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Agroecology feminisms: Gender, social movements and alternatives to industrial agriculture in Paraguay

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Abstract

As plantations of mono-cropped cash crops continue to expand globally, small farmers and peasants continue to make out a living at the edges of plantations. Though it draws on long histories of traditional farming, agroecology emerged as alternative set of agricultural practices to counter industrial agriculture in the 1990s. It encapsulates both the diversity of traditional agricultural systems and the systematization of these practices, making it a response of *campesinos* (peasants) to plantation expansion. In Paraguay, agroecology has been taken up by several *campesino* social movements, including the women's and indigenous movement known as Conamuri. For twenty years, Conamuri has advocated for agroecology as a means of both protecting *campesino* livelihoods and addressing power inequities along gendered lines. By looking at the ways Conamuri participants practice and experience agroecology, I argue that these movements are shaped by multiple relations of power which condition the possibilities and limitations of engaging in agroecological practices. Using ethnographic and archival research, this thesis explores two of Conamuri's major projects – the National Seed Campaign and a yerba mate co-operative. The ways agroecology is practiced and experienced by Conamuri participants reveals both the potential and limitations of agroecology for feminist organizing. The fragility of *campesino* lives at the edge of plantations illustrates that agroecology as an alternative to industrial agriculture and means of addressing gendered inequalities remains fraught.

Keywords: agroecology, gender, social movements, campesino, industrial agriculture, Paraguay

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Glossary of terms and phrases

Barbacúa	indirect heat oven
Campesinado	peasant class
Campesino	peasant
Chacra	farm
Depósito	small store
FNC(Federación Nacional Campesina)	National Peasant Federation
IPCC	Intergovernmental Panel on Climate Change
Huerta	garden
Jaguata	let's go for a walk (Guaraní)
Jopará	dialect mix of Spanish and Guaraní
Ka'a he'é	stevia, (direct translation: sweet herb)
Kaguré	manioc cheese bread cooked over coals
Kokue	farm (Guaraní)
La Via Campesina	Peasant Way (Spanish)
Minga	communal work
Miel de caña	molasses
Ña	sign of respect for a woman, Ms. (Guaraní)
Óga	home (Guaraní)
OLT (Organización de la Lucha por la Tierra)	Organization of the Fight for Land (Spanish)
Oñoirũ	companion (Guaraní)
Semilla Róga	Seed House (jopará)
Sin tierra	landless
Tereré	cold tea drink made with yerba mate
Upeichá	That's how it is (Guaraní)
Yerba mate	a plant used to make infused herbal tea

List of Illustrative Materials

Chapter 1

Introduction: Gender, agriculture, and organizing in Paraguay

Image 1: The hills of Edelira. Soy plantations can be seen in the distance. Photo by author.

1.1 Introduction

"Women work more than men. We work in the gardens, we cook, and we prepare the *tereré* for when the men come back from the fields. When the men come back from the fields, they want their *tereré* ready. There are some who help more, but this is how it is," Ña Zunny[1] reflected as she deftly removed the skin of the *mandioca* she and I were peeling under the shade of tall mandarin trees. . Even in a casual statement, Ña Zunny brings attention to a system of labor disproportionately burdens certain members of the household. It was winter, and the sun was strong, but the breeze kept us cool as we worked. The red clay dirt covering the tubers stained our hands as we peeled, and our fingerprints left behind bright splotches on the pearly white flesh before we tossed them into the bowl for washing. Our conversation meandered through topics like the weather, her children, and community gardens.

"This garden," she gestured behind her toward a fence made of chicken wire and weather-worn wood, "we founded through Conamuri. It is a community garden. We plant with

[1] Ña in Guaraní translates to señora (Mrs.). It is an indication of respect.

the women, with all the women together. At the meeting we will see if we start planting *remedios*[2] again." Ña Zunny has been involved with Conamuri — a women's peasant and indigenous social movement — for nearly fifteen years. The community garden is just one of many projects this movement has begun in south-eastern Paraguay. Conamuri, recognizing the interrelated challenges of patriarchy and capitalism that rural women face, advocates for and creates projects that further agroecological modes of agricultural production. The movement formulates its project to make visible women's multiple roles in agriculture while improving subsistence farming techniques. Agroecology can be understood as a variegated project that "offers an alternate path to agricultural intensification by relying on farming knowledge and techniques adjusted to local conditions, [and] management of diverse resources and inputs," (Altieri, 1999: 197). As such, there is a variety interpretations and practices associated with agroecology, but Conamuri takes a more radical social movement approach that centers indigenous and local knowledges. With an emphasis on the use of native seeds, mixed-use crops (also known as polycultures), and natural pesticides, Conamuri's model of agroecological production stands in sharp contrast to the prevailing mode of industrial agriculture at work in Paraguay.

Just as Ña Zunny and I finished peeling the mandioca, her son Pedro emerged through the trees, with his one-year old-daughter was perched on his hip. Now that Ña Zunny and I had nearly finished preparing lunch, Pedro was going to take me to meet with other Conamuri activists in the area. The worn plastic chair groaned as I rose, and we called out a quick goodbye to Ña Zunny and promised to return before lunch. The dirt road was still damp from yesterday's rain, and our boots stuck to the thick clay with each step. His daughter suddenly pointed to the

[2] *Remedios* translates to medicinal herbs.

ground. Pedro knelt so she could investigate what had piqued her curiosity, and he motioned for me to join them near the ground.

"This is the *akeké* ant, the one we talked about the other day. They are escaping the soy plantations and seek refuge here because there is more biodiversity over this way." We continued crouching there for a moment as we watched the line of small red ants make their way into the dense vegetation along the road before standing again. "We here are lucky. The soy plantations haven't come this far yet, but once you cross over these hills," Pedro swept his hand over the rolling green hills that surrounded us, "that's where it all starts." The hills limited our view, but beyond them lay the vast expanse of genetically modified soy soon to be exported to the European Union, the US, China, and Brazil.

In these hills, agroecological production contacts industrial agriculture. Such proximity to industrial agriculture makes sustainable small-holder production advocated for by agroecology movements and practitioners more difficult. Meanwhile, uneven power relations among agroecology advocates distributes the benefits of agroecology unevenly. The multiple ways agroecology movements are shaped by power relations is the dynamic at the heart of this project. Agroecology, as a set of practices and an organizing strategy for rural social movements is shaped by power relations along classed, gendered, and racialized lines. I argue that agroecology is always conditioned by locally contingent power relations along multiple axes of power which have profound consequences for how agroecology social movements are experienced by participants. The literature on agroecology rarely centers discussions of power as an influential force that conditions the possibilities and limitations of engaging in this particular form of agricultural production. Conamuri, an agroecology movement that highlights the specific needs

of *campesina*[3] and indigenous women, illustrates how identity, agricultural production, and social mobilization are intimately bound together (cf. Sundberg, 2004; Bezner Kerr, 2014; Mullaney, 2014). As industrial agriculture continues to grow and seize land globally, how rural resistance manifests and is experienced becomes an important question to consider. Since, as Ña Zunny indicates, agricultural and domestic labor is differentiated by gender identity, the needs of women in the face of capitalist expansion require specific attention in social movements as well.

The soy fields of Itapúa that surround Pedro and Ña Zunny's homes and lives are some of the most productive in Paraguay (Palau, 2019). Since the introduction of genetically modified soy by Brazilian multinational corporations in the 1980s, Paraguay's economy has become increasingly dependent upon its production (Nickson, 1981). As of 2018, Paraguay is the fourth-largest global exporter of soy, joining the ranks of much larger countries such as the United States, Brazil, and Argentina (World Bank, 2018). In the twenty-year period between 1997 and 2017, the number of hectares dedicated to soy has increased from 1.5 million to 6.3 million hectares (Palau, 2018). While the departments on the Brazilian border produce the most soy, such rapid growth has also been made possible by expanding production westward. In addition to genetically modified soy, agribusinesses continue expanding genetically modified corn and wheat production. While soy has dominated the eastern region of Paraguay, the sparsely populated Chaco to the west depends on cattle ranching as its economic base (Correia, 2018). Steady growth for industrial agriculture has translated to a relatively stable GDP growth rate of around four percent annually.

Despite apparently promising economic indicators, the intensification of industrial agricultural and its consequences cannot be ignored. Other indicators point to another reality

[3] Translates from Spanish to peasant women.

lived by Paraguayans: the violence and exclusions manifested alongside industrial agriculture. Paraguay has a long history of a highly uneven distribution of land in favor of large landholdings, which has only been exacerbated by industrial agriculture's expansion. Indeed, the World Bank Country Report (2018) indicates that Paraguay has the most unequal distribution of land in the world and links this unevenness to the expansion of industrial agriculture. Agribusinesses have managed to expand at such a rapid rate by displacing rural populations through various technologies (Hetherington, 2009), including violent moments of forced removal, and slower forms of dispossession through the increased toxicity of local environments and getting the rural poor stuck in cycles of debt as they struggle to keep up with the demands of agribusinesses. Industrial soy production does not produce significant numbers of wage-labor jobs, so many of the rural poor, both indigenous and *campesino*, are forced to migrate to urban areas (Finnis, 2017). Meanwhile, others, such as Ña Zunny and Pedro, remain in the countryside trying to eke out a living in an insecure situation of land access.

Even with the buffer of about 10 kilometers between them and the sea of soy, Ña Zunny's, Pedro's and other's lives are shaped materially, politically, and socially by their proximity to these plantations, a socio-economic form Tania Murray Li terms *plantation zones* (Li, 2017). Plantation zones include the "residual spaces or 'enclaves' tucked *between* plantations," (Li, 2017: 1158). It is in these in-between spaces that movements such as Conamuri advocate for a different vision for Paraguay, one that is based in agroecology and food sovereignty. Yet this vision must also be understood in terms of patriarchal gender relations which shape the exclusions produced by agroindustry in addition to shaping households and communities that lie within plantation zones.

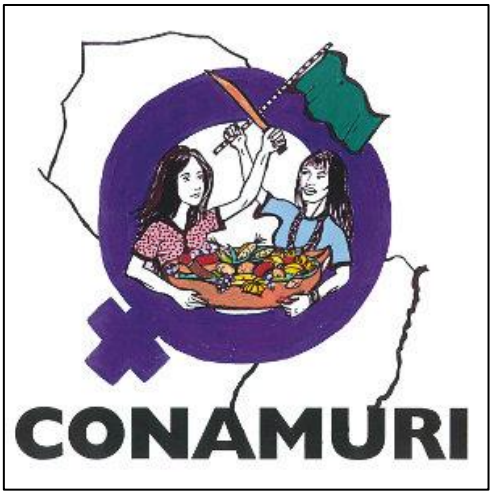


Image 2: Conamuri's symbol. Retrieved from: conamuri.org.py

Paraguay's rich history of *campesino* and indigenous organizing means that Conamuri is one among many movements operating in Paraguay today that advocates for agroecology (Riquelme et al., 2017). Agroecology is framed as an alternative to industrial agriculture that can protect *campesino* life and livelihoods, as well as advance causes like biodiversity, food sovereignty, and more sustainable agricultural production. What makes Conamuri distinct, however, is its explicit focus on the gendered division of labor creating specific challenges for women as expanding industrial agriculture increases precarity. Conamuri also recognizes that *campesino* organizing, including an agroecology agenda, does not necessarily deal adequately with the specific challenges women face. Ongoing frustrations with lack of access to leadership and programs that deal with challenges women face led to Conamuri's founding in 1999. On October 15th, the International Day of Rural Women, three-hundred women from disparate women's committees across the country met in Asunción, and this date is understood to be Conamuri's founding date. In reality, Conamuri is the result of a long history of women's committees in Paraguay, though the October 15th date serves as an important component of it's

founding mythology (Wolford, 2010). That Conamuri organizes consistently across multiple sites and scales differentiates it from local committee organizing.

These pages follow Conamuri through Paraguayan plantation zones as it advocates for agroecology in an ongoing context of capital accumulation and patriarchal forms of labor relations. In light of this context, this thesis navigates three interrelated questions: (1) How do the long-term effects of dispossession shape the possibilities of alternatives to soy development?; (2) Why and under what conditions is agroecology 'socially transformative?; and (3) Why does Conamuri link agroecology and gender-based rights, and to what effects? As Ña Zunny's reference to the community garden illustrates, Conamuri is involved in a variety of ongoing projects based in various communities across Paraguay. Conamuri regularly hosts workshops on women's rights, indigenous rights and sustainable agriculture. However, there are two ongoing projects that are currently the focus of Conamuri's efforts on a national and departmental level: Semilla Róga and Oñoirũ. This thesis follows these two projects as they craft particular understandings of agroecology and gender relations in Paraguay.

These projects are in different regions of Paraguay, which are undergoing related, yet distinctive, processes of agricultural expansion. Semilla Róga[4], is a site of native and creole seed exchange among Conamuri activists. It is located in the Repatriación district of Caaguazú, a department that is currently experiencing the fastest rate of soy expansion in Paraguay (Palau, 2019). Oñoirũ is an agroecology yerba mate association that encourages *campesinos* to focus on producing yerba mate for income rather than turning to genetically modified (GM) soy. The association runs as a small co-operative and is in the Edelira district of Itapúa department. Semilla Róga helps Conamuri realize the aspect of agroecology that centers on using native and

[4] Semilla Róga is a mix of Spanish and Guaraní (jopará), which translates to Seed House.

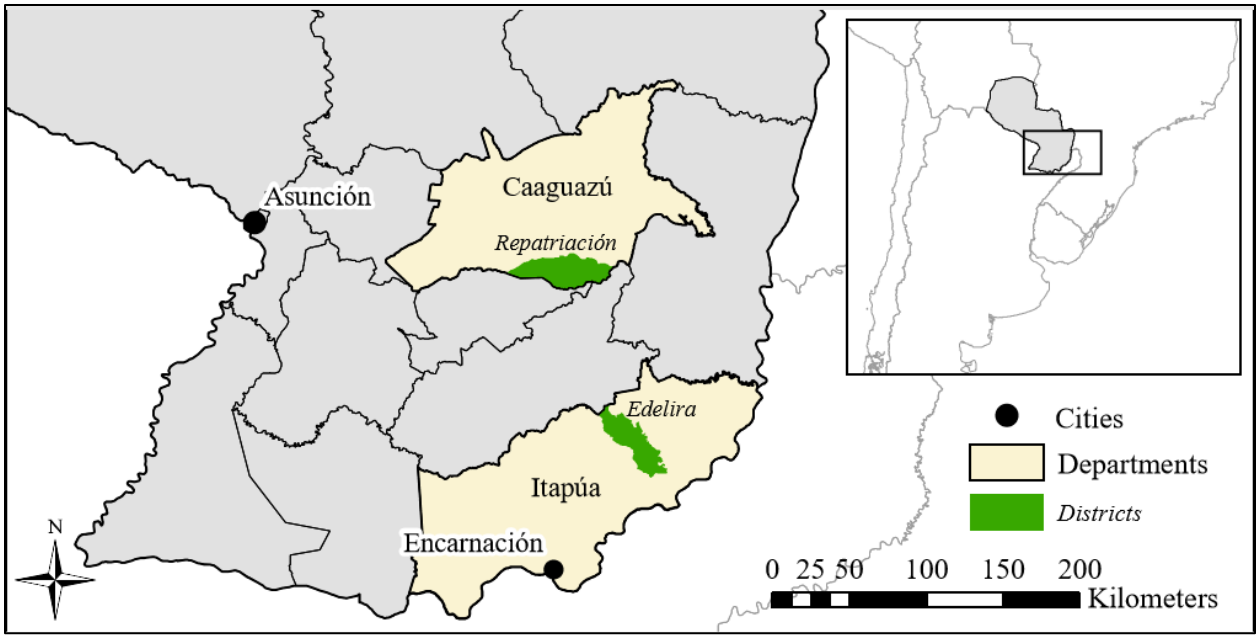
diverse seeds, with a specific emphasis on making visible the role of women's knowledges in protecting and preserving diverse seeds. Meanwhile Oñoirũ promotes biodiversity, reforestation, and production without the use of pesticides or heavy machinery. Yerba mate is often associated with men's labor, but through Oñoirũ, Conamuri attempts to expand the women's association with various agriculture practices and create new spaces of participation beyond the home. Conceptualizing the research across specific projects rather than solely on specific places creates a framework that allows the research to engage with the multiple reasons people have elected to join the movement across the national leadership, district leadership, and popular base (Wolford, 2010). Semilla Róga and Oñoirũ focus on distinct ways that Conamuri links gender-based rights and agroecology in its rhetoric and practice. My thesis sketches the ways these projects work toward Conamuri's goals while also acknowledging their limitations (Anthias, 2018).

Drawing on Tania Murry Li's conception of plantation zones (2017; 2018) and ongoing concerns with the intergenerational implications of dispossession from the land and from work (Fernandez, 2018), I present participation in Conamuri as a means of responding to positionality in plantation zones, as well as how the project of agroecology itself is shaped by this social form. Thus, I aim to understand agroecology not only as a practice of traditional agriculture (Giraldo & Rosset, 2018), but also as a response to an unequal distribution of power in plantation zones. By framing agroecological practices as a response, I aim to situate and historicize individual experiences which might lead to such a decision. Given concerns over "how will future generations meet their own needs in a milieu dominated by large-scale plantations," (Li, 2017: 1158), I encourage this question be applied to the reproduction of social movements and agroecology in order to interrogate what is left (Tsing, 2015) in the plantation zones and how meaning is cultivated there. I move to see agroecology as a social movement frame that allows

for particular responses to industrial agriculture that is shaped by power. These questions are also conditioned by patriarchy, which is especially concerning to a movement like Conamuri, given its emphasis on the role of gender and ethnicity in shaping people's positionalities within plantation zones. Bina Agarwal (2014) argues that as agroecology and food sovereignty begin to be tied more explicitly to the issues of the rights of women, the contradictions within the agroecology project must be understood and clarified. This thesis contributes to such a project by exploring how these contradictions manifest in a specific movement that locates women's and indigenous issues at its core. Since agroecology is practiced *by people*, it is shaped by broader relations of power among individuals and groups. I argue in the pages that follow that even as Conamuri utilizes agroecology to produce a particular *campesina* and indigenous women's identity, their capacity to link the goals of agroecology and anti-patriarchal organizing is constrained by the ability of the movement to reproduce itself and agroecological production.

1.2 Notes on methodology and positionality

This thesis is based upon two-and-a-half months of ethnographic and archival work in Paraguay. Conamuri's two libraries served as the basis for my archival work, and a combination of interviews and participant observation at Semilla Róga and Oñoirũ are the foundation of my ethnographic work (See Appendix A for details). Interviews were conducted with NGOs involved in *campesino* struggles, Conamuri movement leaders, and its popular base. An interpretive ethnographic approach to social movements in Latin America aligns this project with ongoing feminist and decolonial approaches to scholarship. It allows for a sensitivity to the ways



Map 1: Map of districts and cities where research was conducted. Map by Joseph DiStefano.

an individual's experience is simultaneously about one's personal history as it intersects with grand historical narratives typically used to explain global processes (Thomson, 2013).

This thesis, rather than representing a definitive endpoint, is part of an ongoing conversation that thinks with and is in solidarity with Conamuri and its participants (Correia, 2018). An ethnographic approach to social movements that takes both the popular base and national leadership seriously helps us see movements as part of people's lived, everyday lives, not just the stuff of rhetoric, though rhetoric is a key tool of social movement cohesion (Wolford, 2010). Within Conamuri, understandings of feminism and agroecology vary from participant to participant, and I strive to be attentive to these nuances. Although ethnography is attuned to lived experiences, it cannot claim to be exhaustive (Thomson, 2013), and therefore I do not claim knowledge over Conamuri or its participants. Rather, the pages that follow aim to account for the partial representations brought forth by participants and my own limitations in representing them (Rose, 1997). By centering the participants' voices throughout, I do, however, attempt to join the

project of rethinking issues of feminism, food sovereignty and agroecology *from* Latin America in line with ongoing decolonial projects (Radcliffe, 2017). Just because these attempts are partial does not mean they do not represent legitimate ways that my participants understand their lived realities. My research is not objective in the traditional sense of maintaining distance between myself as a researcher and the participants in the project (Asher, 2009). Instead, my work reflects a critical qualitative approach to research that has at its center an ethical commitment to participants in conducting research which furthers their goals through critical work (Kobayashi, 2001).

Interviews were supplemented by participant observation. During my time with Oñoirũ, I was integrated as part of the administrative team, which included participation in meetings to improve the association's management, meetings with NGOs such as Oxfam Paraguay, and representing Oñoirũ at several seed fairs. As such, I not only observed how seed exchanges take place, but actually participated in the exchange itself. In addition to my role with Oñoirũ, I contributed to the daily functioning of the households in which I was staying, which gave me insight into the rural households' routines. As such, this ethnographic approach blurs the line between the social movement itself and people's daily lives beyond their involvement in the movement, which more accurately reflects people's lived experiences.

Ethnography also must account for my own body and geography and their role in shaping the research (Sundberg, 2005). Wherever I went, I was introduced as Conamuri's intern. The density of activist networks in Paraguay often meant that knowledge of my presence in the country preceded me, as did my affiliation with Conamuri. My association with Conamuri shaped who was and was not willing to participate in my project in ways that I cannot fully account for (Winders, 2001). As a white researcher from the United States, my presence in

Paraguay cannot escape the legacies and contemporary manifestations of colonialism and imperialism in the region that allowed me to be there in the first place. While in my day-to-day life this was not an immediate conversational topic, it did at times shape how my intentions were read in ways that I cannot fully grasp (Rose, 1997). My gender and gender presentation, as a female who presents as feminine, shaped spaces to which I had access and who felt comfortable speaking with me. I was able to enter people's homes and interview women with relative ease since I was not perceived as a threat, but my presence in public life was somewhat truncated. I had to navigate interviews with women carefully so as not to ask a question which might cause issues for them when I left. Conamuri's leadership confronts a similar challenge when they come in to a community, especially as a re-vamped government campaign against 'gender ideology' is making many, including women, question the validity of an organization centered on gendered issues.[5] What people have elected to share with me was shaped by my affiliation with Conamuri and with my gender presentation, again in ways that I cannot fully know (Rose, 1997). This did not prevent people from being critical of Conamuri and its role in their community but may have qualified the ways they talked about Conamuri. For this reason, it is important to complement interview data with participant observation.

Feminist geographers continuously point to the contradictions of representation in academic bodies of work that claim solidarity or empathy (Stacey, 1991). My work is not immune to these critiques, especially as the historical and contemporary conditions of my status as a white person from the United States that makes this research possible in the first place (Radcliffe, 2017). At the same time, I situate this work as part of a broader feminist project

[5] This propaganda campaign initiated by the Cartes government (2013-2018) attempted to erase any discussion of gender or sexual orientation from public life. It is now illegal for teachers to speak about issues relating to gender or LGBTQIA+ identities in schools.

where the "political impulse of feminism is the belief that things – the system of production of social difference – can and must be changed," by linking them to concrete projects (Pratt, 2004: 9). By bringing the lived experiences, goals, and aspirations of Conamuri participants to light, my research aims to further deepen connections of a transnational feminist project (Mohanty, 1988). The thesis that follows is just one of many projects in line with this goal. Embracing and working through contradiction and discomfort remains a central component of my work with Conamuri and beyond.

