. *World Development*, 29(10), 1623–1648. [http://doi.org/10.1016/S0305-750X\(01\)00066-3](http://doi.org/10.1016/S0305-750X(01)00066-3)
- Alonso-Fradejas, A. (2012). Land control-grabbing in Guatemala: the political economy of contemporary agrarian change. *Canadian Journal of Development Studies / Revue Canadienne D'études Du Développement*, 33(4), 509–528. <http://doi.org/10.1080/02255189.2012.743455>
- Alonso-Fradejas, A. (2015). Anything but a story foretold: multiple politics of resistance to the agrarian extractivist project in Guatemala. *The Journal of Peasant Studies*, 42(3-4), 489–515. <http://doi.org/10.1080/03066150.2015.1013468>
- Banks, S., Armstrong, A., Carter, K., Graham, H., Hayward, P., Henry, A., ... Strachan, A. (2013). Everyday ethics in community-based participatory research. *Contemporary Social Science*, 8(3), 263–277. <http://doi.org/10.1080/21582041.2013.769618>
- Clover, D. (2011). Successes and challenges of feminist arts-based participatory methodologies with homeless/street-involved women in Victoria. *Action Research*, 9(1), 12–26. <http://doi.org/10.1177/1476750310396950>
- Dey, S., Resurreccion, B. P., & Doneys, P. (2014). Gender and environmental struggles: voices from Adivasi Garo community in Bangladesh. *Gender, Place & Culture*, 21(8), 945–962. <http://doi.org/10.1080/0966369X.2013.832662>
- Elmhirst, R. (2011). Introducing new feminist political ecologies. *Geoforum*, 42(2), 129–132. <http://doi.org/10.1016/j.geoforum.2011.01.006>
- Etmanski, C., & Pant, M. (2007). Teaching participatory research through reflexivity and relationship. *Action Research*, 5(3), 275–292. <http://doi.org/10.1177/1476750307081018>
- Huisman, K. (2008). “Does This Mean You’re Not Going to Come Visit Me Anymore?”: An inquiry into an ethics of reciprocity and positionality in feminist ethnographic research. *Sociological Inquiry*, 78(3), 372–396. <http://doi.org/10.1111/j.1475-682X.2008.00244.x>
- Isakson, S. R. (2009). No hay ganancia en la milpa: the agrarian question, food sovereignty, and the on-farm conservation of agrobiodiversity in the Guatemalan highlands. *The Journal of Peasant Studies*, 36(4), 725–759. <http://doi.org/10.1080/03066150903353876>
- Isakson, S. R. (2014). Maize Diversity and the Political Economy of Agrarian Restructuring in Guatemala. *Journal of Agrarian Change*, 14(3), 347–379. <http://doi.org/10.1111/joac.12023>
- Israel, B. A., Schulz, A. J., Parker, E. A., & Becker, A. B. (1998). Review of Community-Based Research: Assessing Partnership Approaches to Improve Public Health. *Annual Review of Public Health*, 19(1), 173–202. <http://doi.org/10.1146/annurev.publhealth.19.1.173>
- Maguire, P. (1987). *Doing participatory research: a feminist approach*. Amherst, Mass: Center for International Education, School of Education, University of Massachusetts.
- Martiniello, G. 2015. Social struggles in Uganda's Acholiland: Understanding responses and resistance to Amuru sugar works. *Journal of Peasant Studies*, 42(3-4), 467–488.
- Minkler, M. (2004). Ethical Challenges for the “Outside” Researcher in Community-Based Participatory Research. *Health Education & Behavior*, 31(6), 684–697. <http://doi.org/10.1177/1090198104269566>
- Ordunez, P., Martinez, R., Reveiz, L., Chapman, E., Saenz, C., Soares da Silva, A., & Becerra, F. (2014). Chronic Kidney Disease Epidemic in Central America: Urgent Public Health Action Is Needed amid Causal Uncertainty. *PLoS Neglected Tropical Diseases*, 8(8), 1–3. <http://doi.org/10.1371/journal.pntd.0003019>
- Pan-American Health Organization / World Health Organization (2013). Chronic Kidney Disease in Agricultural

Communities in Central America. CD52/8 (Eng.) Washington, 17 July 2013. Retrieved at:
http://www.paho.org/hq/index.php?option=com_content&view=article&id=8833&Itemid=40033&lang=en

SEGEPLAN. (2011). Retalhuleu: Plan de desarrollo departamental 2011-2025. Retrieved at: www.segeplan.gob.gt

Shriar, A. J. (2014). Theory and context in analyzing livelihoods, land use, and land cover: Lessons from Petén, Guatemala. *Geoforum*, 55, 152–163. <http://doi.org/10.1016/j.geoforum.2014.06.002>

Sultana, F. (2009). Fluid lives: subjectivities, gender and water in rural Bangladesh. *Gender, Place & Culture*, 16(4), 427–444. <http://doi.org/10.1080/09663690903003942>

Sultana, F. (2011). Suffering for water, suffering from water: Emotional geographies of resource access, control and conflict. *Geoforum*, 42(2), 163–172. <http://doi.org/10.1016/j.geoforum.2010.12.002>

Sundberg, J. (1998). Ngo landscapes in the Maya Biosphere Reserve, Guatemala. *Geographical Review*, 88(3), 388–412. <http://doi.org/10.2307/216016>

Sundberg, J. (2003). Conservation and democratization: constituting citizenship in the Maya Biosphere Reserve, Guatemala. *Political Geography*, 22(7), 715–740.

Taylor, P. L. (2010). Conservation, community, and culture? New organizational challenges of community forest concessions in the Maya Biosphere Reserve of Guatemala. *Journal of Rural Studies*, 26(2), 173–184. <http://doi.org/10.1016/j.jrurstud.2009.09.006>

Truelove, Y. (2011). (Re-)Conceptualizing water inequality in Delhi, India through a feminist political ecology framework. *Geoforum*, 42(2), 143–152. <http://doi.org/10.1016/j.geoforum.2011.01.004>

Williams, J., & Lykes, M. B. (2003). Bridging Theory and Practice: Using Reflexive Cycles in Feminist Participatory Action Research. *Feminism & Psychology*, 13(3), 287–294. <http://doi.org/10.1177/0959353503013003002>

Winkler, K. (2013a). La expansión de la caña de azúcar en Suchitepéquez y su impacto en la subsistencia de la población del altiplano guatemalteco. Coordinación de ONG y Cooperativas (CONGCOOP), Instituto de Estudios Agrarios y Rurales (IDEAR). Retrieved from http://idear.congcoop.org.gt/images/stories/cuaderno_1_congcoop_final-2.pdf

Winkler, K. (2013b). “La territorialidad tz’utujil frente a la expansión de la caña de azúcar.” Coordinación de ONG y Cooperativas (CONGCOOP), Instituto de Estudios Agrarios y Rurales (IDEAR). Retrieved from: http://idear.congcoop.org.gt/images/stories/CONGCOOP_territorialidad.pdf.