1.2.1 A note about names

Legitimate concerns over the protection of participant's identity for both reasons of confidentiality and possible retaliation has generally meant that scholars disguise the location of their research and the names of participants. Such an approach has been critiqued under certain circumstances for a paternalistic approach to research that reifies the divide between the researcher as knowledge producer and the research participants as passive actors in the research process (Asher, 2009). While there are many cases where disguising the location and participants' names is crucial to the safety of both the researcher and participant, the participants in my research are active in a well-known social movement in the country. Many of them are regularly interviewed for local newspapers or radio stations. In other words, many participants wanted their names to accompany their stories in any work that is written by or with them.

With the complexities of names and representation in mind, I gave them the choice of whether they wanted to use their real name or a pseudonym for the research and any materials associated with the research, while explaining the potential risks of utilizing their real names. Most elected to use their real name because they felt a sense of ownership over what they are

saying and doing.[6] I do not distinguish in the work between those who have elected to use their real name and those who have not. This decision operates as a further protective measure for those who have not elected to use their real names. Allowing participants to choose how they appear in my work integrates their voices into the writing and dissemination process and is a reflection of my solidarity with them. In terms of locations, I have not identified any specific towns associated with my research. I have elected instead to refer to places in terms of their district location, which would be the equivalent of identifying a county in the United States. Both practices serve to protect the location and identity of many participants, while still allowing them to speak some of their own narrative through my work.

1.3 Thesis Structure

As was mentioned above, the thesis that follows argues that agroecology movements are affected by multiple structures of power that impact the ways agroecology is practiced and experienced by *campesinos*. To build toward this argument, the remainder of the thesis is divided into four chapters. Chapter 2 looks at the history of land access, gender, and social mobilization in Paraguay. This chapter argues that the continued expansion of plantations illustrated the limitations of agrarian reform, thus making agroecology an appealing organizing strategy for rural social movements. It further argues that agroecology's capacity to deal with issues of social reproduction has made it particularly important for a movement centered on *campesina* and indigenous women. Chapter 3 centers on Semilla Róga and Conamuri's seed fairs, andargues that the practices of seed exchange foment particular ways of transferring knowledge that are co-constituted with gendered and racialized identity formation. Chapter 4argues that the social

[6] Field Notes, June 13th, 2019.

transformation advocated by agroecology movements is conditioned by ongoing systems of power that mean the benefits of agroecology are not evenly experienced among all of the movement participants. The chapter looks at Oñoirũ in a moment of crisis that elucidates in specific ways that gendered labor expectations persist and indeed often benefit from this particular set of relations. The conclusion reflects on the ongoing political obstacles to social mobilization in Paraguay and places that in conversation with the literatures on feminist political ecology, agroecology, and social movements. The research which has been conducted is a snapshot of an ongoing process of organizing. Rather than attempt to make a definitive claim on Conamuri or on gender-based organizing in Paraguay, this thesis offers reflections on the ongoing challenges and contradictions that social movements and their participants face on a day-to-day basis.

1.4 Conclusion

Conamuri, along with other social movements aiming to transform the contemporary global agro-industrial complex, are pertinent at this moment of the climate crisis. Towards the end of my fieldwork in August 2019, the Intergovernmental Panel on Climate Change (IPCC) released their latest land report. The report casts a dim picture on the current global state of land use, agricultural production, and deforestation. The current system of food production, land use, and deforestation, according to the IPCC, is entirely unsustainable and is a major contributor to the effects wrought by anthropogenic climate change. Movements such as Conamuri, offer insights into the possibilities and limitations of an agricultural transition that favors polycultures, small holder production, and the use of native seeds. However, since social movements are comprised of people who engage with the stated objectives in distinct ways (Wolford, 2010), we

must pay careful attention to the motivations, experiences, and positionalities of various participants. It is increasingly clear that to stave off the worst effects of climate change, our global system of food production must change along with it. Changing the system of food production is not enough. Women are disproportionately bearing the costs of climate change (Terry 2009), and an agricultural transition must be attentive to ongoing inequities structured by patriarchy in the home and beyond. Through working closely with Conamuri, the following thesis reflects on what such a transition might entail.

Chapter 2
Tangles of landlessness, gender, and agroecology

Image 3: Early morning in Caaguazú department. Photo by author.

2.1 Introduction

The stars shone brightly above our heads on an otherwise-dark Paraguayan night. We were sitting just outside the home of Alicia's mother, eating a quick dinner put together for us over an outdoor fire. As Conamuri's current national director, Alicia now spends most of her time in Asunción away from her family that lives in Repatriación, Caaguazú. Alicia was helping me get to this part of Caaguazú for my research and had taken the opportunity to visit home. We had arrived at three am that morning after a long drive in a pickup truck. We spent the day going from house to house, visiting her friends and family, and I was starting to feel the wear of sleep deprivation.

"I can't even have a chicken!" she laughed, but her brows began to furrow. "To be involved in the struggle, it takes sacrifice. But it brings many opportunities as well." As the most recently elected Conamuri national director, Alicia spends most of her time living in the Conamuri offices in a quiet neighborhood near downtown Asunción. Alicia glanced over her shoulder toward her mother's house, which was still lit as her grandmother, mother, and year-old daughter were bonding and laughing while the news played on an old TV. The home was humble

with a dirt floor, but its brilliant green paint glowed even in the dark. Through the window, we could see Alicia's grandmother swinging back and forth in her hammock.

"How did your family come to this place?" I asked her.

Alicia began pulling apart the jagged edges of our fried *tortillas paraguayas*.

> This is a land occupation. Us…my family that is…my grandmother they removed her from her land because here in Paraguay, it's only recently that there is a law that considers women as a subject of agrarian reform. And before women had to have, if they didn't have a husband, they had to have an older son for the land title. She is not a subject of agrarian reform…[w]hen people began coming here, they gave my grandmother ten hectares because she was a single mother with many children, but they [the political party in power] took away her land. Because she was a woman, because she couldn't title her land…and for this they took away her land. My aunt, at age thirteen or fourteen, was working as a nanny for the same man who kicked us off our land. My mother was also working as a domestic employee…then around 1982 or 1983, we occupied the place where we are now. My mother occupied this land because there was a house. There is no more land…but even to this day we've never had a property title. I know what it is to live *sin tierra.*[7]

Alicia's family history, one of predominantly single women who have been repeatedly dispossessed, reflects the complex entanglement of gender, land, and dispossession as they articulate in Paraguay. Even though agrarian reform was supposed to address *campesino* issues of land access, by virtue of being a female-headed household, Alicia's family was foreclosed even from the possibility of receiving a land title through this mechanism. Their ability to currently access land is mediated by local social relations, not just the legal framework established by the Paraguayan state. The experience of *sin tierra* is what led Alicia to her activism with Conamuri. When she was a teenager, her family and their neighbors were once again threatened to be forcibly removed from the land on which they lived and subsisted. She joined a local radical church organization in order to defend it, but eventually Alicia found

[7] Interview, Alicia Amarilla, 9 August, 2019. *Sin tierra*, from Spanish, translates to landless. *Sin tierra* is commonly used as a refrain to describe the condition of the peasantry who do not hold land titles or easy access to land.

herself becoming more involved in a newly formed organization centered on women's issues: Conamuri. She was introduced to the movement by her neighbor, who was a founding member. Alicia's circumstances have shaped why she fights for an agroecology that is attentive to the specific needs of *campesina* and indigenous women.

Alicia's family is caught in an ongoing process of capital accumulation and plantation expansion that results in the continued dispossession of the peasantry. The specific experiences of Alicia's family are shaped by multiple generations of a female-headed households. The legal allotment of land through agrarian reform co-produced the peasantry as a class and shaped gender relations vis-à-vis the land. This is not to say that gender relations — and the associated uneven distribution of power — were wholly produced through agrarian reform but that rather they relied upon and furthered gendered norms of household labor to exclude women from access to the market and basic services needed for survival. By producing males as subjects of agrarian reform, and therefore legally allowed to own land and receive technical assistance packages, the 1963 Agrarian Statute circumscribed women's reproductive role in the household (Duré, Ortega & Palau, 2012). Rural women are thus marginalized in multiple ways — in their class status as peasants, and as women in the household, which both has implications in the legal allotment of rights and privileges and subjects them to violence in the household and communities. In other words, these processes are gendered.

This chapter looks to Paraguay's history of land, gender, and *campesino* resistance in order to understand how and why agroecology is mobilized by Conamuri to address the historical and contemporary exclusions experienced by the *campesino* class, and women *campesinos* in particular. As Alicia indicates, it is precisely these experiences which led her to activism within Paraguay's agroecology movement. This chapter argues that the continued plantation expansion

in Paraguay laid bare the ways agrarian reform failed the *campesinado*[8], thereby creating space for agroecology to become a new way for agrarian social movements to articulate their demands and continue organizing. Agrarian reform on its own did not contend with the multiple issues created for the *campesinado* by plantation zones. Agroecology offered a more holistic vision, which also made it more appealing to a women's peasant and indigenous social movement like Conamuri. Since women deal with specific challenges within the plantation zone, agroecology creates more space to grapple with these issues in ways that agrarian reform could not. This chapter is divided into three sections. First, we look at the history of land distribution and agrarian reform in Paraguay as the foundations of power. Next, we look at the multiple ways Paraguayan *campesinos* and indigenous peoples have resisted the expansion of plantations over the late-20th and early-21st century. Finally, we turn to Conamuri itself, and how this movement utilizes agroecology to articulate a vision for rural peoples that addresses interrelated problems created by capitalism, patriarchy, and the exclusions of the peasanty and indigenous communities from decision-making processes.

2.2 Paraguay's plantation zones

It is in the context of the plantation zone that agroecology takes its form in Paraguay. On the one hand, the multi-faceted issues cultivated by plantation zones have made agroecology an appealing frame to organize the *campesinado* for many contemporary agrarian social movements. These movements draw on the science of agroecology, connect these practices to broader political aims, in order to encourage participation. To fully understand the impact and

[8] *Campesinado* literally translates to the peasantry in English, but *campesino* does not share precisely the same meaning as peasant in English. While it refers to a specific class formation, it is one that is continues to exist. Similarly, *campesinado* refers to a contemporary class formation. While in some places, *campesino* was used by the state to replace the ethnic indigenous category as a marker of modernity (Gotkowitz, 2007), this is not the case in Paraguay, where *campesino* and the *campesinado* can refer to a wide variety of ethnic or racial identities and national heritages (Chesterton, 2013).

implications of agroecology, it must be placed in tension with its supposed anti-thesis: industrial agriculture. Li (2017, 2018) utilizes the concept of the plantation zone to emphasize the scale of industrial agriculture, but also to highlight the importance of the spaces and people that exist *in between* plantations (Li, 2017). This shifts our focus away from only the moment of a land grab itself to focus on the long-term and intergenerational implications of a global agri-food system that relies upon plantations. In other words, plantation zones encompass an entire landscape transformation that extends beyond the scope of any individual plantation or land grab. Plantations have been a centerpiece to the unfolding of contemporary capitalism; they have re-arranged labor relations, commodity chains, and the bodies of marginalized populations. The plantation is a labor relation that pre-dates capitalism but was radically transformed by it (Robinson, 2000[1983]). Plantations are not new, but since the implementation of the Green Revolution (Patel, 2013) the ways they have been mobilized by agribusiness to extend their production have altered ecologies, societies, and land relations in ways that are violent in the short and long-term (Rosset & Giraldo, 2018). For Li, altering plantations would not reduce the violence of this system because "plantations are routinely violent because of the forms of life they destroy, the resources they monopolize, the futures they preclude, and the set of material, social, and political relations they enable and fix in place," (Li, 2018: 329-330).

The concept of the plantation zone is useful in that the concept integrates a focus on global food systems, regimes of land access, and its impact on populations. Contemporary plantations often escape global outrage because they continue to allow people to live in between them. Land grabs are not always immediate, nor do they always immediately appear violent. The land on which people are able to live might be sufficient for the time being, but across generations these so-called enclaves cannot support people's livelihoods (Li, 2017). Questions

surrounding intergenerationality pull Li's work into conversation with gendered accounts of dispossession. If we heed Nancy Hartsock's (2006) claim that dispossession is gendered, then plantation zones should be viewed through a gendered lens as well. Through various means, plantation zones undermine the social reproductive capacity of populations, much of the labor of which is deeply gendered (Rai et al., 2014). In this context, social reproduction includes the labor and social practices which allow for productive labor to occur (Bhattacharya, 2018; Fernandez, 2018). This labor is often unpaid, and much of the burden of reproductive labor falls on rural women in plantation zones (Fernandez, 2018). As populations are increasingly marginalized through ongoing plantation expansion, the ability to access the resources required for social reproduction become threatened. In this case, access to land and an uncontaminated environment are particularly important to averting some of the major pitfalls of limited resource access.

Land grabs are about much more than the statistics of how many hectares have been accumulated in a given time period. They have real impacts on people who live – and those who can no longer live – in plantation zones. This leads Li (2018) to ask what life looks like in the plantation zone across time and space? In this chapter, I extend this question to include: How do people living within the plantation zone respond to its continued expansion? This chapter by no means claims to articulate all the ways Paraguayan *campesinos* respond to continued plantation expansion. However, this theoretical framework begins to explain how and why certain movements have shifted away from agrarian reform and toward agroecology as a means of challenging this expansion. In contrast to many agrarian reform policies implemented in Latin America throughout the twentieth century, agroecology begins to contend with the many challenges people are confronted with in the plantation zone because it is not only centered on re-arranging land relations, but organizes infrastructure . When conceptualized in relation to the

plantation zone, we begin to see agroecology not as an antithesis to agrarian capitalism, but rather produced alongside it. This is important, because it pulls into focus the ways livelihoods can exist "simultaneously inside and outside of capitalism," (Tsing, 2015: 134). Since women's outsized role in reproductive labor leads them to face specific challenges, this is also what has made it an appealing frame for a gender-specific agrarian movement as well. Frames are useful to social movements because they present a particular narrative that represents the movement to outside actors and negotiate relationships between participants (Martin, 2003). Since agroecological practices encompass much more than only the ability to access land, agroecology becomes a way of representing and producing the idea of *campesino* lifestyle, even though not all participants necessarily subscribe to this framing in the same way (Wolford, 2010). Not all participants necessarily engage with agroecology in the same way, which is why it is important to be attentive to how agroecology is framed by participants themselves, not just in the literature produced by Conamuri. The framing of agroecology within Conamuri is linked to the historical gendering of land and land access in Paraguay. The next section looks to how Paraguay's land relations have been historically gendered, and how it has been shifted through the expansion of agrarian capital in the countryside.

2.3 Paraguayan land distribution and the failures of agrarian reform

Paraguay's plantations have their root in both the colonial and post-colonial eras. In other words, they are historically specific to a nation-state that obtains its legitimacy through colonial forms of rule, even after official colonization has ended (Galeano, 1971). For much of the nineteenth century, the majority of Paraguayan land was owned by the state, through a policy implemented by dictator Dr. José Gaspar Rodríguez de Francia (ruled 1814-1840) (Galeano,

2012). *Campesinos* were allowed to work the land for subsistence, provided they also produce some yerba mate and cotton to give to the state for export (Hetherington, 2011). The system of public land ended in 1870, when Paraguay's devastating defeat in the Triple Alliance War meant that the state had to sell off its land to pay its massive war debt, jump-starting the privatization of land (Ezquerro-Cañete & Fogel, 2016). The majority of the sold land was in Paraguay's eastern border regions, effectively enclosing the majority of *campesinos* within 100 kilometers of Asunción (Zoomers, 1988; Zoomers & Kleinpenning, 1990).

The twentieth century saw several different attempts at agrarian reform. Many other countries in Latin America over the course of the twentieth century undertook policies of agrarian reform to various effects (Thisenhusen, 1995). Some involved a radical redistribution of land, meanwhile others were largely ploys to procure political favor. Paraguay's first encounter with agrarian reform was the Agrarian Statute of 1940, which granted women and men the right to obtain land titles for small plots of land (Williams, 1985). The Agrarian Statute of 1940 was a policy born out of frustration of the average Paraguayan after the memories of the Triple Alliance War and the more recent Chaco War with Bolivia (1932-1935). This attempt at agrarian reform was overturned only a year later with almost no land redistributed. Upon their return from the war, many soldiers were allocated minimal plots of land on which was difficult to grow enough food. Ultimately, it was agrarian reform in name only. Almost no land titles were granted to *campesinos*, and elites continued consolidating land in order to produce cotton and yerba mate for export (Whigham, 2017).

The timing of Paraguay's second attempt at agrarian reform linked it to global narratives of the Cold War and the spread of communism. In the 1950s, both Cuba and Bolivia experienced revolutions that restructured the prevailing *latifundio* system, and therefore fundamentally

disrupted power relations (Gotkowitz, 2007; Barraclough & Collarate, 1973). The emergence of a Soviet-aligned government on its doorstep stoked national security fears in the US. Latin American elites, whose power was largely based in their control of land, were also concerned about losing control over their means of power (Petras & Veltmeyer, 2003). Agrarian reform was a way for the US, particularly through the suggestions put forth by the Alliance for Progress, to protect its hemispheric interests, and for Latin American elites to stave off more fundamental threats to their power (Dunne, 2013; DeWitt, 2009). The traditional system of land tenure was understood as a root cause of peasant revolution (Kay, 2001; Barraclough & Collarte, 1973). To prevent a more radical system of land redistribution from taking hold, modified types of agrarian reform were implemented by elites.

In some regards responding to *campesino* demands, truncated versions of agrarian reform were implemented in countries such as Colombia, Brazil, and Paraguay, to name a few (Thiesenhusen, 1995). These versions of agrarian reform which did not fundamentally alter large-scale landholdings, even though some land may have been granted to smallholders or *campesinos* (Petras & Veltmeyer, 2007). Paraguay's most notorious agrarian reform policy was implemented by the infamous Alfredo Stroessner (ruled 1954-1989). By 1956, 49.07% of the population did not have land titles (Riquelme, 1994). In order to prevent *campesino* rebellion, Stroessner implemented his own Agrarian Statute in 1963, thereby "establishing the legal parameters for colonization," of the interior (Hetherington, 2011: 28). Stroessner's government would create colonies in new parts of the country to encourage migration away from Asuncion. This policy allowed Stroessner to build legitimacy among *campesino*s (Galeano, 2016). By encouraging *campesinos* — many of whom were living in densely populated communities within one hundred kilometers of Asunción — to migrate farther east, Stroessner also appeared to be

solving the perception of overpopulation around the capital (Zoomers, 1988). After working their ten hectares in the colonies for seven years, c*ampesinos* were promised titles to that land (Carter & Olinto, 2003).

Rather than redistribute land, agrarian reform helped jump-start the entrance of industrial soy into Paraguay. As they sought to make the land manageable to stake a land title claim, *campesinos* undertook a lot of the difficult work of clearing the dense Atlantic Forest that dominated eastern Paraguay, which helped produce the infrastructure and landscape necessary to facilitate agribusiness growth. Stroessner utilized the legal precedent set by the 1963 Agrarian Statute to give land titles to Paraguayan elites or Brazilian agribusinesses. Paradoxically, agrarian reform paved the way for plantation zones to become a preeminent force in Paraguay. According to the Truth and Justice Commission (2008), responsible for documenting the violations of Stroessner's government, out of the twelve million hectares allocated through the Agrarian Statute between 1954 and 2003, nearly eight million were appropriated illegally by elites and agribusinesses. The legal parameters set by the Agrarian Statute increased the amount of land controlled by a private property regime, especially industrial agriculturalists. The Brazilian agribusinesses, looking to expand their production out of already-crowded southern Brazil, began planting soy in Paraguay on a massive scale (Oliveira, 2016). With them, agribusinesses brought massive ramifications for Paraguay's *campesinado* as they implemented an industrial-scale plantation zone of soy in eastern Paraguay over the coming decades.

In terms of land area, the period between 1991 and 2008 saw a 350 percent expansion in agribusiness ownership (Elgert, 2016). Between 2003 and 2017, the number of hectares owned by agribusiness increased from 2.35 million hectares to 5.13 million hectares (Duré & Palau, 2018). Between 2007 and 2017, agribusinesses increased their landholdings by 24 percent. In the

same period, *campesino* landholdings declined by 15 percent (Pereira, 2018). Agribusinesses primarily produce GM crops, especially soy, corn, wheat, and sugar cane (Palau, 2018). Soy has been particularly rapacious in its expansion; in the last fifteen years, the amount of land dedicated to soy has more than tripled (Oxfam, 2017). More drought-resistant seeds allow soy to continue its expansion into the dry Chaco region (Ortega, 2019). In eastern Paraguay, where most *campesino* colonies from agrarian reform are located, agribusinesses have resorted to dispossession to continue expansion. They utilize multiple modalities of forced removal: immediate removal, and slowly making *campesino* livelihoods unviable (Fernandez, 2018). Agribusinesses also increasingly utilize violent tactics to remove *campesinos*, especially those without land titles, from plots of land to convert them to industrial plantations (Correia, 2017).

There are multiple ways that agribusinesses are slowly forcing the migration of *campesinos* as well. Paraguay's commodity crops, including soy and corn, are usually mono-cultivated, meaning that there is a single crop planted across a field. Since agribusinesses rely on GM seeds[9], they also utilize chemical inputs like pesticides and herbicides to increase the changes of a high crop yield. These pesticides leech into the soil and water, which contaminates the wider environment (Hetherington, 2014). This impacts rural populations, who thenwater and staple foods. According to a recent study, the level of pesticide contamination, specifically the pesticides used with soy, in Paraguay has altered the rural children's DNA with negative implications for their health (Última Hora, 2018, December 11). Households' ability to produce food is dramatically shaped by the expansion of plantation zones as household crops struggle to survive alongside intensive agrochemical use (Altieri, 2009). In addition, GM soy only requires

[9] Genetically modified seeds were technically illegal in Paraguay until 2004, however, it is highly likely that Brazil brought in GM seeds long before (Carter & Olinto, 2003). Ever since 2004, Paraguay has rapidly expanded the number of GM packages approved for cultivation (García & Ávila, 2019). We will return to these questions in Chapter 3.

three laborers per 1,000 hectares (Roig, 2008), so even as households must increasingly rely on income to provision daily necessities, opportunities for waged work are few and far between. Entire regions are impacted by this model of production, not just the plantations.

Looking at the time span from 2003-2017 again, the number of hectares titled to *campesino* producers declined from 685 thousand hectares to 334.5 thousand hectares (Duré & Palau, 2018), and much of this land wasincreasingly marginal (Ortega, 2018). A decline in land access holds multiple meanings for *campesino* producers. Many continue to occupy and utilize land, but their ability to remain there is always under threat from dispossession. The stakes have become so high for land occupations, that the number of new militant occupations has declined steadily between 2008 and 2018. In 2008, there were eighteen new occupations, but only one new occupation in 2018 (Palau, 2019).[10] Fewer *campesinos* have access to land, and their options for reclaiming land are threatened as well. As the plantation zone continues to spread, *campesinos* must deal with the consequences of both immediate and long-term modalities of dispossession (Fernandez, 2018).

Alicia's community in Repatriación district was one of the agrarian reform colonies and is illustrative of these dynamics. Repatriación is located on the southern edge of the Caaguazú department. It is approximately halfway between Asunción and Paraguay's second largest city, Ciudad del Este, which sits on the border with Brazil. To facilitate *campesino* movement to the frontier, various highways were built, including Ruta 7, which runs through Caaguazú to connect Asunción to Brazil. Repatriación is located just below Ruta 7, making it an ideal location for resettlement, and helping establish new infrastructures to facilitate soy exports to Brazil.

> Repatriación has a history…one of repatriation. During the Stroessner dictatorship, our dictatorial president, he brought all the people who were in

[10] The number of new occupations enacted per year has declined significantly since the 2012 Marina Kue Massacre, where twelve occupying *campesinos* were killed by a police force dispensed by an agribusiness looking to cultivate on that land.

> Argentina, who were located in twenty countries. He brought them here, and left them in the *monte*,[11] in truth. Everything was *monte*. Many people died, women, children. They died from different types of sicknesses. Those who could left again. They returned to Argentina or other places. And those who couldn't stayed here and populated Repatriación.[12]

Alicia's recounting of Repatriación's history as a settlement colony illustrates the level of the uncertainty attached to agrarian reform for *campesinos*. Even those who stayed in Repatriación have been displaced from quality land, and they lack the security afforded by land titles (Hetherington, 2011). They were dependent upon a government promise of land titling and service provisions that were rarely realized. Even though Stroessner's government re-located *campesinos* to Repatriación, the land Alicia's family and neighbors currently occupy was titled to the family of one of Stroessner's girlfriends before his government collapsed in 1989.[13] Her family still holds this land title. Even though Alicia's neighborhood is currently allowed to live on this land, that could change at any moment if the property owners decide to rent the land for agribusiness cultivation. Alicia's family and her neighbors live under the constant threat of forced removal.

2.3.1 Women, social reproduction and the limits of agrarian reform

The experience of Alicia's family is conditioned by their class as peasants, and as rural women. Agrarian reform was particularly problematic for women in two ways (1) they were unable to directly receive land titles; (2) even when they were able to access land, the continued expansion of plantations made their labor increasingly difficult. In spite of their key role in food production, family care, and general running of the household, rural Paraguayan women are subjected erasure and violence in specific ways that do not necessarily correspond to their male

[11] Spanish for wilderness or brush.
[12] Interview, Alicia Amarilla, August 5, 2019.
[13] Field notes, June 15, 2019.

counterparts (Duré, Ortega, Palau, &, 2012). Gender is not a stable identity; it shifts over time and becomes redefined in relation to other social identities and relations, including labor ones (Mollet & Faria, 2011; Ong, 1990). The issues rural women face are not only caused by plantation expansion. However, their expansion does make their work more difficult by locating peasants on ever-more marginal land, making food production more difficult, and increasing levels of sickness within households due to pesticide exposure. Agrarian reform, by only promising land access, and even then, only under certain conditions, is unable to provide households with the means necessary to re-generate and replenish the resources that maintain the household.

This is the case in Paraguay as well, where patriarchy and the expansion of industrial agriculture have shaped how women become defined as a category and the roles they are expected to fulfill. Women were unable to receive land titles under the 1963 Agrarian Statute until it was modified in 2002 (Oxfam, 2017). Any land titles that were granted had to be in the name of a husband or the eldest son. This also meant that women could not receive technical assistance packages, which encouraged many *campesinos* to engage in commodity production using pesticides and GM seeds (Oxfam, 2017). Alicia's grandmother has been able to live on the land as a single mother due to communities allowing her to do so, which leaves the family vulnerable to removal. The space around their home is barely enough to sustain a garden with poor-quality soil. However, legal exclusions from land access, agrarian reform policies' primary concern, are not the only factors that shape women's condition of marginality, which is also configured through the daily experiences of patriarchal gender norms.

While in recent decades women have been given legal parity with men, they are still expected to perform the majority of social reproductive labor within their households and

communities. Women's labor is made more difficult in specific ways with the plantation expansion and worsening social and environmental conditions. As pesticides contaminate the local environment, including soil and water, production of household staples becomes more difficult. Exposure to pesticides is also having significant health ramifications They disproportionately bear the burden of caring for sick family members and providing daily food from their gardens. In addition, women rarely have a say in how money is spent within the household (Duré, Ortega & Palau, 2012; Oxfam, 2017). Therefore, even in cases where agrarian reform allowed women to indirectly legally access land through their family or community connections, there are limits to what land on its own can achieve to assist in daily tasks.

Rural Paraguayan women take on both productive and reproductive roles, but frequently their reproductive role is the one emphasized. The allocation of household work is therefore gendered. Women take on tasks in the farm, garden, and household in order to ensure the continued survival of the household. Even within tasks in the farm – which is usually shared with men – the division of labor is often also gendered (Duré, Ortega & Palau, 2012). Even though women often participate in the tasks often associated with men's labor, such as in the farm, men do not frequently take on household chores or care for the garden (Duré, Ortega & Palau, 2012). Simultaneously, women were disproportionately burdened with the social reproductive labor of both the household and community. As plantation expansion pushes *campesinos* onto land that is more marginal, contaminated, and of lower quality, the tasks associated with producing food become more difficult. The resources required to work the land in ways that sustain the household become more challenging to access and re-establish across growing seasons. This is what Rai et al. (2014) term the depletion of social reproduction. In addition to depletion, this process makes many *campesino* households more dependent on wages that can be generated

through migrant labor, particularly that of rural Paraguayan men (Finnis, 2017). As men in particular migrate in search of work (Finnis, 2017), the remaining family members must take on additional work to sustain the household.

It is important to acknowledge that a disproportionate labor burden is not the only way women are impacted by uneven power dynamics. The question of gender-based violence – in the household and beyond – must also be addressed as well. Inability – or perception thereof – to adequately fulfill their gender-allocated roles can leave women more vulnerable to abuse by family members (Ocampos, 1992). Between 2004 and 2013, more than 260 cases of homicide were tried as cases of femicide[14], and since 2012, the number of femicide cases increased each year (Vera, 2018). Rural women regularly face domestic abuse and violence from male family members, including husbands, fathers, siblings, and sons (Corvalan, 2013). In moments of violent land-grabs, women are vulnerable to additional forms of violence. When the Paraguayan police were dispensed to disrupt a *campesino* land occupation in May 2000, at least ten women were raped, groped, and threatened with rape (Caceres, 2019). The performance of gender identities creates norms which legitimize and sustain power dynamics. These norms render people identified as female vulnerable to these types of violence

Rural Paraguayan women's marginalization is shaped by both legal frameworks (such as access to land titles) and the experiences of everyday life. While each *campesina* has a distinct experience of these processes, the ways they are classed and gendered as individuals becomes salient in different ways at different moments. Thus far we have focused on how marginalized groups have been created in relation to patriarchy and expanding plantations. Since land access

[14] Femicide refers to the murder of women by domestic partners, husbands, boyfriends, or male relatives due to issues of domestic violence or abuse (Rubin & Bovino, 2014). In Paraguay, cases of femicide (*femnicidio*) are tried as a type of homicide with its own set of possible punishments for those found guilty.

alone cannot account for the complexities of resource depletion in social reproductive labor (primarily though not exclusively shouldered by women), agrarian reform alone was an inadequate framework for dealing with the complex issues *campesinos* face in their daily lives, and women experienced this in specific ways. Since land rights allocated through agrarian reform proved insufficient, rural social movements needed another frame to express the *campesino* experience and generate the possibility for addressing their multi-faceted realities. Next, we turn to how agroecology emerged as a more encompassing framework for *campesino* social movements to address their multi-faceted issues.

2.4 Agroecology as a new *campesino* organizing strategy

Agroecology as an alternative agricultural vision began as a highly technical approach to agriculture within ecology and agronomy. Starting in the 1970s and 1980s – around the same time more scholars began politicizing our approach to ecological sciences – agroecology began to cross-pollinate with more critical fields of scholarship as anthropology, sociology, and ethnoecology (Altieri & Nicholls, 2017). The NGO strategy to use agroecology to assist small-scale producers dovetailed with more participatory approaches to development practice in the 1980s, which opened up development-driven agroecology to a wider array of local knowledges and experiences (Altieri & Nicholls, 2017; Scoones, 2009).

Over time, agroecology shifted from simply another suite of agricultural technologies to a radical vision for change in the countryside (Altieri & Nicholls, 2017). In line with more bottom-up approaches to development, agroecologists became more intimately concerned with the experiential knowledges of local populations to create sustainable agri-food system (Altieri & Nicholls, 2017). By paying attention to local knowledge systems, agroecologists and

agroecology-based development programs sought to counter the increased deforestation, soil erosion, nutrient depletion and loss of genetic diversity wrought by the industrial agriculture production system (Altieri & Nicholls, 2017). Rather than rely solely on Western scientific approaches to agriculture, agroecologists increasingly looked to local populations to develop appropriate production techniques.

It is precisely this critique of top-down approaches to development that helped make 'an agroecological revolution' possible (Altieri & Nicholls, 2017; Altieri & Toledo, 2011). Such critiques were taken up through transnational agrarian movements such as Via Campesina, where, over the course of the 1990s, began to tie agroecological practices to a more expansive political agenda (Mesner, 2008). Indeed, it is more appropriate to speak of agroecolog*ies* rather than agroecolog*y* because of the multitude of ways it has been taken up by social movements, scholars, and NGOs (Wezel et al., 2009; Mendéz, Bacon & Cohen, 2013). Conamuri has a specific take on agroecological practices because of its emphasis on gender relations, but even within the movement, people practice it in a variety of ways (Karriem, 2013). As it has been taken up by more grassroots agrarian movements, agroecology has come to encompass much more than a set of agricultural practices. It integrates a theory of capitalism – in particular the ways it impacts the global agri-food system – with *campesino* lives and livelihoods. Altieri and Toledo (2011) cite three main dimensions of what they call the agroecological revolution (1) epistemological; (2) technological; (3) social (Altieri & Toledo, 2011). As part of its epistemological practice, many agroecology social movements advocate a *campesino-a-campesino* (peasant-to-peasant) pedagogy. As agroecology spread through NGOs, it became better known to an increasing number of agrarian movements which adopted the many aspects of agroecology.

Scholars of agroecology call this transformation taken up by social movements 'militant' (cf. Altieri & Nicholls, 2017), since they take a political stance against capitalist modes of agricultural production (Altieri & Nicholls, 2017; Holt-Gimenez, 2006; Giraldo, 2020). This is typical of transnational agroecology movements like La Via Campesina, which is a transnational agrarian movement that operates as an umbrella organization for coordination among different agrarian movements world-wide (Borras, Edelman & Kay, 2008). Agroecology, which through agrarian social movements has become inextricably linked to food sovereignty, land redistribution, and public health issues, becomes a path toward *campesino* liberation and a more sustainable system of food production (Rosset & Martinez-Torres, 2012). While land redistribution remains part of the agroecological vision, agroecology maintains a broader vision for improving *campesino* life and livelihoods. It also advocates for the protection of native and diverse seeds, biodiverse ecosystems, and healthy environments for plants, animals, and people. In practice, agroecology involves the use of farm-produced inputs for agricultural production, rather than being forced to rely on external purchases such as fertilizers, pesticides, and seeds. Through practicing agroecology, the goal is to create mechanisms that allow farm inputs to be regenerated within the farm from year to year. Since it builds upon many already existing *campesino* strategies, agroecology includes a wide array of issues *campesinos* face and aims to address them. It is a way to understand and work against the precarious positions in which theglobal peasantry is placed. In Paraguay, all these reasons have helped many agrarian social movements shift toward an emphasis on agroecology rather than agrarian reform.

Image 4: An example of polyculture, one aspect of producing with agroecology techniques. Photo by author.

2.4.1 Campesino *resistance and the emergence of agroecology in Paraguay*

There is a rich literature on peasant resistance that encourages us to consider the nuances of agency and structure in movements that aim to challenge or maintain the *status quo.* It is beyond the scope of this paper to fully recapitulate this literature, but there are a few key elements that are relevant to understanding how and why agroecology has become an organizing framework for *campesino* movements in Paraguay. James Scott's (1985) seminal book, *Weapons of the Weak*, challenged structuralists to think more closely about how agency and resistance to oppression operates in everyday life through politics that might not be immediately legible to outsiders. Although this book remains influential, it is critiqued for romanticizing the potential of peasant resistance and agency. Fernando Coronil (1994) complicates Scott's framework while

remaining attentive to everyday resistance since peasants exist as "agents of identity construction that [participate], under determinate conditions within a field of power relations, in the organization of its multiple positionality and subjectivity," (Coronil, 1994: 648). Power, then, become a key principle to conceptualize resistance. Wendy Wolford (2010) and Kiran Asher (2009) remind us to center how social movements themselves are sites of politics and contestation, whereby people's diverse reasons for participation are homogenized in the process of cultivating a narrative of that movement and the forms of resistance it advocates. Participation in a movement, therefore, helps produces identities and subjectivities (Asher, 2009), because of the varied practices of social movement participation (Ulrich, 2016). As capital re-works rural spaces, the ways people respond to that change matter to the types of resistance that are undertaken, and who participates (Borras, 2009). Scholarship on social movements must account for the fluid and fragmented character of social struggles and movements (Wolford & Keene, 2015).

As the land-tenure regime in Paraguay shifted over time, so have *campesino* resistance strategies (Borras, 2009). As mentioned earlier, the 1963 Agrarian Statute emerged out of actual *campesino* demands over the course of the twentieth century in Paraguay. Its implementation had unforeseen consequences for the *campesinado*, however. One of Paraguay's most well-known *campesino* movements, the *Ligas Agrarias Cristianas* (Agrarian Christian Leagues), was one Paraguayan *campesino* movement in the 20th century advocating for agrarian reform. Inspired by liberation theology, the *Ligas Agrarias* grew most rapidly between 1960 and up through the mid-1970s. The *Ligas* organized around the idea of Christian fraternity and believed organizing through the church would lead to a more economically just society (Riquelme, Toralez & Guzmán, 2017). They demanded a more holistic approach to land redistribution that would

actually grant land to the rural poor and ensure their secure access to it, and were occasionally successful in this effort (Galeano, 2016). As they gained more power, Stroessner mobilized the full extent of his military and police forces to drive the movement out of existence (Riquelme, Toralez & Guzmán, 2017). Women involved in the *Ligas* were vulnerable to specific forms of violence enacted by the repressive apparatus of Stroessner's government, including public and private sexual assault (Soto, 2017). The *Ligas* effectively dissolved in 1976 due to this systematic campaign, but *campesinos* continued organizing in secret (Roig, 2008). Despite the *Ligas* efforts, agrarian reform policies increasingly concentrated land in a few elite hands (Areco, 2018). Frustration with the failures of agrarian reform alone to address the multi-faceted issues *campesinos* face has made agroecology an appealing alternative for many rural Paraguayan social movements.

As we have seen in Paraguay, these versions of agrarian reform did little to fundamentally alter the land tenure structure. Over time, *campesinos* became frustrated that agrarian reform had not alleviated their poverty or dramatically improve their way of life. Disappointment and anger over agrarian reform policies coincided with the further development of a different vision for agricultural production: agroecology. Frustrations with agrarian reform can be traced to the first-ever *campesino* march on Asunción in 1994. Over the course of three days, 40,000 *campesinos* occupied the capital, demanding an 'integrated' agrarian reform, because land on its own was insufficient (Roig, 2008). This was happening around the time agroecology was being taken up by transnational movements like La Via Campesina (Mesner, 2008). Agroecology slowly began to percolate through different agrarian movements, eventually reaching organizations in Paraguay around the early 2000s.

Agroecology became popular in Latin America as Paraguayan *campesino* organizations were splintering and dealing with the increased criminalization of protest. Paraguay, like much of South America, was negatively impacted by the Brazilian financial crisis in the late 1990s. This crisis led to an increase in the number of land occupations organized by *campesino* movements that had come back into public space after the fall of the Stroessner dictatorship in 1989. *Campesino* organizations increasing militancy provided impetus for the government to implement a new anti-terrorism law, which resulted in the deaths of many *campesinos* (Roig, 2008). The anti-terrorist law justified increased state violence against *campesino* land occupations, ultimately paving the way for agribusinesses to more easily expand their soy production (Hetherington, 2009; Hetherington, 2011).

As the cost of participation in land occupations increased, *campesino* movements sought new ways to articulate their demands that might invoke less direct state retaliation. Meanwhile, escalating tensions and internal conflicts within the larger agrarian movements began to fracture along ideological lines, resulting in a constellation of smaller agrarian movements (Riquelme, Toralez, & Guzmán, 2017). None of the above-mentioned factors necessarily caused the division of these agrarian movements, but collectively they created disadvantageous conditions. In 2005, Brazil's largest agrarian movement, the Movimento dos Trabalhadores Rurais Sem Terra (MST), officially adopted agroecology as the focus of its organizing (Turniawan, 2015). Since this movement is well known throughout Latin America and has been an inspiration to tactics utilized by Paraguayan movements for several decades (Riquelme, Toralez, & Guzmán, 2017), this had profound influence on Paraguayan *campesino* organizations hoping to salvage *campesino* movements from decline. Some of the best-known agroecology organizations to date in Paraguay

include Federación Nacional Campesina, Organizacion Lucha por la Tierra[15] and Conamuri. Agroecology began as an advantageous way for these organizations to mobilize, since the form of agroecology that was becoming popular across Latin America integrated more of the challenges *campesinos* faced in their daily lives. In Paraguay, however, long-standing frustration with these agrarian movements led to the creation of a women's and indigenous-specific organization: Conamuri.

2.4.2 Integrating agroecology and women's liberation

Due to its focus on gendered and indigenous issues, Conamuri also has a particular take on agroecology. Within agroecological practices, there is the possibility to think critically through issues of household reproduction, not just agricultural production, which makes it more adaptable to the multiple and varied issues rural Paraguayan women face. As such, it becomes central to Conamuri's organizing platform. On October 15th, 1999, on the International Day of Rural Women, three hundred women from community women's committees arranged a meeting in Asunción. From this meeting, they formed a network that came to be known as Conamuri. Since then, Conamuri has evolved from an umbrella network of women's committees to its own organization with a national and department-level leadership structure.[16] According to a 2012 pamphlet, Conamuri "is the principal organization that gathers and represents rural women and searches for alternatives to the distressing situation of poverty (*mboriahu*), discrimination (*nembo'yke*), and exclusion (*nembo'yekte*) for reasons of class, ethnicity, and gender," (Conamuri, 2012: 7). As the experience of Alicia's family illustrates, agrarian reform alone, with a nearly exclusive focus on land titles, could never address the principal issues *campesina* and indigenous women encounter in the plantation zone. By contrast, agroecology practices have

[15] National *Campesino* Federation and Organization of the Fight for Land, respectively.
[16] Interview, Alicia Amarilla, August 5, 2019.

been taken up in ways that incorporate a wider political vision where the labors of social reproduction can also be addressed.

There are Conamuri committees in twelve of Paraguay's seventeen departments. These committees are connected to the national leadership, who periodically visit to conduct workshops or intensive training sessions. These committees create a learning space where they can share their own experience while also being exposed to techniques developed through agroecology. Many of these committees run small weekly fairs to expose more people to the idea of agroecology. Conamuri participants also organize and participate in marches and occupations, but much of the focus is on education. Claudio, through his family's connection to Conamuri was able to receive an education as an agroecology technician, and now goes to people's homes to assist them with anything they might need. However, Claudio, having grown up in the countryside, knows the importance of centering local knowledge in his own practices:

> The *campesino* knows when to do this, even if they can't explain it scientifically. They'll just say '*es mejor, upeicha*.'[17] I may have the scientific training to explain why, but I just want to listen because the agribusinesses just want to take away this knowledge. The beauty of the *campesinado* is that there is a diversity of knowledges. I listen more than I try to teach.[18]

Education for Conamuri and its technicians is not about domineering over local practices, but about creating conversations between the science of agroecology and people's own experiences. These practices, however, are threatened by plantation encroachment and agribusiness's efforts to encourage *campesinos* and small holders to produce in ways that replicate their own external input intensive, monocropping model of production. Conamuri

[17] Jopará (a combination of Spanish and Guaraní) that translates to: It's better. That's just how it is."
[18] Interview, Claudio, June 17, 2019.

Image 5: Conamuri's tables at the National Seed Fair on July 27, 2019 in Asunción.

attempts to disrupt this process by improving upon peoples' material farming practices and framing the *campesino* experience as antithetical to agribusiness models.

While agroecology practices assist in many productive and social reproductive tasks done by women, the ways that agroecology is argued for in various Conamuri pamphlets lays clear that agroecology alone cannot be a panacea for the variety of issues rural women face. The specific challenges for women in the countryside are conditioned by patriarchy, racism, and capitalism (Conamuri, 2012; Roig, 2008). Within Conamuri's own literature, patriarchy is defined as "the system of domination by men and the subordination of women in familial, social, economic, and political relations, taking as justification biological, cultural, and social differences between genders as fact," (Conamuri, 2012: 5). Women's experiences in agrarian movements helped spur their desire to create a separate organization that focused on *campesina* and indigenous women. Militant *campesino* organizations also promoted structures that perpetuated patriarchy within their ranks, which has been cited as justification for Conamuri's

founding because "[i]n these organizations we also face these types [of stereotypical] roles for women even though it remains strange that women should be the ones who are charged with leadership roles, they remain in roles such as secretary, logistical support or cooks," (Conamuri, 2012: 8). Effectively, there was a prevailing politics of participation (Wolford, 2010) connected to patriarchal norms of gendered behavior that made women's engagement more difficult. Social movements are comprised of people, who are situated differently within the organization in terms of the ways they elect to participate and treat others associated with the movement (Wolford & Keene, 2015). This is why it is important to be attentive to movement participants and their practices, not just how the movement is represented in its literature or to an audience. To summarize the sentiments of Magui Balbuena, one of Conamuri's founding members, simply because people are participating in these organizations does not preclude them from the desire to control the bodies of others (Roig, 2008). Conamuri, then, utilizes agroecology to improve women's lives on the productive and social reproductive fronts, but also integrates sustained critique of patriarchy as it operates within households, communities, and agroecology movements. This complexity has significant impacts on the women who participate in Conamuri.

2.4.3 Agroecology in translation

Although agroecology has several key features that serve as a guiding philosophy, in reality there is great diversity in terms of the way agroecology is practiced in the everyday by movement participants `(Karriem, 2013). The types of activities that participants emphasize reflects some of the ways they understand the role of the movements, while their participation simultaneously shapes the movements themselves (Wolford, 2010). Conamuri integrates additional complexity by pointing to the interrelationship between women, the division of household labor, and agroecology. This is also what has made it appealing to many women in

Paraguay; they are able to utilize the organization to improve their lives in the ways they see fit. Certain members emphasize the importance of learning agroecology, while others highlight how Conamuri has allowed them to improve gender relations within the household. The salience of Conamuri's existence as an organization – even as it remains a site of contestation – is made to be important within the everyday practices of its participants.

Conamuri's participants are well-aware of the importance of the division of labor in shaping the lives of women as they go about their daily lives. Celia, of Edelira district, emphasizes the women's centrality to agroecological production.

> Agroecology is a way of life as well. Especially of the *campesinos*. So that they know that women always practiced this mode of production. It is a mode of production that is kind with the environment and more healthful as well. That it is also for the people. Healthier, without poison [pesticides], and with the environment itself along with the land…the air…the water. I particularly believe that agroecology and feminism can sustain each other as well. And with the *campesinado* I believe that having equality between women and men would be very important particularly in terms of the division of labor.[19]

For Celia, it is important to acknowledge the centrality of women's labor to the creation of agroecological knowledge systems while also advocating for a re-distribution of labor. Since not all advocates or practitioners of agroecology foreground these issues, it is up to Conamuri's participants and their everyday practices to address them. Agroecology has become more associated with women's labor in Paraguay because the men working in the farm fields were producing largely for the market, and subsequently targeted by agribusinesses as consumers of their trade-marked seeds and pesticides. The association of women's labor with agroecology is situated in historical, lived context that shapes how Conamuri's participants engage with the movement now.

[19] Interview, Celia, June 11, 2019.

"Conamuri does many things. Principally in the garden and how to work with seeds. I do this with many people and my neighbor comes to help me in the garden," says Juliana of Repatriación district.[20] Graciela, also from Repatriación, similarly cites how Conamuri has been instrumental in helping her take better care of her soil, and her plants without the use of pesticides.[21] Women had access to these aspects of everyday life before,, but their exposure to agroecology through Conamuri has deepened their knowledge. As Juliana, an older woman, indicated above, her experiences with Conamuri have fostered new connections with people around her to assist in caring for her garden. Using agroecology, they have been able to make some of their social reproductive tasks easier, through improving material practices for inputs on the farm and mobilizing connections in new ways.

Other participants stress how important Conamuri has been in improving gender relationships within their households and communities. Lumia was encouraged by the size and strength of the movement in her area:

> During the meetings you learned about what women's rights mean. Before, only men made decisions in the household. The opinions of women weren't valued. The word of men you had to respect. This knowledge of women's rights that we learned in the meetings wasn't to go home and get in fights with the men, but rather allow you to defend your rights. The organization woke us up, but at the same time it was worrying to know about these rights and know we had lost all this time.[22]

In this statement, Lumia expresses some of the ways women participate in propagating patriarchy themselves. Ramona, a young mother from Edelira district, attributes this to ongoing gender norms that remain unquestioned: "[The challenge for women] is that the work is heavier and men have more freedom to leave, women…it's not always a question of men not allowing

[20] Interview, Juliana, July 23, 2019.
[21] Interview, Graciela, July 24, 2019.
[22] Interview, Lumia, July 22, 2019.

them to, but that the women themselves also don't feel they should leave." Ramona cites Conamuri as an important force that has challenged these norms in many households. Overall, many women have stressed how Conamuri has helped destabilize uneven power dynamics in the household. While it is not as immediately apparent, this is another way for the depletion of social reproductive capacity (Rai et al., 2014) to be more effectively managed. Altering gender relations in the household can also be key to survival.

A broader realization of how capitalism and patriarchy shape household dynamics and agricultural labor for multiple household members is necessary to realize these changes. Men who have family members involved in Conamuri organizing have also acknowledged the role of participation in shaping family dynamics. An older man from the southeastern corner of Paraguay, Irineo has grown up with a particular set of beliefs about how the household ought to function. However, as many of his family members have become involved in Conamuri, he began to reconsider some of these ideas. One morning, Irineo and I began discussing the importance of feminism over breakfast. He spoke slowly as he considered how he and his partner and their relationship had changed over the years as they both became more involved in Conamuri:

> I learned many things from these changes we made. I was very machista. Machismo dominates here…Before I was very temperamental and here it is not only men that is machista, but women as well. But [with Conamuri] we now feel calmer, with more confidence [in each other], and we help each other out. Paraguay is machista and we grow up thinking [machismo] is truth.[23]

Involvement in Conamuri has included learning new ways of engaging in relationships within the household and community in addition to sustaining agroecological practices of production. In

[23] Interview, Irineo, July 3rd, 2019.

several households where I conducted interviews, this process has involved multiple household members, not just those who participate directly in Conamuri committees.

Meanwhile the discourse of Conamuri's leadership remains aimed at global systems of power. Conamuri's literature attributes blame to the capitalist mode of agricultural production that dominates the Paraguayan landscape. It is also language that is repeated by movement leadership in workshops and was also frequently mentioned by the participants. Their pamphlets, speeches, newsletters, and communiques nearly all reference both agroecology and an anti-capitalist, anti-patriarchal agenda. However, workshops and focus groups conducted with the popular base in small towns and villages tend to be more oriented toward training these participants in ways that can be directly applied to their lives now. The popular base members remain predominantly concerned with the daily needs of providing food, or with altering gender relations within the household to be more equitable. Daily life in the enclaves of the plantation zone are occupied with survival (Li, 2018). Agroecology offers one way to put off the slow squeeze of long-term dispossession in ways that land redistribution through agrarian reform on its own cannot. Through Conamuri, participants work toward these goals, though not always in the same ways.

2.5 Conclusion

The specific form agroecology takes in Paraguay is shaped by the particular experiences of the *campesinado* and indigenous peoples here. Agroecology itself is a site of contestation, and in the case of Paraguay, it is profoundly shaped by its co-production with the plantation zones so prevalent in this country. Conamuri has taken agroecology in a direction that addresses not only the specific productive and social reproductive challenges rural women face, but that also deal

with issues of patriarchy as they operate within households and communities. Precisely what constitutes agroecology is less important than how it is made to be important through people's daily lives. The aspects of agroecology that the Conamuri leadership emphasizes is specific and informed by a particular understanding of how agricultural production writlarge is inflected through patriarchal gender relations. The ways agroecology is practiced by Conamuri participants also continuously shapes the organization. I will again stress here that there is no single set of agroecological practices, nor is the political agenda that has become associated with agroecology movements uniform. Therefore, it is important to be attentive to how agroecology and agroecology movements are shaped by their specific conditions. This chapter has argued that agroecology is better able to contend with the multiple factors that drive long-term dispossession amidst plantations than agrarian reform was, which has made it appealing for a wide-breadth of agrarian movements. This is why agroecology has become such a central organizing platform to agrarian movements in Paraguay. Indeed, for Claudio, "Agroecology is everything…people don't think we exist anymore. That is what [agroecology] does. It says: we are here, we exist."[24] Agroecology has become an integral organizing strategy and point of identification for many *campesinos*.

However, it remains contested as multiple interpretations of the political impetus behind agroecology collide. The varied contestations over agroecology help situate how and why a gender-specific agroecology movement use it in an attempt to address the multi-faceted issues rural women face. It is a means of survival. The next two chapters address some of the specific ways agroecology has been utilized as a means of gender-based organizing, tracing bothits possibilities and limitations as an organizing force for rural Paraguayan women.

[24] Interview, Claudio, June 17, 2019.

Chapter 3
"Having seeds is already a question of politics"[25]: Seeds as sites of encounter

Image 6: The welcome sign to Conamuri's Semilla Róga. Photo by author.

3.1 Introduction

At the end of July 2019, agroecology movements and research organizations in Paraguay gathered in the Plaza de Democracia, in the historic center of Asunción, for the annual Feria Nacional de las Semillas. Around 8:30 in the morning, Dr. Miguel Lovera — of Heñoi Centro de Estudios, a local research NGO — gave the opening words. The day promised rain, so people rushed to set up their tents. Despite the commotion, everything quieted down enough for people to listen to Dr. Lovera's speech.

> Marito[26] is a poor marionette of the powerful. He is a traitorous president…and the best we can do is survive how we can. Survival with *campesino* seeds, with indigenous seeds…with our food sovereignty even though today they seek to change the Law of Seeds…they want to change all of this, all that you see here.

[25] Interview, Alicia Amarilla, August 5, 2019.
[26] Marito is short for Mario Abdo Benitez, Paraguay's president since August 2018. He is from the Colorado Party, Paraguay's strongest political party. His father was an important advisor to the Alfredo Stroessner during the dictatorship. Marito is a nickname used by both supporters (who mean it in an endearing way), and critics(who use it to diminish his authority). #DesastreKoMarito (#DisasterThisMarito) became a viral hashtag in the summer of 2019 after it was revealed that Marito had pre-emptively tried to renegotiate the Itaipu Treaty with Brazil, which is not due to be re-negotiated until 2023. This news began circulating just before the National Seed Fair, which was on July 27th, 2019.

He gestured all around him at tables piled high with produce, seeds, and other goods produced by the *campesinos* who had arrived that morning.

> They want to make seeds private property that you have to buy. The private sector has the money to register seeds in their name. And you will go to look for your seeds and you will find a *dueño*[27], as they have done with land in this country.[28]

Here, in the center of Paraguay's largest city, *campesinos* had gathered to exchange seeds and sell extra produce along with other goods they produce to each other and to people of Asunción. But all of this is under threat. Just as we saw with land in Chapter 2, seeds are the next frontier of capital accumulation (Kloppenburg, 2014) in the plantation zone. That very day, in Ciudad del Este on the border with Brazil, representatives from Cargill, Monsanto, and other major agribusinesses were meeting with delegates from the European Union and Mercosur[29] to negotiate what may end up being their largest trade negotiation yet (Achucarro, 2019). These multinational corporations are intervening in the negotiations to ensure that any agricultural trade between the two regional blocs is done with trademarked seeds. If this trade deal goes through with the proposed modification, it could provide sufficient justification for the Paraguayan government to alter the Seed Law that currently protects native seeds. The seeds at the National Seed Fair and beyond would become illegal under this new regime. Any *campesino* producing food with their own seeds would be vulnerable to charges of illegal agricultural production. It would make it more difficult to sell additional produce for income, which is increasingly necessary for *campesinos* to provide for their daily needs. If utilizing local seeds were outlawed, *campesinos* would need to rely more heavily on purchased seed inputs. Meanwhile, agribusinesses would profit from the expanded market and trademarking of seed varieties. The

[27] Spanish for owner.
[28] Field Notes, July 27, 2019.
[29] Mercosur is the regional trading block for the Southern Cone countries of South America, which includes Paraguay.

Image 7: Packing Conamuri's seeds for the National Seed Fair in July 2019. Photo by author.

commodification of seeds – directly in contrast with their historical uses among the *campesinado* – would deepen. Within the plantation zone, the biodiversity and practices associated with native seeds are at risk of disappearing in favor of the interests of capital.

But there are multiple geographies of seeds at work in Paraguay, including one spear-headed by agroecology movements. By promoting networks of seed exchange, Conamuri draws upon the historical role of Paraguayan women in agricultural production in order to counter agribusiness' seed commodification. Just a few days earlier, we had been preparing Conamuri's seeds at Semilla Róga in Caaguazú. We had been waiting all week for Conamuri representatives to come with supplies to package the seeds for the national fair. As we waited, Ña Marina, her partner Emilio, Claudio and I stripped corn cobs. The kernels landed in the wheelbarrow with a satisfying plop. Ña Marina and Emilio have been entrusted with the care of Semilla Róga since its founding in 2010. In the early afternoon, Alba and Cristian arrived on a motorbike with supplies from Conamuri.

As is typical of household visits, we pulled our chairs over to the hammock and began sharing *tereré,* a cold Paraguayan tea drink. Ña Marina refilled the tea between each turn with

the mint-infused water as we passed it around the circle. Meanwhile, Claudio ducked in and out of Semilla Róga with glass jars full of colorful seeds — bright reds, whites, yellows, and greens passed us as he set up the table for us to package the seeds. When he finished, we stood around the table and began sliding seeds into the cellophane envelopes Alba had brought.

"How many should go in each envelope?" I asked.

"This is for exchange only. To promote biodiversity in other parts. So the envelope only needs a few to show them off," Claudio responded. He took a step back, looking at the piles of tiny bags accumulating on the table and said quietly "Here we are caring for 12,000 years of history." His mother nodded in agreement at the other end of the table. While native seeds are important in agroecology for their biodiversity, to the *campesinado*, they often represent something more than just agricultural inputs. Claudio understands seeds as a point of connection between his family to the past and future. The traditions and practices associated with native seeds make them valuable in ways beyond biodiversity alone(Mullaney, 2014), working also to foster networks and connections between people, organizations, and agricultural inputs.

Peasant and indigenous women occupy a specific role regarding seeds and their care. Conamuri's National Seed Campaign, explored here through Semilla Róga and seed fairs, aims to center and deepen women's knowledges through agricultural exchange. In this chapter, I argue that the practices associated with the transfer of situated knowledges are co-constituted with gender and racialized identities. Seeds and the practices that maintain them become one site of encounter (Sundberg, 2004) through which these identities are constituted. Through the practices of knowledge systems designed to preserve agrobiodiversity, seeds become a site of encounter where people interact with others, and with material agricultural inputs, to produce forms of interconnection that are at odds with efforts at seed commodification. Such an argument follows

on Karl Zimmerer's long-standing (1996) call not to take agrobiodiversity at face value, but rather to situate what it produces and by whom it is produced.

Seeds are increasingly becoming commodified by agribusinesses, but there is another seed geography that exists in the enclaves in between plantation zones where lives and livelihoods are shaped by (Li, 2017). I turn to seeds to begin exploring how identities and material objects come into being in these enclaves. Although the seed geographies of the *campesinado* intersect in complex ways with the geographies of commodified seeds, the practices that sustain multiple seed geographies are central to the ways *campesinos* enact agrobiodiversity. Therefore, it is crucial to understand how seed knowledges are transferred and *to what effects*. Seeds are much more than material objects; they "can be a microcosm for examining struggles…between men and women, different generations, within communities, the state, scientific arenas and private corporations," where seed geographies become an inflection point through which identity and alternatives to industrial agriculture can become realized (Bezner Kerr, 2014: 868). This chapter focuses on how seeds are situated within networks and knowledge systems to manifest part of a particular *campesina* and indigenous identity based in practices of seed care. First, this chapter reviews how gendered knowledges have featured in the feminist political ecology and agroecology literatures. Next, it turns to analyze the specific ways seeds are being commodified in Paraguay, and to what effects for the *campesinado*. Finally, we look to how Conamuri's National Seed Campaign makes situated knowledges visible through Semilla Róga and seed fairs.

3.2 Feminist political ecology and situated knowledges

Feminist political ecology was first introduced as a new way of approaching political ecology to highlight how gender differentiation plays a role in resource allocation and access (Rocheleau, Thomas-Slayter & Wangari, 1996). Drawing on post-structuralist critiques of identity, feminist political ecology recognizes gender as a relational, socially produced category (Rocheleau, Thomas-Slayter & Wangari, 1996; Sundberg, 2004; Elmhirst, 2011). In effect, this means that gender identities are historically and geographically specific. Feminist political ecologists extend insights from both political ecology and feminist critiques to acknowledge that socio-environmental relations are mediated by the production of gender in everyday life as expectations of care and community shape perceptions of the environment and gendered identities. Thus, gendered socio-environmental relations "derive from the social interpretation of biology and social constructs of gender, which vary by culture, race, class, and place and are subject to individual and social change," (Rocheleau, Thomas-Slayter & Wangari, 1996: 3). While early work in feminist political ecology tended to treat gender as just another variable (cf. Carney 2001; Rocheleau, Thomas-Slayter & Wangari, 1996), the sub-discipline has shifted toward understanding gender as co-constituted alongside multiple identities and axes of power (Ravera et al., 2016; Elmhirst, 2011). Through this transition, feminist political ecology offers insight into how norms and practices reproduce difference alongside nature-society relations (Adams et al., 2016). Therefore, gendered identities are produced as a relationship of power alongside and through socio-environmental relations (Asher & Shattuck, 2017; Sundberg, 2004).

Feminist political ecology's attention to the interrelation of production, social reproduction, and the environment links this sub-discipline into political economy. Gender is in part produced through the division of labor, where women tend to bear the majority of

reproductive labor within the household in addition to any work that generates income. For example, in rural Paraguay, women often work for upwards of sixteen hours a day (Dure & Palau, 2018) between agricultural production, care for small animals, child and elderly care, cooking, and cleaning (DGEEC, 2017). Men in rural Paraguay tend to dedicate their time to producing farm crops, care for large animals, and remunerated work (DGEEC, 2017). According to the National Survey on Time Use conducted in 2016, rural women perform nearly triple the amount of domestic labor compared to men (DGEEC, 2017). Meanwhile, rural men are more likely to work for wages (Finnis, 2017). It is important to acknowledge that the division of labor is itself a social construction (Jewitt, 2000), thereby allowing our analysis to think with post-structuralist notions of performative identity in tandem with material relationships (Pratt, 2004). Instead, this chapter argues against viewing gender and other identities as coherent prior to their engagement with social relations (Sundberg, 2004). The specific practices of the gendered division of labor cannot be presumed *a priori*. However, while being attentive to particular practices that are inflected through class, ethnicity, age and other factors, it remains important to acknowledge that gendered expectations help produce a division of labor that places disproportionate burden on particular members of the household. What that burden looks like, and the strategies for overcoming (or not) those challenges are spatially and socially contingent. For *campesina* women, the burden often involves familiarity with particular environmental resources that help sustain the household, including the maintenance of agrobiodiversity.

Using gender as a lens rather than category can also pull research into new scales of analysis since categories are not taken for granted. Gendered analysis of intra-community and intra-household dynamics reveal new dynamics of how power structures operate at and within multiple sites and scales (Asher & Shattock, 2017; Mollett & Faria, 2013; O'Reilly, 2011; Hart,

1991). Drawing on political ecologists' critique of scale as a site of contestation (Rangan & Kull, 2009), feminist political ecologists also highlight that the notion of the local, often featured feminist analyses, is simultaneously connected to the global scale (Mullaney, 2014). While lived experience and the body remain key elements of feminist analyses, these should not exclusively be read as local. Bearing all of this in mind, gender transforms from the "end point of critique and analysis," to a means through which environment-society relations are organized (Elmhirst, 2011: 130). Feminist political ecology thus turns to how gendered power-relations help produce socio-environmental relations. Situated knowledges, including gendered ones, are one of the ways that these relations are linked to power, a theme we look at next.

3.2.1 Situated environmental knowledges

To early feminist political ecologists (e.g. Schroeder, 1999; Carney, 2001), gendered knowledges mattered because they showcase how partial knowledges constitute multiple ways of being and knowing. The difference between feminist political ecology and early eco-feminist accounts of gendered knowledges is that feminist political ecology moves away from understanding them as 'closeness with nature', and rather reflects how "women's multiple roles as producers, reproducers, and 'consumers' have required women to develop and maintain their integrative abilities to deal with complex systems of household, community and landscape," to produce varied knowledge systems (Rocheleau, Thomas-Slayter & Wangari, 1996: 8). Acknowledging the diversity of knowledge systems challenges the notion of a singular scientific truth. This perspective in feminist political ecology stems from Donna Haraway's concept of situated knowledges (1991), which acknowledges that all knowledges are the product of power relations which are shaped by those very relations. Therefore, all knowledges represent a partial perspective helps constitute social location, but "the ability partially to translate knowledges

among very different – and power-differentiated – communities," remains an important project (Haraway, 1991: 187). Since knowledges are inflected through power relations, how they come into being through class struggle, patriarchy, and white supremacy has become a way for feminist political ecologists grapple with the question of situated knowledges and their role in constituting multiple subject-positions (Mollett & Faria, 2013; Elmhirst, 2011).

Since the construction of gender involves a relation of power, knowledges can also be gendered. Certain knowledge systems are understood as masculine (Zwarteveen, 2008) whereas those that are seen as more holistic are often connote the feminine. Particular regimes and practices of knowledge come to be associated with masculine identities, which in turn affords a degree of authenticity and power (Zwarteveen, 2008; Leslie et al., 2019).These knowledges derive from a patriarchal-capitalist system that relies on a distinction between the private and public, productive and reproductive roles. In other words, the "gendered division of labor [is] critical," to understanding which knowledges are produced and valued (Jarosz, 2011: 308). Different knowledge systems stem from their need to utilize material objects in distinct ways, and while this is never only attributable to gender, much of the feminist political ecology literature highlights the importance of the construction of gendered identities in shaping this relationship (Rocheleau, Thomas-Slayter & Wangari, 1996; Carney, 2001; Zimmerer, Carney & Vanek, 2015). Knowledges are also co-produced alongside other identity formation such as ethnicity, socio-economic standing, and age (Carney & Elias, 2006). The peasant economy, then, is sustained through "patriarchal structures of power," that rest upon the discursive and practiced separation of productive and reproductive labor (Mbilinyi, 2016: 118). The "daily discourses, practices, and performances," of diverse knowledge systems are one way that gender identities are produced (Sundberg, 2004: 43).

The multiplicity of knowledge systems signifies different practices of landscape and resource management, including how seeds are cared for (Carney, 2001; 2006). Judith Carney, writing on indigenous knowledges on African shea, notes that we must look to gendered knowledges in order to have a more complex understanding of agroecosystems, as well as to understand the complex ways that knowledges produce landscapes (Carney, 2006). Zwarteveen (2008) decenters the assumption that gendered knowledges are necessarily feminine by illustrating how power becomes tied to knowledge systems coded as masculine. Situated knowledges are not *only* gendered, but since gender is a reflection of power relations, it is one way to understand the interplay between knowledge and power.

Since varied knowledge systems shape and are shaped by people's interaction with agricultural production, the role of local and varied knowledges is also important to the agroecology literature. In this literature, women's roles in knowledge production is important because "rural women have traditionally carried out much of the biodiversity conservation activities. Women are thus a key source of knowledge about on-farm seed conservation, cultivation, and local crop-based gastronomy in their respective communities," (Altieri et al., 2012: 4). For some scholars who study agroecology movements, one avenue toward agricultural intensification is through gendered knowledges (Altieri et. al, 2012; Giraldo, 2020). However, the quote above elucidates the assumption of an immediate affinity between women and nature that creates those gendered knowledges. In other words, we return to a framing of situated knowledge systems as a product of gender as a stable category. This presumes a gendered knowledge system *a priori* without due attention to how power shapes gendered categorizations in the first place.

Acknowledging the ways in which the division of labor produces varied knowledges has its dangers. The work of Sarah Jewitt (2000) cautions against presuming an automatic relationship between women and environmental knowledges. The agroecology literature tends toward this reading of gendered knowledges, where gender is a repository of specific knowledges tied only to local conditions (Mullaney, 2014). As we have seen, more recent work in feminist theories critiques the notion that gender is a stable category; therefore, it is important also to see the ways in which situated knowledges are themselves mediated through power relations (Leslie et al., 2019; Zwarteveen, 2008; Jewitt, 2000). Without a critical lens toward how environmental knowledges are obtained and articulated, the agroecology literature runs the risk of re-inscribing problematic solutions, resulting in the exclusion of women in agroecology circles.

Jewitt argues that the transfer of knowledge, and obstacles to that end, must be a central component of analysis and understanding how and why different knowledge systems exist. Gendered knowledges are not the result of the innate abilities of women, but rather depend on certain resources for survival (Agarwal, 1992), and the capacity to act on or articulate these sets of knowledges (Jewitt, 2000). The ways knowledge is transferred centers our focus on how practices are intimately tied to the production of gender and other identities. The remainder of this chapter turns to the multiple seed geographies at work in Paraguay, including how Conamuri utilizes situated knowledges of seed care and agrobiodiversity to counter seed commodification efforts. Identities are shaped in relation to multiple seed geographies, as the importance of exchanging seed knowledges is understood as an alternative practice to the prevailing commodification of seeds associated with agribusinesses and industrial agriculture.

3.3 Seed geographies

Land is not the only way that capital is accumulated in the global agri-food system. The commodification of seeds, through legal and technological mechanisms, has become a key site of accumulation for agribusinesses (Kloppenburg, 2004[1987]). Hybrid and GM seeds have been favored by agribusinesses due to their high crop yield, however, this narrative of technological innovation obscures the multiple forms of debt dependence, labor displacement, genetic erosion and pest vulnerability that extensive use of these seeds engender (Kloppenburg, 2004[1987]). However, technifying seeds and their genetic material creates grounds to extend intellectual property rights to seeds, thereby requiring anyone who wishes to utilize these seeds to purchase them (Garcia-Lopez et al., 2019; Kloppenburg, 2004[1987]). Reliance on commodified seeds produces dependence on external input purchase for small-holder and *campesino* farmers who might hope to sell any of their extra produce for income, and seriously undermines agrobiodiversity, which is an important guards against crop loss and pest-control (Zimmerer, 1996; Zimmerer, Carney & Vanek, 2015).

As Conamuri works to promote and protect biodiverse native and creole seeds, agribusinesses are attempting to replace those seeds with their own commodified seeds. Much of eastern Paraguay is extremely productive for various types of grains and subsistence crops. A huge diversity of corn, beans, peanut, and mandioca can be grown here. Currently, the Ley de Semillas[30] defines this seed diversity as national patrimony. GM seeds weren't technically legal in Paraguay until 2004, although it is likely that Brazilian agribusinesses brought in and produced GM soy beginning in the 1980s (Hetherington, 2014). Since then, the Paraguayan

[30] Seed Law, No. 385. This law was amended in 2004 to legally allow the use of genetically modified seeds.

government has greatly expanded the number of approved genetically modified seeds that can be grown.

There are five multi-national corporations that control more than 40% of seed patents in Paraguay, including global giants Monsanto, Dupont and Syngenta (Garcia & Avila, 2019). While GM seeds are an important component of this, this also includes other kinds of trademarked seeds, usually referred to as commercial seeds. Commercial and GM seeds often require significant amounts of pesticides, including glyphosate (Apipé, 2018). Paraguay – which is only about the size of California[31] – imports 6.2% of the global market of agrochemicals, which includes fertilizers, pesticides, herbicides, and fungicides (Apipé, 2018). Because of its reliance on seed and agro-chemical imports that are geared toward commodity crop production, Paraguay remains highly dependent upon food imports from Brazil and Argentina, especially for food staples like onions and tomatoes. Between 2016 and 2018, the importation of staple diet crops has increased 25%, only counting the crops that arrive to the country legally (Valdez, 2019). The problem isn't that these crops are crossing the border *per se*, but rather that it coincides with a massive decline in *campesino* production for subsistence and local markets. The enforcement of intellectual property rights dramatically rearranges seed access and knowledge systems around seeds (Kloppenburg, 2004[1987]). All in all, the rapid turn toward commodity cash-crop production has made Paraguay dependent upon global markets at multiple stages in the production process.

The case of cotton illustrates the kinds of problems a lack of seed diversity can generate. Paraguayan *campesinos* used to produce a local variety of cotton, which has been sold by *campesinos* as a source of income since the mid-19th century. The cotton crop variety grown in

[31] In addition, a significant portion of western Paraguay has not yet been agro-industrialized, although with the experimentation of drought-resistant soy seeds, soy production may expand alongside the dominant economy of cattle-rearing. .

Paraguay produced somewhat less fruit but was an efficient producer of seeds that could be re-planted the next year. However, that variety of cotton virtually disappeared from the Paraguayan landscape once Monsanto introduced a US-cotton variety. The local variety of cotton was banned, and *campesinos* were expected to produce using the new US-variety if they hoped to sell their product. The US-variety is more efficient in terms of how much cotton it produces per hectare, but it yields almost no seeds. Any *campesinos* who wanted to continue producing must purchase their seeds on a yearly basis, which creates a debt-cycle if they cannot sell sufficient cotton to cover the cost of inputs (Apipé, 2019). *Campesinos* have largely abandoned cotton production as a source of income. We have seen this story happen with cotton, and now agribusinesses are trying to privatize and exercise property rights over more and more seeds, genetically modified or otherwise (Kloppenburg, 2014).

While seeds in many respects have become commodified, they retain other forms of significance "such as a gift, exchange item…or source of agrobiodiversity," (Bezner Kerr, 2014: 870). As agribusinesses seek to extend intellectual property rights and other forms of control over seeds (i.e. commodify them), another geography of seed access is being promoted by agroecology movements that centers exchange of seeds and situated knowledges. The remainder of the chapter attends to the importance of seeds in notions of identity and situated knowledges. Agroecology movements are striving to protect local biodiversity and livelihoods through seeds. Two components of Conamuri's National Seed Campaign: Semilla Róga and seed fairs illustrate seeds' complexities as a site of encounter and contestation through which situated knowledges are practiced, exchanged, and modified. Conamuri's approach to seed preservation is not just about the seeds themselves. It is about making the agricultural knowledges of women visible and creating networks of information. It is about creating agricultural spaces for *campesinos* beyond

the space of the market, as women in particular have had to do historically. Through protecting the seeds themselves, Conamuri also preserves and modifies traditional seed care practices which constitutes seeds as a site of encounter between agrobiodiversity, situated knowledge systems, *campesinos*, and the wider public.

3.4 Conamuri's National Seed Campaign

There is a complex interplay between agrobiodiversity and multiple knowledge systems (Zimmerer, Carney & Vanek, 2015). As agribusinesses promote the use of GM and hybrid seeds, they alter entire ecosystems by reducing biodiversity and agrobiodiversity. Agrobiodiversity – reflected as both genetic diversity within crop species as well as the variety of crops used – is an important strategy for inter- and intra-crop resilience (Zimmerer, 2013). In other words, genetic and crop diversity can help mitigate the risk of crop loss from pest and environmental factors. Complex agricultural systems are key to biodiversity conservation (Perfecto & Vandermeer, 2008), and helps build food sovereignty (Kloppenburg, 2014). Conamuri's National Seed Campaign also illustrates how situated knowledge systems and gender identities are re-worked through the acts of seed preservation.

Begun in 2008, their campaign has shifted over time, but two constants have included Semilla Róga, and the national seed fair. The National Seed Campaign has also become a platform to contest the legalization of new GM seeds (Ne'ê Roky, 2010). As articulated in Conamuri's literature, the National Seed campaign is important for protecting local seed varieties because "big capital has entered into the farm with a clear objective: to appropriate our *campesino* and indigenous seeds in order to augment their profits at the cost of the patrimony we have put out in service of humanity," (Ne'ê Roky, 2011). This position has been adopted from

La Via Campesina's Declaration for the Protection of Seeds: "we cannot conserve biodiversity and feed the world while our right to sow, guard, exchange and sell our seeds is being criminalized," (Ne'ê Roky, 2011). Conamuri's leadership has directed organizing strategies to preserve and improve women's role in agriculture through seed knowledges and practices.

There is a variety of ways Paraguayan *campesina* women participate in agricultural production. The division of labor has meant that women are primarily in charge of the garden, which is where most production for household consumption occurs. This also means that they are principally responsible for carrying seeds over from one year to the next. Even when *campesino* families receive government technical assistance packages, they typically contain commodity seeds like soy, corn, canola or sunflower.[32] Since they cannot rely on purchased seeds, the continued reproduction of the garden depends upon the ability to cultivate enough seeds from their harvest and carry them through until the next planting season. This illustrates how gender and sexual relations that shape agricultural production are part of the enactment of gender, not simply a result of it (Leslie et al., 2019). The expectation that women perform these labors establishes a tradition of transferring these knowledges to particular household members more so than others. The discourse of the campaign highlights the historical and contemporary role of gendered knowledges in seed production:

> In the same way, we believe it is necessary and urgent that women have and recover their central role in the productive process: the role of caring for seeds, selecting them and in this way ensuring the best conditions of the agricultural cycle…at the same time, it is necessary to recognize the importance of indigenous women in the processes of caring for seeds, of subsistence consumption, and use of native plants in indigenous cultures, in nutrition, and in daily life. (Cartilla de Semilla Róga, 2011: 10)

[32] Field Notes, June 15, 2019.

Seeds become a mechanism through which the practices of cultivating agrobiodiversity are realized. Through movements like Conamuri, this becomes particularly associated with the labor of women, thereby producing a particular idea of what it means to be a rural woman. The National Seed Campaign aims to transfer of situated knowledges to work toward food sovereignty. The discourse of the campaign acknowledges that the transfer of knowledge is a necessary practice which connects agrobiodiversity to the *campesinado*. While related to labor often associated with women, knowledges of seed care are learned rather than innate. Semilla Róga, to which we turn next, is a mechanism through which the transfer of knowledge occurs in ways that bring together agrobiodiversity and gender identity through seeds.

3.4.1 The founding and transformation of Semilla Róga

As part of the National Seed Campaign, Semilla Róga integrates the goals of food sovereignty and strengthening biodiversity conservation practices, especially among women. In many ways, Semilla Róga functions as a community seed house. In what little literature does exist on seed houses, there is little emphasis on how community seed houses retain knowledges and practices, not just biodiversity itself (c.f. Perkins et al., 2019; Merritt & Dixon, 2011). Since Semilla Róga was founded in 2010 during a meeting in Asunción. Shortly thereafter, Conamuri gathered the funds to build a small warehouse in Repatriación district, Caaguazú. This location was strategically chosen because it is approximately halfway between Asunción, and the Conamuri committees in southeastern departments like Itapúa and Misiones. It is accessible by a half-hour bus ride from the urban center of Caaguazú, then a two-mile walk down a narrow dirt road mostly traversed by locals on motorbike. The sign indicating that you've arrived stands right next to the road, but it is worn away by central Paraguay's humid, harsh weather. The brick building contrasts the wooden home of Ña Marina and her partner, on whose property Semilla

Image 8: Mural painted on the side of Semilla Róga in Repatriación. Photo by author.

Róga sits. Murals decorate the sides of the building, depicting *campesinos* and indigenous people carrying seeds or the Paraguayan flag.

Ña Marina and her family are responsible for caring for Semilla Róga, which is why they live in the house next to the warehouse. Ña Marina has been involved in Conamuri for nearly a decade, and her family has been involved in organizing their neighbors for a long time. Ña Marina's son, Claudio, will soon take primary responsibility over Semilla Róga. Claudio has grown up alongside Semilla Róga, and he recalls how this particular project has changed over time. After we had finished breakfast one morning, Claudio took me on a tour of the facility.

> It was founded in 2010, after many women from various communities sat down and debated and planted the idea it was necessary to have a seed bank or seed house, as they called it in Guaraní. And because of this they named it Semilla Róga and not a seed bank. Because a seed bank is more focused on being a banked oriented toward other banks. And Semilla Róga is a house of seeds so everyone can have access to seeds.[33]

[33] Interview, Claudio, June 23, 2019.

As Claudio highlights, Semilla Róga[34] is intentionally named "Seed House" in order to break away from the logic of a seed bank. Seed banks "are repositories of local genetic diversity that is often adapted to prevailing climate conditions," (Vernooy et al., 2017: 317).[35] Some seed banks are governed by the local population, but there are many cases where seed banks have been shifted away from local control (Vernooy et al., 2017). Others still, including some run by the Food and Agricultural Organization (FAO) of the United Nations, are massive. There are also agribusinesses with seed banks. While seed banks may help preserve biodiversity, they are not automatically beneficial for agroecology or *campesino* producers. As with many aspects of agroecology, seed banks are vulnerable to technification and commodification by interested parties. For instance, Merritt & Dixon (2011) advocate for seed banks that can result in landscape-scale transformation through increased technification. Many small-scale seed banks run by local communities would be unable to afford such technological advances, which would reduce the role of local management, and focus seed banks primarily their ecological function. The rearranging of nature-society relations at the heart of agroecology is lost in favor of an *apolitical ecology* (Robbins, 2004), which reinforces unequal resource access and control (Asher & Shattuck, 2017).

By contrast, the role envisioned for Semilla Róga is to strengthen the ability of *campesinos* to "exchange, plant, and rescue seeds and plants," (Cartilla de Semilla Róga: 7). Semilla Róga takes inspiration from the conservation ideas behind seed banking, but re-orients it so that people have free and easy access to seeds. For Ña Marina, Semilla Róga is important

[34] A quick note on translation is important here. *Semilla* is Spanish for seed, and *róga* is a derivative of the Guarani word for home, *óga*. *Óga* is a transforming noun and placing an 'r' in front implies connection because it indicates 'my' home or 'our' home.

[35] There is also a slightly different definition of seed banking utilized in ecology. In this case, seed banks are regions of soil that display significant plant variety for the local area. In this case, the seed banks do not refer to human activity regarding these seeds. However, in our treatment, we are discussing the act of recovering and preserving seeds as done intentionally by people (Perkins et al., 2019).

because: "[we] practice all sorts of things for seeds so that you can find good seeds, creole[36] seeds, natural. Without poison [pesticides]. So we can advance nutrition through our fields."[37]

Seeds are very delicate. They require carefully curated knowledges order to ensure that the seeds will survive until it is time to be planted (Zimmerer, Carney & Vanek, 2015). The types of knowledges and practices associated with seed care are co-produced alongside gender (Carney, 2006), because this type of labor in Paraguay has been primarily performed by women (Duré, Ortega & Palau, 2012). This knowledge gets passed down through generations, and so come to constitute particular identities vis-à-vis seeds (Jewitt, 2000**).** Without proper care, seeds are prone to germinating early, which Claudio describes as 'waking-up'. They may also lose their capacity to sprout due to molding from humidity exposure. Seeds require careful attention and care, which created some issues for Semilla Róga at the beginning. While the original goals of seed recovery could not be completed, Conamuri was able to transform Semilla Róga into a project that retained its utility:

> In the first moment, when they built this house, they were thinking for seed conservation. For conservation's sake. But soon they realized that this was not adequate infrastructure to conserve seeds. Because in order to conserve seeds you need well-done infrastructure because seeds are very delicate. The seeds were being lost because there was a lot of humidity.[38]

Realizing that their original goals for Semilla Róga could not be accomplished, the women of Conamuri met again to decide how to proceed. In the end, they decided to make Semilla Róga a focal point of seed exchange rather than recovery:

> And they went on debating that instead of conserving seeds, they could do this exchange of seeds. So that many people could have access and bring seeds to cultivate…this is why there aren't many seeds here now. Because all of the

[36] Creole (in Spanish, *criollo*) seeds are hybrid seeds. While there are industrial *criollo* seeds, especially for cacao and tobacco, Claudio is referring here to seeds created by campesinos to develop new seed varieties, which do not necessarily require pesticides.
[37] Interview, Marina, June 18th, 2019.
[38] Interview, Claudio, June 23, 2019.

> families took them to conserve at home. There in the house my mother had many conserved seeds.[39]

Indeed, in the corners of Ña Marina's house are many metal seed silos. By keeping the seeds in the house, she is better able to keep a vigilant eye on her seeds, some of which she will use for her own agriculture, while others will be exchanged for different seeds with other *campesinos*.

Through this exchange, people are exposed to new varieties of seeds that they may not have in their local area. This particular area of Repatriación, for example, has fourteen varieties of corn, some of which cannot be found in other regions of Paraguay. Through this exchange network, people have begun planting new varieties of corn, beans, and other common household staples. In their 2018 seed exchange, Conamuri registered over sixty seed varieties (Conamuri documentary, 2019). Since the initial Semilla Róga was founded in 2010, there are now four smaller locales in Itapúa, Misiones, and San Pedro departments. These exchange networks have introduced new seed varieties to other parts of Paraguay, thereby increasing agrobiodiversity even though it does not fall within a narrow definition of seed recovery and conservation. Material constraints have prevented Conamuri from being able to conserve seeds within the Semilla Róga as they initially intended. However, the movement has shown how it can adapt to its limitations. Rather than rely on a single site for the conservation of biodiverse seeds, Conamuri works with participants to ensure that as many people as possible are trained to conserve high-quality seeds. In doing so, it sustains the practices associated with non-market dependent forms of agriculture. Agroecosystems are re-worked through these seed exchanges, and by doing so, social relationships and knowledge systems are altered (Carney, 2006; Sundberg, 2004). Next, we turn to how seeds become a site through which social relations are produced through the exchanger of situated knowledges.

[39] Interview, Claudio, June 23, 2019.

3.4.2 Semilla Róga and the transfer of knowledges

"*Jaguata*," Ña Marina said to me around mid-morning on a cloudy day. "We're going for a walk." I jumped up from my chair at the dining table where I had been reviewing my Guaraní lessons after morning chores. We walked three miles to the school down the road where Ña Marina had to finalize forms with the director. On our way back from the school, we stopped at many of the homes of Conamuri participants. Ña Marina was making the rounds to announce that later in the week, someone from the Conamuri national leadership was coming to do an early morning workshop on Thursday at Semilla Róga. The women whom we visited, several of whom I had already interviewed, smiled at the news. In my interviews, I had found that many of the women were hoping for Conamuri's national leadership to come back soon for additional assistance in the community.

As Sundberg (2004) reminds us, the ways knowledges are transferred situate them in specific contexts and social relations. These knowledges are not stable across space, and therefore the identities they produce are also subject to shifting according to particular moments. For rural Paraguayan women, the knowledges and practices associated with seed care have become more fraught as worsening environmental conditions and increased reliance on commodity seed purchase for the farm have reworked the relationship between social reproductive labor, agricultural production, and the practices associated with gendered identities (Mbilinyi, 2016). However, through Semilla Róga, Conamuri attempts to connect households and encourage knowledge transfer of seed care practices within communities. These efforts highlight the ways that identities bound up with knowledges are "intricately related with the environments – households, regions, habitats, bodies, neighborhoods – being produced," (Hawkins & Ojeda, 2011: 237). Care for diverse seeds produces more agrobiodiverse

Image 9: Preparing corn to be made into corn flour. Photo by author.

environments, but the need to recover and extend those knowledges are practiced through Semilla Róga and its participants. Education and processes of co-learning create additional networks of support for Conamuri participants.

Juliana, who lives just down the road from Semilla Róga, joined Conamuri to benefit her family and for additional support for her garden: "[Conamuri] does many things. [They taught me] principally about the garden and how to work with seeds. I do this with many people, and my companion comes to help me in the garden. It's a challenge looking for help. That is why I joined the committee."[40] Juliana associates her improved agricultural production with her involvement in Conamuri. She points to how learning these practices also connected her to other people nearby in new ways that also support the agricultural labors she performs in the

[40] Interview, Juliana, July 23, 2019.

household. Thus, while the necessity of exchanging knowledges about seeds is an immediate practical concern for recovering and honing agrobiodiversity, it also generates particular connections that also support agricultural labor in ways that are necessitated by a gendered division of labor. Seeds become a site of encounter where gendered identities and knowledges are produced and practiced through social and environmental connections. Viviana, a long-time Conamuri participant, highlights how her engagement with the organization has also shaped her relationship with her neighbors, including those who are not involved with Conamuri.

> [The success of Conamuri] comes from unity. We've always been active in the committee. Some join only to find benefits for their family, but I don't see it that way…I joined so that the organization could be stronger. Because the organization is *ojehayhuve hagua* (love and unity) …I have seen many changes, principally among my neighbors…My neighbors don't know how to organize. I have learned this, and so they come to me for information, and to join the organization. This is why organizing is important. Because of this we were few and now we are more. We need many things and if we go to the market and buy other seeds they might now grow because they are too old.[41]

Several other Conamuri members around Semilla Róga emphasize the importance of unity and building connections through their organizing, Graciela, a young mother who has only been participating in Conamuri for about three years joined because "on your own you can't do anything or achieve anything. Only in unity it is possible to find something."[42] The act of knowledge exchange serves several functions, including the immediate practical need to improve agroecological production and enhance agrobiodiversity. But these acts also produce ways of relating to and connecting with neighbors through their experiences of gardening. While none of their experiences are precisely the same, they are a collective experience that brings forward the challenges and possibilities of producing a wide range of foods.

[41] Interview, Viviana, July 24, 2019.
[42] Interview, Graciela, July 24, 2019.

Both Graciela and Viviana came to the working group that Ña Marina and I advertised. During the focus group, we asked questions about how decisions in the household are made. We also asked them about how they are caring for their seeds and who gets to decide which crops are grown in the garden (*huerta*) or the farm (*chacra* or *kokue*). Women shared how they were dealing with the stubbornness of some household members and how they were taking care of that year's seeds. Jokes about daily life in the household kept the mood light as participants laughed. We snacked on varieties of Paraguayan cornbread and fresh juices we had made that morning. In this space, questions of agroecology, agrobiodiversity, and the household came together through the act of sharing stories and knowledges. In addition to helping participants improve their seed care overall, these sorts of meetings foment the exchange of knowledge and build networks of communication that might further support agricultural production down the line, as it has for Juliana. While agrobiodiversity in itself is an important goal, it is co-produced alongside specific knowledges and practices in ways that produce gendered identities and networks of support. These connections help further the goal of agrobiodiversity as these social relationships transform environments (Hawkins & Ojeda, 2011l; Carney, 2006). In other words, knowledge exchange shapes environmental conditions, and seeds are one vehicle through which this transformation is realized.

3.5 Sites of encounter through multiple sites and scales

Discussions around agrobiodiversity, seeds, and situated knowledges are often situated at the local scale. There is a crucial emphasis placed on the importance of everyday practices to influencing socio-environmental conditions. However, as feminist political ecologists (and others) remind us, the so-called local is always situated across multiple sites and scales

(Elmhirst, 2011). When we consider seeds as sites of encounter, they become identities and agrobiodiversity in-the-making (Sundberg, 2004). Seed fairs, for example, become a key site through which *campesina* and indigenous identities and labor are constituted and made visible to others. As Emma Mullaney (2014) highlights, the practices of seed conservation, protection, and defense are intimately linked to scales that are never *only* local. The practices of conserving, cultivating, and exchanging native seeds "[function] as a powerful technology for exerting control over the means of agricultural production," (Mullaney, 2014). Seed fairs allow exchange and transfer of knowledges to happen across multiple sites and scales. Seed fairs become a means through which agrobiodiversity is improved upon, knowledges are exchanged, and women's multiple agricultural roles are made visible.

3.5.1 Exchange and extra-local agrobiodiversity

Since Conamuri has been operating seed fairs since the mid-2000s, these events have developed a particular rhythm. Vendors begin arriving around 6 am, and everyone rushes to be sure everything is properly set up prior to the 8 am start time. Over the course of the morning, people from the local town or city begin filtering in to purchase *campesino* and indigenous products such as molasses, medicinal herbs, and fresh fruit. In the background, someone delivers an opening speech through a microphone. By the late morning, this microphone is passed around for anyone to speak to the group. Usually, these speeches touch on issues of food sovereignty, the importance of the agricultural labor of the *campesinado* and indigenous, and the ongoing alliance between the Paraguayan state and agribusinesses. After the speeches are done, everyone eats a communal lunch. *Campesinos* and indigenous groups exchange seeds among one another once the shared meal is over. People wander from table to table, selecting packets or bottles filled with seeds they find appealing. If it is a variety they do not know, they will ask for basic

Images 10 & 11: Corn, anise, and beans on display at the seed fair in Encarnación. Photos by author.

information regarding the seed, such as when it was harvested, and when they should be planted. They will offer their own seeds, which will also be carefully evaluated, and an exchange will be made.[43]

These interactions are important for a number of reasons. In agroecological terms, this exchange preserves and improves upon agrobiodiversity of the seed stock. Although *campesinos* produce similar types of food, the precise varieties vary tremendously. For example, Repatriación is known for its diversity in corn and mandioca varieties. Meanwhile, in Edelira, people produce many different types of citrus fruits and papaya. In other words, these seed fairs allow for the transfer of knowledge and seeds that are simultaneously connected to local and broader conditions. The overall seed stock across the country improves through the practice of seed exchange fairs. Seeds become a site through which agrobiodiversity is practiced and learned (Mullaney, 2014). To the extent that utilizing native seeds is associated with *campesino* identity, these exchanges also affirm a particular way of being a *campesino*. In other words, seeds and their exchange become a site through which *campesino* identity is practiced and produced that

[43] Field Notes, June 8, 2019, and July 27, 2019.

carry particular gendered meanings (see also Lopez et al., 2019). Exchanges draw on a long history of women swapping seeds with their neighbors in order to improve their gardens but become systematized through Semilla Róga and seed fairs in ways that connect distinct parts of the country. Women's continued production with native seeds has helped fortify this as a system of exchange that does not privatize seed ownership.

The political economic importance of seed exchanges also requires attention. As discussed earlier, agribusinesses have utilized technology and legal mechanisms in order to commodify seeds (Kloppenburg, 2004[1987]). GM and other trademarked seeds must be purchased, often annually. In other words, agribusinesses have made their seeds biologically unviable (Kloppenburg, 2015) in order to maintain their sales. To maintain their livelihoods, many *campesinos* are willing to participate in this process (Mullaney, 2014; Scoones, 2009). However, the seed fairs and exchanges maintain networks of non-market seeds. Both Semilla Róga and the seed fairs maintain and extend agrobiodiversity through non-market means. This labor relies in many ways on women, their historical and contemporary exclusion from the market, and how the act of passing down knowledge shapes future practices. These exchanges matter in terms of what they represent within agroecology, and as a move away from the capitalist market, but they also tell us something about situated knowledges. Agarwal (1992) and Jewitt (2000) crucially remind us that women's interest in environmental matters is not intrinsic. Rather, the seed fairs show us how the ways that knowledges are transferred condition specific practices and shape identities. However, seed fairs are not just about extending networks of agrobiodiversity among the *campesinado*. Rather, Conamuri has utilized the seed fairs to make the *campesinado* and indigenous groups – particularly women – visible to other

Image 12: Corn husks on display at a district seed fair in Itapúa. Photo by author.

Paraguayans in order to build alliances. Transfer of knowledge, then, is not just about improving the capacities of agriculturalists, but also about exposing others to the very real issues of agricultural production in Paraguay.

3.5.2 Seeds and alliance building

During the open speeches at the seed fair in Encarnación, a man from the outskirts of the city took the microphone at one point. He told the story of his daughter, who due to sudden on-set illness was brought to the emergency room earlier that week. The doctor cited pesticide poisoning as the reason for her ailments. He expressed that, in hearing the speeches everyone had been giving, he better understood what led to his daughter's illness. The man ended his speech with: "You can count on one more compatriot."[44] This man's encounter with agroecology, rural peoples and the challenges wrought by industrial agriculture came about through his attendance at a seed fair. These events are not only about fostering better agroecological practices and protecting seeds among *campesinos* and indigenous peoples, but also expose their lived realities

[44] Field Notes, June 8ᵗ 2019.

to others. These fairs create a particular narrative about the issues in the countryside and what it means to be a *campesino*. In doing so, the hope is to spread information about how industrial agriculture is impacting everyone in Paraguay, and how agroecology might help alleviate some of these issues. It is, in other words, a question of building alliances.

The seed fairs become a space through which new people become exposed to these issues. According to Elsy Vera, a Paraguayan scholar who works with *campesinos*, the seed fairs offer a material representation of what happens in the countryside, and its impact on daily lives: "When there are these concrete projects that [*campesinos*] develop and create fairs for the common people, where [the *campesino*] can explain 'this is production and work of the land', and this is a good way to sensitize the public…not just through marches or protests which often do not create sympathy with the people."[45] The *campesino* identity takes on a particular form in these seed fairs, where attention shifts away from disruptive demonstrations and toward understanding of how many in the *campesinado* see themselves in relation to the products and food they produce. The *campesinado*'s lived reality is not always immediately evident to more urban residents. Elsy emphasizes that when rural movements only use disruptive tactics in urban centers, it can disrupt the potential for alliance-building with urban people and organizations.[46] It is crucial to note that alliances are not necessarily built in the seed fairs themselves but rather that they create the potential for fostering connections to occur.

The organizing practices of many Conamuri participants aim to make the multiple labors of women visible in these fairs, thus also challenging the masculine association of the *campesinado* (Duré, Ortega & Palau, 2012; O'Campos, 1992). By highlighting the various agricultural roles that women perform, they attempt to disrupt the notion that the *campesinado* is

[45] Interview, Elsy Vera, June 5, 2019.
[46] Interview, Elsy Vera, June 5, 2019.

primarily male. At the largest seed fair of the year, the final activity before lunch was the premiere of a short documentary about Semilla Róga. Here, in the middle of Asunción, just blocks away from the Ministry of Agriculture, *campesina* and indigenous women explained the importance of seed care, their role in it, and its connection to questions of food sovereignty and agrobiodiversity.[47] Conamuri is actively trying to destabilize the masculinist association other Paraguayans have with the *campesino* identity. Seeds, due to their importance in women's multiple agricultural labors, have become one way they are attempting to disrupt the prevailing narrative.

3.6 Conclusion

There is a complex interplay between seed conservation, agrobiodiversity, knowledge systems and gender. Native seeds take work and attention. They require certain forms of connection and knowledge transmission in order to continue preserving the knowledges and practices that make such seeds possible in the first place (Zimmerer, Carney & Vanek, 2015; Mullaney, 2014). But, as we have seen through Semilla Róga and the seed fairs, these practices of knowledge and seed exchange also become tied to specific identities, particularly gendered ones. As a global geography of commodified seeds promoted by agribusinesses continues to grow, gendered lives and livelihoods are being significantly altered (Elmhirst, 2011). As the IPCC 2019 reports illustrate, agrobiodiverse crops and ecosystems are more likely to survive the ravages of climate change, not because they will all survive, but because the complexity of crop diversity will mediate the impact of climate shocks. While there are technological advances that can protect crops from environmental shocks, they are economically exclusionary and often not

[47] Field Notes, July 27, 2019.

available to the most vulnerable populations when they are needed (Altieri, 2003). Therefore, varied knowledges, and the practices which maintain them, are key to helping people survive in a rapidly changing climate. Since the majority of seed care labor has been conducted and is passed down through women, these practices also reflect gendered livelihood strategies that are co-produced with gendered identities themselves. Seeds are one way these practices, identities, and material conditions relate to one another. However, this chapter has also illustrated that these practices and identities must be actively preserved; they cannot be assumed to exist or continue in different contexts.

The work that Conamuri performs to counter seed commodification illustrates the importance of not presuming the existence of situated knowledges. Rather, these situated knowledges are maintained and shift through the creation of exchange networks and alliance building. Seeds have become an important battleground between agribusinesses and *campesinos*. As these contestations over the right to seeds plays out in Paraguay, Alicia notes that "To do a seed exchange is already an act of rebellion. To save your seeds, to work. Today, having land and having seeds is already a question of politics."[48] This chapter has aimed to illustrate the complex ways that seeds imply "intimate and multiple links," between situated knowledges, identity, and agrobiodiversity (Bezner Kerr, 2014: 871). Conamuri centers situated knowledges in Semilla Róga and the seed fairs while not ignoring that these knowledges must be transferred in order to effectively organize within the plantation zone and against agribusiness. While seed commodification is ongoing, there are ways that this process is being countered, thereby producing multiple, interwoven seed geographies. The ways Conamuri engages with seed exchange shows that the transformative possibilities within agroecology must also account for

[48] Interview, Alicia Amarilla, June 13, 2019.

power relations. In spite of the successes of projects like those discussed throughout this chapter, there remain real limitations to agroecology that must be accounted for as well. We turn how these limitations shape Conamuri in the next chapter.

Chapter 4
"It was like our dreams burned"[49]: The limits of agroecology

Image 13: An isolated home in Edelira district. Photo by author.

4.1 Introduction

At 7:00 am on June 21st, 2019, in Edelira district, Itapúa, work was already well underway at the Oñoirũ[50] yerba mate collective. The new harvest had just begun four days earlier, so Oñoirũ's associates were hard at work. Pedro, along with others, was just leaving for the yerba mate groves when a loud bang caused them to turn around. Large flames licked the edges of the tin roof of the open-air warehouse where the previous four days of work had been stored. The flames began at the back, but quickly spread forward and down. The green plastic lawn chairs used for meetings wilted and slowly began to melt from the fire's heat. Pedro whipped out his phone and called for volunteer firefighters from nearby towns and cities. Even the closest firefighters were more than a half-hour drive away.

In the meantime, smoke billowed over the rolling hills of Edelira. Ña Zunny, whose house wasjust a few hundred meters away from Oñoirũ, noticed the smoke traveling down the

[49] Interview, Ramona, July 11, 2019.
[50] Oñoirũ is Guaraní for *compañero* or companion.

road, but since slash-and-burn agriculture remains a common practice among *campesinos*, she thought nothing of it. She continued doing her morning tasks — laundry, cleaning, preparing for lunch. The day went about as usual, until suddenly everyone's energy had to be poured into addressing the ramifications of the fire.

In the half hour it took for the first firefighters to arrive, a significant amount of damage had been done. Seven tons of freshly harvested mate were burned to ash, the brick *horno barbacúa*[51], where the yerba leaves are processed, was damaged and crumbling. The storage facility's tin roof was warped with a black scar left behind from the smoke. One associate received minor burn damage but was treated on-site by the firefighters. While the fire was stopped before it could spread to other buildings or other nearby farms or structures, the damage was a heavy weight for the associates of Oñoirũ. The harvest could not continue, not until the *horno barbacúa* could be re-built. The fire's timing meant that the harvest for that entire year was in jeopardy.

At the time of the fire, I was at Semilla Róga in Repatriación. Notifications from Whatsapp lit up our phones in a flurry of updates. I had been to Oñoirũ just a few weeks before, when they were still preparing for the new harvest. When I had to leave, Pedro dropped me off at the nearest bus station. As we parted ways he said: "You should come back in a few weeks when we begin the harvest." I nodded enthusiastically before getting on the bus back to Asunción. Now I couldn't help but wonder, "Would there be anything to go back to? Would I just be a distraction as everyone attempted to put the ruins back together?"

The fire significantly shifted my research trajectory. Within a few days, in consultation with Alicia and Pedro, I had arranged both an online funding campaign to support Oñoirũ's

[51] This refers to the large brick oven-like structure where the yerba mate leaves are dried with indirect fire.

reconstruction, and my return to Edelira. By the time I returned, everyone was in the throes of rebuilding, and still processing all that had happened. The next several weeks were dedicated to re-constructing the facilities and improving the on-site safety features. The initiative I had taken with the fundraising campaign unexpectedly altered my relationship with participants. They had interpreted this campaign as a show of solidarity[52] and a commitment to their broader cause. Suddenly, I was granted access to new spaces and meetings, bringing about new ethical challenges as I attempted to negotiate giving them control over what I could write about even as I was granted deeper access to information. I was asked to participate in several meetings with Oñoirũ's leadership team, including Pedro, Ramona, and Celia. I was even asked by the leadership team to entertain insurance brokers, who, with their point-and-shoot cameras and notebooks, carefully scrutinized every inch of the facilities. The hard work of Oñoirũ's associates had come under threat, but they by no means had given up.

The Oñoirũ collective is the result of several decades of *campesino* organizing in this part of south-eastern Paraguay, although it has only been producing yerba mate since 2014. Oñoirũ is run as an agroecology collective. *Campesinos* in Edelira and Itapúa Poty districts collectively produce the yerba mate plant, with each *campesino* getting paid for the work they contribute. Through communal labor, they turn the plant into the yerba mate, which is drunk as a hot and cold tea in Paraguay, Argentina, Uruguay, southern Bolivia, and southern Brazil. Yerba mate is part of everyday life in the countryside for hydration, rest, and socializing. As agribusinesses try to convince more *campesinos* to produce in an industrial manner, Oñoirũ offers them an alternative means of producing while also providing a small income for families.

[52] Which was indeed the intention behind my actions, but the ways they responded were unexpected.

As an affiliate of Conamuri, the association aims to create more space for public participation and leadership positions for women. After they began producing yerba, the association elected a female leader. Conamuri has hosted workshops with the associates on gender-based rights, and women in the area attribute improvements in gender relations to the work done jointly between Oñoirũ and Conamuri. The fire threw this possibility into jeopardy. As we saw in Chapters 2 and 3, agroecology has evolved from a set of agricultural practices to a political project that can be achieved through a combination of social movement organizing and agroecological practices. Thus, agroecology has become a project with a specific political, economic, and social vision that is enacted through its practitioners. The agroecology literature often discusses how this type of agricultural production creates the possibilities for social transformation (Giraldo 2020; Altieri et. al, 2012). For scholars of agroecology, this transformation is linked to how agroecology as a science, practice, and social movement is "committed to a more just and sustainable future by re-shaping power relations from farm to table," (Nicholls & Altieri, 2018: 1186; see also Rivera-Ferre, 2018). However, the majority of the agroecology literature has not yet taken "an explicit gender approach," (Larrauri et al., 2016). This chapter illustrates why such a move is necessary if we want to discuss the socially transformative potential of agroecology.

In spite of all this, there are several contradictions within the agroecology project that mean the benefits of participation are unevenly experienced by its practitioners. This chapter argues that the socially transformative aspects of agroecology are distributed unevenly along axes of differentiation that stem from contradictions within agroecology. The ways agroecology has been taken up political by movements and other practitioners helps reinforce particular notions of the family and labor relations that perpetuate gender discrimination, sexism, and

uneven distribution of labor. Without addressing these issues, women and other marginalized groups do not experience the 'socially transformative' benefits so often heralded within the literature. Social transformation is an important aspect of agroecology, but its limitations as a vehicle for such transformations must also be discussed. Several scholars claim that practicing agroecology is necessarily socially transformative without due attention to how agroecology movements remain imbued with power relations. . Agroecology scholars tend to emphasize what women bring to agroecological practice, rather than examine the specific ways they do or do not benefit from this form of agricultural production (cf. Altieri, Martinez-Funes, & Peterson, 2012; Lopez et al., 2019; Giraldo, 2020). The assumption that agroecology movements create socially just conditions limits analysis of how patriarchy shapes agricultural labor relations in multiple ways: (1) not questioning why certain productive and reproductive relationships are dominant, (2) assuming women in particular have infinite time to take on additional tasks on behalf of advancing agroecology. Ultimately, this reliance upon female labor may undermine the capacity of women to participate. As agroecology becomes more popular, *for whom* and *in what ways* it is socially transformative become important questions. Agroecology's continued expansion may not be a question of scaling up or amplification, but rather one of what aspects of agroecology movements themselves might be undermining the capacity of certain people to participate. The growing concern over feminist issues within agroecology movements (Val et al., 2019) leaves the lingering question of how the agroecology project might be adjusted to better serve this agenda.

Close consideration of the social relations shaped by Oñoirũ offer one way of performing just such a task. The fire plunged Oñoirũ into deep crisis. Uncertainty was high, and even as hopes were re-kindled over the coming weeks, the crisis helped re-establish and deepen

patriarchal norms of the gendered division of labor. This chapter investigates how the crisis at Oñoirũ elucidates some of the specific ways women do not necessarily receive the same benefits as men from agroecology. Grassroots organizations like Conamuri must contend with the contradictions within agroecology as they attempt to address multiple uneven relations of power along class, race, and gender lines.

4.2 Agroecology as transformation

Scholars and practitioners have emphasized the socially transformative aspect of agroecology as emphasis has shifted to the social and ethical implications of agroecosystems (Wezel et al., 2009; Mendez, Bacon, & Cohen, 2013). While it is subject to diverse interpretations, by and large agroecology represents a shift away from the contemporary agri-food system that relies heavily upon agribusiness production of foodstuffs and biofuels toward more sustainable smallholder production (Altieri & Nicholls, 2017; McMichael, 2006). Agribusinesses and the food system they promote has had profound implications for small-scale producers and consumers, albeit in distinct ways (Guzmán & Woodgate, 2013). Land access for subsistence and small-scale producers has become increasingly tenuous particularly in Latin America (Brass, 2003; McMichael 2006; Wolford, 2007), and re-arranges socio-natural relations across rural and urban producers and consumers (Coplen, 2018). Within agroecology, advocates and practitioners aim to re-distribute power in the food system back to subsistence and small-scale producers by altering land, ecological, and productive relations, as well by addressing issues of food sovereignty and public health (Gliessman, 2011; Guzmán & Woodgate, 2013). It warrants mentioning again that because agroecology practices are mobilized in different ways, it is more appropriate to speak of agroecologies rather than a singular agroecology (Wezel et al., 2009;

Mendez, Bacon & Cohen, 2013). As a result, the specificities of local context play a central role in shaping what social transformations take place and how. In order to achieve these social transformations, the agroecology literature is highly concerned with making agroecology more popular.

The question of why agroecology does not spread more rapidly has become an important one for scholars of the field (cf. Ferguson et al., 2019). This line of interrogation also implies the question of what is holding agroecology back (Holt-Giménez & Altieri, 2013). The agroecology literature often discusses the political, social and ecological transformations that are achieved when agroecological principles are followed (Holt Giménez, 2006; Altieri et. al, 2012; Giraldo, 2020). However, under what conditions these transformations occur is rarely discussed. While the strengths of agroecology are crucial to document, its limitations or even outright failures must also be analyzed to work toward a transformed global agri-food system. Agroecology has become an integrative political approach to transform rural life and livelihood that encompasses much more than just traditional agricultural practices (Wezel et al., 2009; Méndez, Bacon & Cohen, 2013). Agroecology encompasses a variety of environmental justice issues such as food sovereignty, agrarian reform, and the right to a non-contaminated environment. For scholars of agroecology, it is a socially, politically, and ecologically transformative vision. Eric Holt-Giménez's 2006 book, *Campesino a Campesino* (Peasant to Peasant), documents how Mayan peasants were able to utilize agroecology's principles to begin a co-operative market that eventually led them to be able to stop working on banana plantations. The income generated by the co-op allowed them to eventually purchase land and redistribute that land amongst the members of the co-op. Ultimately, Holt-Giménez demonstrates how agroecology can rupture existing labor and land relations in a given area. Agroecology, then, "[implies] transforming

land-based social relations," which is a deeply political question (Giraldo & McCune, 2019: 793).

Other scholars articulate that the more radical iterations of agroecology are part of a "politically transformative peasant movement for food sovereignty," (Holt-Giménez & Altieri, 2013). Food sovereignty is seen as politically transformative because it represents a path away from national dependence on food imports. This leads them to critique efforts for a 'New Green Revolution', whose advocates argue that the technologies of the original Green Revolution were merely improperly managed (Patel, 2013). Holt-Giménez and Altieri (2013) argue instead that reliance on external technologies remain inherently exclusionary for the majority of *campesinos* and small-scale producers, and therefore should not be depended upon to transform the global agri-food system.

For Omar Giraldo (forthcoming 2020), agroecology represents an ontological shift in the relationship between societies and ecologies, where agroecology helps move beyond a binary distinction between these systems to see them as deeply integrative. Since industrial agricultural is primarily a by-product of Western economic logics, indigenous and peasant populations have by-and-large had to adapt to these conditions to survive (Giraldo, 2020). Agroecology, then, offers a means for peasant and indigenous ways of being and knowing to be foregrounded once again (see Chapter 3).

Other critical engagements with agroecology have also invoked a relatively narrow conception of politics and power relations that often only focus the institutions of the state as the realm of the political. Manuel González de Molina (2013) asks, how can agroecology engage politics? By this, he means in what ways can agroecology articulate with state and regional politics, which leads him to the important conclusion that agroecology is itself produced through

power relations. However, since he narrowly defines politics as the realm of governments, officials, and state institutions, he cannot chart a way for agroecology scholarship to holistically consider how power relations are embedded within the ways agroecology is practiced. Without considering the multiplicity of power, including within the agroecology movement itself, multiple problematic assumptions are drawn. For example, due to the proclivity to stress the socially transformative dimensions of agroecology, the women's empowerment is often presumed as a given outcome (cf. Altieri, Funes-Monzonte & Peterson, 2012). This is not to deny the possibility of agroecology to improve women's lives, but it cannot be presumed to have such an effect, nor can we assume in what ways their lives might be improved through extending agroecology. Indeed, within agroecology's tenets there are already problematic elements which could have negative consequences for women and for gender-relations more broadly. The optimism often found within the literature — and many agroecology movements themselves — obscures the challenges agroecology movements face (Jansen, 2014). There is real concern among scholars about the potential for agroecology to be co-opted and commodified by industrial agriculture (Cadieux et al., 2019; Rosset & Martínez Torres, 2016), but rarely does the literature emphasize the importance of power within the movements themselves that results in certain members benefitting more from agroecological forms of production than others. This is the case for Holt-Gimenez's 2006 book, which is a classic text for illustrating the importance of agroecology in creating greater independence for small farmers from agribusinesses, and yet largely bypasses the multifaceted relationships between the farmers themselves.

To be sure, the practice of agroecology has had numerous benefits for many rural women, as well as the elderly and children. An agroecology approach to agricultural production can help make women's roles in agriculture more visible (Masson, Paulos & Bastien, 2016). In Chapter 3,

we saw how seeds are an important material manifestation of both shaping the *campesina* and female indigenous identities and make their roles in agriculture visible to others. Carmen Deere (2003) and Sonia Schwendler and Lucia Thompson (2017) show how women have taken up leadership positions to profoundly shape agroecology movements in terms of broadening the scope of land rights, and pedagogy. The crisis at Oñoirũ reveals that, while this work is clearly necessary and important, we must be careful to not romanticize the labor of women and bring our analysis down to the everyday experiences of patriarchy within agroecology movements (de Marco Larrauri, Neira & Montiel, 2016). While recognizing women's role in agroecology movements is important, attention should also scrutinize why certain members within these movements must take on this additional labor in the first place. Until this work can be done, it will remain difficult to fully account for the ways the benefits of agroecological production are unevenly experienced among participants.

In order to interrogate agroecology's socially transformative potential, I bring this literature into conversation with long-standing critiques within the critical development studies literature, with particular attention to the gendered critiques of development practice. While it is beyond the scope of this chapter to fully assess the long history of literature on development critiques, there are a few key points that make it relevant to agroecology as well. Within mainstream circles, development is frequently tied to unproblematized notions of progress (Cowen & Shenton, 1996) that presume that improvements in the material conditions of an undifferentiated global poor will lead to better lives (Chambers 1983; Bebbington, 1999; Kay, 2009). Critiques of this understanding of development point to how development projects themselves often have unintended consequences for the targets of development (Kay, 2009).

Feminist critiques of development call into question the gender-neutrality of development initiatives. The work of Esther Boserup (1970) was instrumental in challenges the prescriptions of development initiatives that presupposed maternal and marital roles for women . Indeed, gender-targeted development initiatives are also critiqued within this framework for an inadequate understanding of how power along gendered, raced, and classed lines plays out in practice (Jacquette & Staudt, 2006; Radcliffe 2006). When power is left unscrutinized, it often leads to problematic assumptions about how development projects will impact the supposed beneficiaries (Terry, 2009). While not exclusively within the domain of gendered critiques of development, feminist critiques have been particularly useful in illustrating that "different development interventions do not enter a level playing field but one in which certain discourses appear as hegemonic, sanctioned and authorised whilst others are marginalized," (Kandiyoti, 1998: 141). As we saw from the feminist political ecology literature discussed in Chapter 3, it is important to consider gender as a relation rather than an analytical category. Approaching gender as a relation pulls power into focus where "relations of power between women and men [are] revealed in a range of practices, ideas, and representations and ascribing to them different abilities, attitudes, personality traits and behavioral patterns," (Wickramansinghe, 2005: 435; see also, Agarwal, 1994). This critique of power within the development studies literature has highlighted a diverse range of issues, from disproportionately burdening women's' time (Wilson, 2015), to critiques of women's agency within development projects (Jackson, 2012; Agarwal, 1994), as well as destabilizing notions of empowerment (Chant, 2016; Jackson, 2012; Cornwall, 2007; Kabeer, 2001). Within these critiques, many scholars emphasize that these power relations are co-constituted and entwined with other systems of difference, including but not limited to race, class, ethnicity, and ability (Radcliffe & Pequeño, 2010; Kandiyoti, 1998). Along similar

lines, by not considering gender as a relationship of power, agroecology tends to focus on what women bring to agroecology rather than how they benefit (or not) from its practice.

Agroecology, in both its practices and political interpretations, is not gender-neutral, but rather always on uneven terrain. Due to their outsized role in household food production, women are often hailed as the frontlines of the agroecology movement at major global and regional agroecology meetings (Menser, 2008). Women are seen as being able to continuously take on more tasks to ensure their family's continued survival (Fernandez, 2018; Wilson, 2015). The focus on women does not always translate to equitable or even safe participation for women in these movements (Corvalan, 2013). Patriarchal power relations and sexual discrimination are common within grassroots movements (Menser, 2008; Roig, 2008). Politics, then, is not limited to state or international institutions, as González de Molina (2013) posits. While we have seen how agribusinesses condition agroecology's scope and scale, however, the ways power dynamics shape relationship among agroecology movement participants is also a conditioning factor. The politics of the division of labor shape women's experiences of agroecology.

The roles that women play in the community and household often remain unquestioned within agroecology movements, even when their 'triple burden' – the productive, social reproductive, and community labors that women disproportionately bare – is mentioned (Wilson, 2015), nor have they necessarily mobilized a re-examination of how labor is distributed among members of the household or community (Roig, 2008). Indeed, while reproductive labor is not the exclusive domain of women, they often play an outsized role in completing these tasks, which in many cases remains undervalued (McClintock, 2018). Ultimately, by not addressing the systemic issues of patriarchy, agroecology may "actively reinforce and extend, existing patriarchal structures and gendered relationships of power," (Wilson, 2015: 807). While Wilson

is specifically addressing problems within material development projects propagated by international NGOs and the World Bank, I argue that this same critique can apply to agroecology.

Women face specific structural issues in agriculture (Agarwal, 2014; Ravera et al., 2016; Carney, 2004[1996]). While the rhetoric promoted by agroecology movements often espouses these issues, often there are complications that play out on-the-ground which muddy the discursive acknowledgment of gender in agroecology (Agarwal, 2014). Overall, the literature on agroecology does not often discuss re-distributing domestic and extra-domestic labor often performed by women (Agarwal, 2000). Without these specificities in mind, practicing agroecology can actually increase the burden of labor performed by women, which may undermine their ability to participate in these movements in the first place.

While making women's roles in agriculture visible remains important, that alone is not enough to achieve the promise of social transformation. Specific attention to the issues women face remains crucial, or else agroecology may unduly burden women. The ways the agroecology movement is defined on an international stage through organizations like La Via Campesina must be understood through the ways grassroots movements are experienced differently by its various participants (Wolford, 2010; Mesner, 2008). While agroecology movements define many of their goals in international forums, the ways they play out within grassroots organizations matters to how agroecology is practiced, which extend beyond questions of scaling up or amplification. We must turn to agroecology itself to see what aspects of this project create uneven effects of 'social transformation' for its participants. The remainder of this chapter looks at a moment of agroecology in crisis, which has had specific implications for women participants. Attention to this moment brings the limitations of agroecology into sharp relief.

4.3 Agroecology in crisis?

It is a twenty-mile ride down a dirt road that diverges from the main highway to get to Oñoirũ. The road is speckled with rocks that make it a jarring ride, and when it rains, the clay content of the soil makes the trip slippery and dangerous. Past the main highway, massive soy and corn fields give way to small houses set back from the road. Oñoirũ is in the Edelira district of Itapúa, which shares its borders with Argentina. Agribusinesses are particularly prevalent in the border departments like Alto Paraná, Itapúa and Canindeyú (Ortega, 2019). According to the World Bank in 2015, Itapúa accounted for 18% of the country's soy production, 31% of its wheat production, and 10% of its corn production (World Bank, 2015). In 2018, agribusinesses expanded land ownership by nearly 24 thousand hectares in Itapúa, which means that they now own at least 941, 284 hectares in this department alone (Ortega, 2019).[53] GM soy has been grown in Itapúa since the 1990s (Ortega, 2019). All this is to say, Itapúa is a stronghold for agribusinesses. Whereas the expansion of agribusinesses has forced massive out-migration in much of Paraguay, Itapúa's migration dynamics are slightly different (Galeano, 2017; Schvartzman, 2014). Since agribusiness established its power in this region early on, it has a comparatively low *campesino* population, and rural-urban migration rates are a bit lower than in the rest of the country (Galeano, 2017). It is in this context that a small yerba mate collective was founded in 2015. Oñoirũ's facilities, which include a small office, a warehouse, an open-air shed, and classroom, are only about five miles from the nearest agribusiness plots. A mix of men and women of a variety of ages participate in the association.

[53] These are only estimates; the Ministry of Agriculture never completed its 2018 census. The statistical research performed by research organizations like BASE-IS (in Asunción) has helped fill in some of the gaps in knowledge, but these are indirectly gathered data. It is the most reputable source available at this time.

Image 14: Young yerba mate trees. Photo by author.

Oñoirũ began as a committee for *campesinos* in the early 2000s. When Pedro graduated from the agroecology school in Brazil, he set forth a vision for the committee to create opportunities for its members. He partnered with Conamuri and in 2015 Oñoirũ began producing yerba mate for sale. The yerba mate plant was used by the Guarani and Tupi indigenous peoples for centuries (Potthast, 2004). Yerba mate was an important agricultural export product for Paraguay throughout the 19th and 20th centuries (Potthast, 2004; Williams, 1979). Members of the Oñoirũ collective grow it without the use of chemical fertilizers, and they grow it alongside other trees and plants in order to ensure a healthy and nutritious soil.[54] In addition, an agroecological approach to growing yerba influences when and how the plant is cultivated. According to Pedro:

[54] Interview, Pedro, June 10, 2019.

> We harvest the yerba during the waning quarter moon because there is an inverse relationship. It's when the majority of the sap — the plant's energy — is concentrated in the roots. So, when we talk about agroecology we also mean that we try to work so that the plant doesn't suffer as much.[55]

The elaborate process of harvesting, aging, and packaging yerba is done collectively among its members. For Ña Nina, a former nurse who has participated in Conamuri and Oñoirũ for nearly twenty years, the collective work done by the association is an important feature: "This is how we work in the yerbatera... And this is how we are. We are always training some people in the committee with the women and with the men as well. We plant as *minga*[56] as well. We do plantings as *minga*."[57] *Minga* is a form of voluntary communal labor. Associates will work at Oñoirũ when and as they are able. This showcases another feature of the more political interpretations of agroecology; communal labor is another way to re-orient the relationships between agricultural producers away from individualism to share in the intense workload (Holt-Giménez, 2006). Agribusinesses who hope to gain from *campesino* production of cash commodity crops propagate an individualistic approach to agricultural production, where labor is reduced by using intensive external inputs. Oñoirũ differentiates itself from agribusiness-style production by emphasizing communal production. According to Pedro:

> It's a product that a handful of associates are working. Instead of a business that's more capitalist, it's a business that is more social from *campesino* families, of small-holder families. So it's also a challenge that we have to technologically bring forward an unusual, really, method of that includes our direct advisory council.[58]

While associates distribute the labor required by their involvement with Oñoirũ, they also share in decision-making processes. Decisions are made collectively through voting, but there is also

[55] Personal Communication, Pedro, October 27th, 2019.
[56] Translates as voluntary collective work. The word is used in Spanish but originates from Quechua.
[57] Interview, Nina, June 9th, 2019.
[58] Interview, Pedro, June 10th, 2019

Image 15: Packets of Oñoirũ yerba mate at a district seed fair in Itapúa. Photo by author.

an advisory council to help guide the association and ensure that the necessary daily operations occur. Currently, Pedro, Celia, and Ramona are part of the advisory council.

As shown above, Oñoirũ practices many of the central features of agroecology. Returning to production of yerba mate, which has a long history of cultivation in this region, is in small ways promoting reforestation and agrobiodiversity in a landscape that has predominantly shifted to monocultures and simplified ecologies (Giraldo & Rosset, 2018). The emphasis on small-scale production has helped reduce *campesino* dependence on agribusinesses for survival and income (Holt-Giménez, 2006). They have re-structured labor relations as communal and have created strong networks among participants (Holt-Giménez, 2006; Gúzman Luna et al., 2019). However, the crisis Oñoirũ has faced since June 2019 has laid bare the limits of agroecology as a vehicle for transformation. Suddenly, the association's very survival was at risk, and certain choices – intentional or not – were made that undermined the possibility of 'social transformation described in the agroecology literature. These limitations were by no means caused by the crisis,

but they were made evident in particular ways by it. The crisis has had specific implications for the women of Oñoirũ that illustrate how the social transformations promised by agroecology are unevenly distributed among participants.

4.3.1 Re-inscribing gender roles in crisis

While increasing the number of non-males who participate in typically male-identified spaces like yerba mate production, it is important to unpack how this participation is still "partly a product of power relations embedded in socio-spatial relationships," (Adams et al., 2018). Participation itself is not necessarily an indicator of success in redistributing power. Oñoirũ is an affiliate of Conamuri, which provides technical support and sells the yerba mate in its offices in Asunción. Conamuri helps the associates apply for funding from grants, and other matters with which Conamuri has many years of experience. In exchange, Oñoirũ strives to create as much space as possible for women to participate and become leaders who can also benefit economically from the collective. Ramona has participated for several years and sums up Oñoirũ's efforts at creating opportunities for leadership as such:

> And since [the association] wanted to give more space for women last year, [there was a woman] president of the association. When the associated emerged, there was agreement that it would be wonderful for there to be a woman who would be the head, and it's already happened. We continue thinking there is still some ways to go since we began so recently, I think we are still lacking to do better work, let's say. But something like that. We are giving women possibilities and for the association they thought it seemed good if a women could lead it. So we are gaining space.[59]

The association's affiliation with Conamuri has helped ensure that creating opportunities for women is part of the organization's structure. Ramona continues:

[59] Interview, Ramona, July 11, 2019.

Image 16: The Oñoirũ barbacúa (pre-fire). Photo by author.

> Sometimes we organize small projects to make something at home. Some small activities. To earn some of our own income more than anything. So we can feel more independent.[60]

Emilce, another Oñoirũ and Conamuri participant echoes similar sentiments: "the goals in reality are to ensure than women can organize and maintain a link with the community and to be able to maintain firmly the status of women in the countryside."[61] Oñoirũ also runs a separate women's committee, ensures that even if women cannot attend general committee meetings — which often happen early in the morning while many women are still busy in the home — they can remain up to date about the association. The women's committee also runs its own workshop and small-fundraising activities to support the association. These are aspects of the committee that Ramona attributes to helping women feel more independent. However, these opportunities, if they are not accompanied by systematic efforts to re-dress differences in time and labor power,

[60] Interview, Ramona, July 11, 2019.
[61] Interview, Emilce, July 11, 2019.

may create more work rather than offer a way to improve their lives (Adams, et al., 2018; Agarwal, 2014).

By ensuring regular leadership positions for women, Oñoirũ has addressed some of the critiques that we saw in Paraguay's older agrarian reform movements (Roig, 2008). However, the aftermath of the crisis helped elucidate how presuming that leadership positions automatically 'empower' women is problematic. This draws on critiques of assuming rural women's time is "infinitely elastic," (Wilson, 2015: 812) and can always incorporate more activities for the sake of neoliberal ideas of empowerment (Agarwal, 2000; Wilson, 2015). Agroecology scholars and movements also tend to assume women's time is continuously able to take on new tasks for the sake of its advancement. For Oñoirũ in the fire's immediate aftermath, this has meant sacrificing some of the tasks the women use to create independence, andrelying instead on certain women to perform household tasks for an entire crew of construction workers as they still had to complete these duties in their own homes. Celia and Ramona in particular took on much of this labor.

Throughout the month of July, reconstruction was in full swing. Most days, there were at least ten men working on the premises, tearing down irreparably damaged infrastructure, laying new brick, and pouring cement. In the morning, Ramona and Celia would come with their young children in tow to begin the morning-long process of cooking lunch for the men reconstructing the facilities. We would begin a fire first thing in the morning, sheltered behind the main warehouse to protect us from the wind. First, we had to peel and wash the mandioca so that it would be done by noon. Someone would go down the road to get the necessary supplies for the day from the local *depósito*[62] to make the communal stew for lunch. Smoke would billow into

[62] *Depósito* here refers to a small business that sells basic household goods like meat, onions, tomatoes, pasta, rice, soap, and toilet paper. In rural areas of Paraguay, the *depósito* is often run out of the front room of someone's home.

our faces, making our eyes water. Someone had to keep the children entertained. Celia's child was just learning how to walk and would need someone to waddle around the site with her to

Image 17: The Oñoirũ barbacúa (post-fire). Photo by author.

keep her busy. Ramona's child was only a few months old and would occasionally panic if they lost track of their mother. Mornings were a flurry of activity. Between cooking and childcare — along with the day-to-day tasks that needed to be completed to keep the other aspects Oñoirũ functioning — we were kept busy. Meanwhile, the men kept laying bricks and mixing cement. The crisis meant that everyone was spending hours at Oñoirũ, time that was supposed to be dedicated to the harvest. Everyone's attention was on getting from one day to the next, all while rebuilding their infrastructure. However, the women of the association were disproportionately responsible for the social reproductive labor of both their families and the association.

One morning, I asked: "Is this something you do every day?"

"No," Ramona responded. She continued by saying that this is something they were doing to support the construction, and quite frequently during the harvest season. This daily exercise of making a meal was specific to the current situation. Since she was at Oñoirũ most of

the day during this time, Ramona's older children had to stay with a friend. This is an important illustration of how women utilize their networks in specific ways in order to continue organizing around environmental causes (Agarwal, 2000), but also highlights how women remain primarily responsible for the childcare even if it is not their own child (Chowdhury, 2016). Celia and Ramona were made responsible for providing food for a large number of people, meanwhile, they had to rely on other women to ensure that their own household responsibilities were also taken care of. These networks of assistance are important to women's daily survival, but it is also important to problematize this reliance in relationship to the power dimensions it reveals. These women, who had taken on significant leadership roles within Oñoirũ, were held responsible during the crisis for the reproductive labor that sustained both the association and their own households. Those tasks they were unable to complete on their own were shouldered by other women in the area. Despite opportunities for leadership, without a redistribution of labor, including productive and reproductive tasks, which ends up unduly burdening the women in the committee.

To grapple with how power operates within agroecology, the question of why labor is distributed in a particular way must be asked. Agroecology may be socially transformative by reducing dependence on agribusinesses and re-orienting nature-society relationships, but these transformations are not experienced equally by all participants because agroecology remains shaped by multiple power relations. The entrenchment of traditional gender roles in the fire's aftermath exemplifies several issues with the ways agroecology movements rely on the additional labor of women in order to continue.

4.3.2 Community work and gendered labor

While the fire brought the issue of women's time to light in specific ways, these are critiques that should be discussed in relation to the functioning of the association more broadly, particularly as they relate to the use of time and community labors. While the ways women are expected to perform certain productive and reproductive roles has led to an array of knowledge systems utilized in agroecological production (see Chapter 3), this often leads agroecology scholars and movements to problematically assume that women's time is continuously flexible (Wilson, 2015), particularly in regards to their proclivity to perform community work (Agarwal, 2000). The women's committee of Oñoirũ, currently led by Celia, has attempted to make a community garden for women to grow *ka'a he'é*.[63] The stevia plant is native to this region of South America, and grows abundantly (Red TECLA, 2018). The goal was to grow *ka'a he'é* for household use and some to sell at weekly markets. When Ña Zunny showed me the plot located behind her house, much of it was covered with her own plants. She explained:

"And this garden we founded through Conamuri. It's a community garden. And now the women don't come anymore…this we planted with the women. With the women together."[64]

"Why don't the women come anymore?" I asked.

"They don't want to leave their house, their housework, for a bit to do community work," she replied simply. Women already have a significant number of tasks to perform in the house, and it can be difficult and time-consuming to leave the house to grow *ka'a he'é* with other women from the area, which would include travelling to the community garden in addition to the tasks they perform with Oñoirũ. In the coming months, Celia was planning on attempting to re-establish the community garden as part of the women's committee. Celia, also a recent graduate

[63] *Ka'a he'é*, or stevia, translates directly from Guaraní as 'sweet herb'.
[64] Interview, Zunny, July 3, 2019.

of the agroecology school in Brazil, had completed her research on the importance of *ka'a he'é* to *campesino* households as a local sweetener.[65] However, this project's implementation had to be paused since so much energy and time was focused on recuperating the harvest that year.

Without a real effort to re-distribute household and community labor, projects like this are likely to fall short of addressing the issues women face in their daily lives. While community work is a focal point of Oñoirũ's operation, the expectation that the women in the group could then take on more community labor through the garden in addition to their work with the yerba has proven challenging. Women are often presumed to have deeper community connections than men, and agroecology movements themselves can replicate or rely on these assumptions (Agarwal, 2000; Tsing, Brosius & Zerner, 2005). Rural Paraguayan women report working sixteen-hour days (Oxfam, 2017), with time divided between household work, family care, cooking, and a variety of agricultural tasks (DGEEC, 2017). While men do work more hours in the fields and with large animals, once that labor is completed, they report allocating fewer hours to tasks geared toward maintaining the household (DGEEC, 2017). Without allocating productive and reproductive tasks more equitably, women's ability to participate in projects which might prove beneficial is truncated because they must also concern themselves with household maintenance (Wilson, 2015). Desire or capacity to participate in community-oriented projects cannot be presumed (cf. Méndez, Bacon & Cohen, 2013), without unpacking what that looks like in practice.

Oñoirũ and its various sub-committees illustrates that women's participation remains fraught in spite of its importance to facilitating sustainable agroecosystems (Adams et al., 2018). While the crisis at Oñoirũ brought these issues to light in specific ways, they reflect broader

[65] Personal Communication, Celia, July 10, 2019.

issues within Conamuri at large, not just within this specific committee. The crisis at Onoiru emphasized that these labor conditions become increasingly precarious and difficult as the expansion of plantations makes productive and social reproductive labor of the people who live around them more difficult (Li, 2017; Fernandez, 2018) The high-stress of the moment increased the association's activity level, rendering the limitations more apparent. .Making women's multiple roles in agriculture and beyond visible is insufficient on its own as social transformation. Conamuri participants are running into the limitations of this version of social transformation as lauded by agroecology scholars (c.f. Giraldo, 2020). The process of addressing such limits is fraught and riddled with contradiction.

4.4 Contradictions of organizing along gendered lines

Agroecology movements must consider the ways in which relations within agroecology itself are gendered in order to address the multifaceted issues participants face.Merely acknowledging the roles of women in agriculture or advocating for a particular set of agricultural practices alone does little to address the systemic issues women face due to gender norms and the specific ways women are impacted by the expansion of industrial agriculture and the normalization of gendered roles within agroecology movements. The ways agroecology is articulated on an international level by scholars and organizations like Via Campesina has implications for agroecology movements at the grassroots. To the extent that there are contradictions within agroecology, movements must deal with these contradictions in real-time. Conamuri's members have had to deal with the contradictions of only organizing women that led to greater efforts at incorporating men. Rather than resolve the issue, new contradictions have emerged for mixed committees.

When in 2015 Conamuri expanded into yerba production — which is primarily associated with male labor (Potthast, 2004) — some of these challenges became all the more apparent. Alicia was instrumental in forging the connection between Oñoirũ and Conamuri, but she sees continued labor distribution issues within them both. Alicia emphasizes:

> And it serves to mention that we [Conamuri] have a great debt with Oñoirũ because we have to strengthen the women. Because there [in Edelira] we began with women and today there are the men, so our force as an organization of women [is diminished]. We have put in a great effort to strengthen production and the women disappear…People say that yerba is completely the work of men. Lies. The men cannot be without the work that women do.[66]

Alicia remains frustrated with the inability to deal with the root cause of the issues women within the movement face, especially since it is the social reproductive labor of principally women that make men's labor in the fields and with yerba mate possible. She knows that while the opportunities the women of Oñoirũ have within the association are important, agroecology alone does not address many of the challenges women contend with daily because it does not necessarily created conditions that redistribute labor. Indeed, it often relies upon women's increased labor, especially as they are so often centered as bastions of agroecological knowledge (Mesner, 2008).

While Conamuri was founded as an organization designed to create more spaces for women's participation in rural social movements, over time men have increasingly found important roles within many of the movement's activities.[67] In its early years, Conamuri focused exclusively on organizing women to improve upon their agroecological practices in household and community food production. However, the movement soon realized that this was

[66] Interview, Alicia Amarilla, August 5, 2019.
[67] In addition, some people within the movement wish to see it become more open to a variety of gender and sexual identities, whichremains a rather fringe idea within the organization, so we will focus primarily on the driving force for mixed committees within the movement (Field Notes, August 5th, 2019).

insufficient. According to Alicia, they have worked to include men in some aspects of the movement because:

> We had many contradictions in the early days because the women would go about doing their [agroecology] practices and their sons and husbands had another conception of agriculture. So there were many contradictions.[68]

Alicia is referencing that, while Conamuri was organizing specific members of households, the men of those households continued to use external inputs like pesticides and GM seeds to produce food on the farm because their agricultural labor is more visible to market forces. By not including men in their workshops that train for agroecological production, Conamuri wasn't really spreading its practice. Instead, they were honing the skills of people who were already producing in ways that were similar to agroecology. Conamuri realized that in order to make agroecology more widely used, it could not exclude members of the household. Including men would also help women. Since men were still using pesticides and other chemicals, women's gardens could be affected either via soil, water, or air contamination. Some of the food consumed in the household, such as corn, is produced on the farm, so only using agroecology for the garden meant that much of the food was still produced using pesticides and GM seeds. Since members of the household were still consuming food with these inputs, they could still be exposed to its harmful effects (ÚltimaHora, December 11, 2018). Incorporating men into committees has helped make agroecology more prevalent among those communities where Conamuri organizes, but it has come with unintended consequences for the movement.

The decision to incorporate men into committees has been fraught for Conamuri. On the one hand, they have been able to expand the number of households participating in their movement and ensure more members of each household had agroecological training. In order to

[68] Interview, Alicia Amarilla, June 13, 2019.

engage as many people as possible, Conamuri's workshops have shifted to focus more on agroecology and production than on the women's rights component of their organizing.[69] Producing according to the principles of agroecology has helped women create support networks (as we saw in Chapter 2) and in many cases has reduced household dependence on government packages or agribusinesses to produce enough for survival. These accomplishments are important, but they do not benefit everyone equally. The challenge isn't about the decision to incorporate men into committees per se, but rather is the result of a capitalist patriarchal system that creates conditions where people – men and women included – come to believe and act upon that value system.

"I so badly want to dedicate myself to Oñoirũ to make visible [the work of women]…And I think us…as Conamuri…we have to debate this idea more — why the men fly [do well] and the women do not. For all the reasons we already know."[70] Here, Alicia implies that Conamuri has had some difficulty in terms of systematically dealing with patriarchal gender norms among its participants. Across several conversations, Alicia and I discussed her ideas about how to improve Oñoirũ from a woman's organization perspective, and how to present these ideas to people like Pedro, Celia, and Ramona. However, once the fire happened, all these ideas had to be tabled while the crisis was dealt with. There was barely enough time, energy, and resources to handle the reconstruction, let alone re-organize Oñoirũ to improve the situation of women within the organization. First on everyone's mind was ensuring Oñoirũ's continued survival and re-gaining the lost harvest.

The women who participate in the Oñoirũ committee also recognize that there is work that remains to be done in terms of improving women's lives. For Ramona: "the women [in

[69] Field Notes, August 5, 2019.
[70] Interview, Alicia Amarilla, June 13, 2019.

Oñoirũ] are already more alert in this sense. They already participate, they speak more, they defend themselves more. Like I told you before, they are animated to take on more important roles that the men always had before. Even still, there is a lot that we are still lacking."[71] Conamuri had to make a difficult choice. They opted to emphasize the agroecological aspect of their mission in order to incorporate men and other members of the household. This had benefits for the movement; more people are involved, and even women can benefit from other members of the household engaging in agroecological production. However, at the same time, women's ability to participate in workshops and disruptive actions have been hindered. While gender-based and indigenous rights education has continued in the movement, in recent years it has not been as central as the agroecology component of Conamuri. This has had a detrimental effect on women being able to participate in certain organizing spaces. Conamuri has retained certain national and district level workshops to be gender-specific, but this does little to help women in the burdens they shoulder in their daily lives and within agroecology workshops in their own communities.

While scholars, practitioners, and agroecology movements claim that agroecology is socially transformative, many benefits are unevenly distributed among participants. I am not arguing that agroecology is not socially transformative, but that these transformations are always conditioned. One reason agroecology has difficulty 'scaling up' (Ferguson et al., 2019; Altieri, Funes-Monzote, Peterson, 2012; Guzmán Luna et al., 2019) is because its effects are uneven. While in many regards, women may have a particular interest in joining an agroecology movement, if their specific concerns are not addressed, joining the movement may have more consequences than benefits, especially in the short-term. On its own, agroecology does not

[71] Interview, Ramona, July 11, 2019.

necessarily redistribute the work performed by *campesina* and indigenous women, which Agarwal (2014) advocates as a necessity for actually improving women's lives. When women are acknowledged in the agroecology movement, emphasis is placed on making women's work visible rather than improving their capacity to achieve those tasks or redistribute them (Agarwal, 2014). . However, agroecology is more than just a set of practices. It is a politically mobilizing framework that is malleable to interpretations that redistribute labor, address gender-based and indigenous violence, and advocate for issues that are important to particular practitioners.

4.4.1 Barriers to participation

The benefits of agroecology are also unevenly distributed due to barriers to participation in agroecology organizations outright. When gender is discussed within the agroecology literature, the focus is on gender as a category, rather than as a set of mutable social relations that are subject to change over time and space (Wickramasinghe, 2004). Whereas NGOs and other organizations that seek to terminate patriarchy by merely providing women with more and better inputs have been roundly critiqued (c.l;f. Patel, 2013; Chant, 2016), agroecology movements have not been held up to the same scrutiny. The return to the traditional agricultural practices and family farms often advocated by agroecology movements do not take into account how those structures played a role in subjugating women to patriarchy in the first place (Agarwal, 2014).

There are multiple barriers to participation in agroecology movements for women, including organizations like Conamuri. We saw in Chapter 2 that the operation of patriarchy within agroecology movements might bar women from meaningful participation or prevent them from organizing in the first place. In addition, Alicia has seen how "if your family situation is…if things are difficult with your partner, it is very difficult to join. If your partner is jealous, you cannot go to work with men or leave the house on your own. And these are the things we

have to work on there."[72] There are women who are unable to participate because of conditions in their home. As Ramona illustrated in Chapter 2, often gender norms of participation in public or mixed-gender spaces are articulated by women as well. These norms are not just propagated by men but rather a systematic set of norms and conditions that allow certain people to participate in certain spaces at specific moments.

As Alicia indicates, who is able to participate in agroecology movements is already conditioned by patriarchy. Certain women who may have a desire to participate in local committees may not be able to do so without seriously risking harm from their families or partners. The prevalence of gender-based violence in the countryside was a common theme throughout my interviews, as was the ways women's ability to move through public and community spaces is often limited. Even though agroecology in the Global South is practiced by some of the most marginalized populations, the ability to participate in movements is shaped by local and global power relationships. Within households, within communities, patriarchal norms of gendered labor continue to shape labor relations. These are ideas that are often propagated by women themselves, including some Conamuri participants. Those who promote agroecological farming practices ought to acknowledge that individualized family farming disproportionately burdens women and that the benefits of switching to this form of agriculture will continue to be unevenly distributed.

Indigenous women face additional barriers to participation in Conamuri that stem from racial prejudice among participants. Compared to many other countries in Latin America, Paraguay has a low percentage of indigenous peoples (CODEHUPY, 2019). The *campesinado* does not align with an indigenous ethnic or racial identity like it does in some Latin American

[72] Interview, Alicia Amarilla, June 13th, 2019.

countries (Gotkowitz, 2007), and there are serious problems of *campesinos* committing violence against indigenous peoples (Correia, 2019). This is a reality that Conamuri must contend with, even though it advocates for indigenous peoples. It took fourteen years and a significant amount of pressure from indigenous participants before indigenous women began to be elected into the national secretariat. Bernarda, the first indigenous Director General of Conamuri, was elected to this post in 2017. While she expresses that she overall enjoyed the experience, she also faced backlash for her comportment:

> I had to learn how to be a community leader which was easy for me, in order to reclaim our rights as indigenous women. And so there were two different pathways, two different knowledges, two very distinct experiences and it wasn't an easy [first year of leadership] because I had to adjust to another way of being. They told me I had to speak forcefully…because the *campesina* women like it when you speak this way…I had to speak with force and I couldn't because I was unable to adjust.[73]

Bernarda's experience of having to adjust to a different way of being – which she associates with her identity as an indigenous woman – in order to earn the respect of the *campesinas* serves as a reminder that even though the movement advocates for indigenous women in many respects, it still can perpetuate norms which are exclusionary to them. Alicia says she tries to be attentive to the ways that *campesinas* may make participation more difficult for indigenous women to participate in the first place.[74] While the precise agricultural practices of agroecology do not deal explicitly with issues of discrimination (whether it is gendered or ethnically-based), this serves as another reminder that within agroecology movements, prejudices still have serious implications for who benefits and in what ways from the social transformation promised within the

[73] Interview, Bernarda, August 9, 2019.
[74] Interview, Alicia Amarilla, August 5, 2019.

agroecology literature. People who aim to further agroecology as an alternative to industrial agriculture must remain attentive to these realities.

4.5 Conclusion

Agroecology in many cases has helped reduce *campesino* dependence on external institutions like agribusinesses and the state. It may be a way to improve resilience to climate change in the regions where its impacts may be most damaging (Altieri & Nicholls, 2013). It does have valuable insights and forms of organizing that are useful to Paraguayan *campesinos*. However, as this chapter has illustrated, agroecology and agroecology movements remain conditioned by power relations. This means that those transformations are unevenly felt by people who participate. By not taking seriously the ways in which power operates *within* agroecology movements, the benefits of transitioning to this kind of agriculture remain unevenly distributed. One of the ways in which this is occurring is through patriarchy, which delimits the benefits women, children, and indigenous peoples can benefit from agroecological production. Agroecology remains rife with challenges that have real consequences for its grassroots organizations. Oñoirũ — especially during its moment of crisis after the fire — shows how agroecology and agroecology movements are shaped by power in multiple forms. The fact that a movement which critiques patriarchy as a central organizing feature still experiences its effects among participants illustrates the necessity of unpacking the actual dynamics of power and the distribution of labor within an agroecology movement. Agroecological practices are always shaped by power relationships that operate among their practitioners. Indeed, the ways agroecology is politically mobilized may rely on and benefit from these conditions.

There is space within the ways agroecology is politically mobilized to address some of the issues discussed throughout this chapter. Bina Agarwal (2014; 1992) advocates for a shift away from the family farm as the principal organizing unit for agroecology movements and a redistribution of productive assets to address some of the social institutions that sustain patriarchal gender norms. Beyond the political interpretations and uses of agroecology, there are a number of ways these already-existing networks can be used to address long-standing issues of sexism and racism within the *campesinado*. Schwendeler and Thompson (2017) demonstrated the ways women in Brazil's MST were able to use their leadership positions to mobilize a gender-rights based pedagogy in the movement's agroecology school. In recent months, Conamuri has re-directed its organizing efforts toward educating all of its participants about gender-based violence, gender-based and indigenous rights, as well as the uneven distribution of work with a new campaign. As the members of Conamuri themselves are cognizant of the limitations of their organizing, scholars must be attentive to this lived reality as well. The importance of these movements lies not only in advancing agroecological practices, but also how these movements are experienced.

Chapter 5
By way of conclusion: What is at stake for Conamuri?

Image 18: A cat warming itselfs in the sun on corn kernels. Photo by author.

5.1 Introduction

Every March 8th, Conamuri participants from all across the country come to Asunción to participate in the annual women's march. Women from rural social movements, from urban unions, from feminist cultural centers, and research NGOs come together to march through the central streets of the capital. They are contained on either side of the marching column by police and military officials bearing arms. Their march is tightly contained by fencing that prevents people from wandering along side streets. One year, tensions were particularly high, and the police and military began utilizing their weapons to brutally repress the marchers.

Lumia was caught in the crossfire. "We went to Asunción for the International Day of Women to defend our rights. That year there was repression from the police. I received three rubber bullets from this repression. And if we [women] achieved something, well then I achieved the mark of rubber!" Lumia laughed and smiled, a joke in the face of trauma that altered her involvement in Conamuri. "Before, I was a forceful presence within the organization, but after that my family asked me to stop participating so much. So, now I participate locally, just here

with us. It is also for my children. We want our children to be able to live better, because there are many illnesses, there is much contamination, and because of this we continue fighting so that our children can live better. We can achieve something only if we are together. Alone, one cannot do this."[75]

Agroecology movements in Paraguay are regularly subjected to systematic state surveillance and control. During the National Seed Fair discussed in Chapter 3, the police made their presence well-known. Throughout the entire day, police strolled casually through tightly packed tables and visitors, their multiple arms on display for us to see. At one point, one of my informants leaned over and whispered to me "Why are they here like this? We are just here with some seeds." There was no moment where tensions escalated between participants and the police that day, but Lumia's story is a reminder of the constant possibility. These eventsin spaces of resistance situate Conamuri's story within a particular moment of Paraguay's history where the alliance between the state and agribusinesses is increasing the violent repression of the *campesinado*.

Particularly since the 2012 massacre of eleven *campesinos* at Marina Kue, scholars are noticing a rise in the use of violent tactics in order to force land removals (Correia, 2017; Irala, 2018). Violent land removals feature regularly in major Paraguayan news outlets such as *ÚltimaHora*, *ABC Color* and *La Nación*. Much of this sequestered land is then granted to agribusinesses; this was the case after the Marina Kue massacre in 2012, and in a forced removal at the edges of the Asunción metropolitan area in March 2019. Both of these tracts of land are now under soy cultivation. The coordination between the state and agribusinesses has allowed the plantation zone to continue expanding rapidly in Paraguay, with serious consequences for the

[75] Interview, Lumia, July 22, 2019.

rural population. This is why agroecology and agroecology movements are important avenues for resistance. Agroecology movements advocate for a redistribution of land, a different set of agricultural practices, the alleviation of rural debt, improved public health, and food sovereignty. Agroecology movements represent a real threat to the state-agribusiness alliance and the continued accumulation of capital by the state and agribusinesses. The continued existence of the *campesinado* and the resistance advocated by agroecology movements represents a challenge to their dominance.

Meanwhile, Paraguay is in one of the regions that will experience significant change as a result of anthropogenic climate change (Ioris, 2014). The 2019 IPCC *Special Report on Land and Climate* highlights that natural system dynamics, desertification, land degradation and food security are particularly vulnerable systems that are and will be impacted by a warming world. Paraguay's wetlands region to the east and dry Chaco to the west will be impacted in different ways. The IPCC points to industrial agriculture as one of the major potential drivers of climate change, as it dramatically alters ecosystems services that mitigate many of the effects of climate change (Ioris, 2014). The Paraguayan state lacks a clear climate mitigation plan, even though many people within Paraguay are already living with the realities of a changing climate that is increasing the frequency and intensity of rains and floods and lengthening droughts.

This thesis has sought to build an argument as to how and why agroecology and agroecology movements are contested even as these forms of organizing are important ways of resisting, while simultaneously holding space to be attentive to the limitations of agroecology as they are experienced and articulated by its practitioners. In so doing, I have focused specifically on the production of gender roles and gendered participation to understand how and why agroecology benefits certain practitioners more than others. I do so not to discredit agroecology

as a practice, nor its political articulations mobilized by social movements, but rather to complicate and contest the socially transformative potential so often lauded in the literature (Giraldo, 2020, Altieri et. al, 2012). This takes on particular relevance in Paraguay, where a campaign against so-called gender ideology is making it increasingly difficult to even discuss issues of gender-based violence and exclusions from daily life.[76] It is important, then, to remain attentive to how agroecology as a practice and a political movement is continuously shaped by power relations on multiple fronts. The very possibility of implementing agroecology is threatened by the continued advance of plantation zones and industrial agriculture, as it also relies upon a social reproductive and productive framework that is depleted (Fernandez, 2018) when environments are contaminated, and land access is under threat. Agroecology movements are also not immune from furthering or benefitting from uneven power relationships between different genders, races, and classes. In other words, industrial agriculture is not the only system of power that shapes the ways in which agroecology is practiced and experienced. Conamuri operates precisely at this intersection, although as we have seen, the movement continues to grapple with the consequences of these socio-economic and socio-ecological arrangements.

5.2 Agroecology as practiced and experienced

I have worked throughout this thesis to historically contextualize the situation of rural Paraguayan women and the shift in rural social movement strategy toward agroecology (Chapter 2), the ways in which seeds and seed networks become complex sites of identity and biodiversity construction (Chapter 3), and the ways that agroecology is experienced unevenly by practitioners of different identities (Chapter 4). All told, these chapters illustrate that agroecology – as a

[76] Field Notes, August 5, 2019.

practice, movement, and vision of *campesino* livelihoods – is constituted as a set of power relations. On the one hand, agroecology is always shaped by its relationship to industrial agriculture. It does not exist in isolation, nor is it simply as an alternative to industrial agriculture and the plantations they create. On the other hands, agroecology movements are shaped by identity and difference.

The ability to practice agroecology is shaped by its proximity to the plantation zone (Li, 2017; 2018) and other spatial forms shaped by industrial agriculture. As the inputs and spatial practices promoted by agribusinesses contaminate environments, dramatically simplify ecosystems, and damage native and creole seeds, agroecology's capacity to function in the ways people hope for it to are dramatically altered. Pedro, for example, proudly proclaims that Oñoirũ utilizes uncontaminated wood to process its yerba mate. When I pressed him by asking how they knew if wood was contaminated, he admitted that at times it was difficult to know, but they did their best to find wood that appeared healthy on their own lands.[77] While the agroecology literature makes a strong case for the importance of agroecological production (Altieri, Rosset, & Thrupp, 1998; Giraldo, 2020), feminist political ecology also reminds us that the construction of identities means that agroecology and its practice are always shaped by power relations among practitioners (Sundberg, 2004; Ojeda, 2016). As such, agroecology is more than something people do, but also becomes one way people come to identify themselves. The fact that encouraging agroecological production among *campesinos* is necessary and often difficult complicates the tendency to homogenize the *campesino* identity and experience (Edelman & Wolford, 2017). In other words, agroecology produces particular kinds of identities among rural populations which are classed, racialized, and gendered even as they are situated in particular

[77] Field Notes, June 10, 2019.

historical contexts. Conceptualizing industrial agriculture as specific spatial formations like plantation zones serves as a reminder to look at the complex ways the spaces in between large-scale farms as areas where people live through resistance and complicity to power relations.

The ways Conamuri has changed over the past twenty years is indicative of precisely these dynamics. Conamuri was created as an organization to address a real lacuna in rural social movements in Paraguay; there was limited space for non-male, non-indigenous peoples to participate in and shape these organizations as they might wish. These organizations in many ways entrenched certain norms and ways of being that were disadvantageous to certain participants. While Conamuri has sought to work around these obstacles, their participants, and by extension the movement itself, remain shaped in important ways by capital, patriarchy, and racism. It is easy to critique a social movement for not living up to its stated ideals. It is similarly easy to idealize *campesino* movements as embodying resistance to capital. However, the experience of participating in Conamuri lives between these two extremes. Scholarship must be attentive to both the potential and limitations of agroecology movements, as this is something many social movement participants themselves understand deeply.

5.3 Looking forward

The challenge with any research project, particularly an ethnographic one, is that it aims to capture and represent an unstable set of social relations. For this reason, I have not sought to provide an authoritative account of Conamuri and its participants. Rather, I have elected to focus my analysis on issues that were directly articulated to me by various participants, which means being attentive to tension and contradiction. Participants at once are grateful for the help that organizing through Conamuri has provided and frustrated with a lack of clear direction in recent

years. Women note that there has been some change in gender relations within the household, but these remain fragile arrangements. Precisely for these reasons, I argue that it is important to look at how participation in agroecology movements is experienced. Itis not a novel approach; Wendy Wolford's *This Land is Our Land* (2010) articulates a similar framework to explore the uneven ways people participate in rural movements. Attention to the lived experience movements, not just the way they are framed (Martin, 2003), is necessary to understand the complexities of power and identity in social movements.

A variety of Conamuri participants during my research noted that there needed to be a renewed effort at emphasizing the gendered dimension of their organizing. The movement has responded to this growing sentiment. In the time since I left Conamuri in August 2019, they have begun a campaign – *Topa jejahéi kuña rekovére*[78] – that seeks to address the prevalent issues of gender-based violence in Paraguay. This is not the first gender-based violence campaign Conamuri has launched, but it represents a re-galvanized effort to center the experiences of women, children, the elderly, and LGBTQ individuals within the organization. Conamuri is constantly evolving, and the ways participants engage in the movement is continuously re-worked. Therefore, this thesis offers less of an authoritative account of what Conamuri is or does to instead focus on how this organization is shaped by its participants, trends in agroecology, industrial agriculture, and patriarchy.

This dynamism lends itself to a variety of new research directions. Recently, the literature in political ecology has turned away from the moment of the land-grab or the moment of dispossession to focus on the long-term effects and implications (cf. Zoomers & Otsuki, 2017; Wolford & Edelman, 2017; Fernandez, 2018; Li, 2017). By focusing on agroecology movements

[78] *Basta de violencia hacia las mujeres*, or *end violence against women*.

as a response to land-grabbing and dispossession, this thesis has contributed to this conversation. However, much work remains to be done to account for the temporal dimensions of dispossession. In the case of Paraguay, there is particularly a lack of research regarding the gendered dimensions of the act of dispossession and its long-term consequences. Paraguayan research-oriented blog, *El Surtidor*, has recently published several articles documenting the specific forms of gender-based violence that occur during the moment of dispossession (Acuna & Caceres, 26 November 2019). In addition to this traumatizing violence, how families respond in the immediate aftermath to the act of dispossession is not particularly well documented in Paraguay. As we saw at the beginning of this chapter, the state and agribusinesses are altering their strategies to control rural populations, which has had consequences for the ways rural and peri-urban people can respond to dispossessive acts.

Scholars and practitioners of agroecology are increasingly concerned with the tactics used by agribusinesses to co-opt agroecological principles in an ongoing effort to sanitize their environmental, social, and economic impacts on local populations (Giraldo & Rosset, 2018). As more people grow cognizant of the profound connection between the global agri-food system and climate change, international and local institutions as well as agribusinesses have begun selectively adopting aspects of agroecology. While agroecology's newly found *fashionability* brings with it many opportunities for collaboration, there remains a legitimate risk of co-optation or being "colonized and stripped of its political content," (Giraldo & Rosset, 2018: 545). Indeed, in one of my first interviews with Alicia, she firmly (and rightfully) insisted on the distinction between agroecology and organic farming:

> And this is why we say that it cannot be organic production, but rather agroecological production. [Organic] would be more expensive. The poor would not be able to access healthy food. And only the wealthy participate.[79]

[79] Interview, Alicia Amarilla, June 13, 2019.

The political and socio-economic content is what makes agroecology important to many people. Yet, this also makes it vulnerable to co-optation. We are beginning to see co-optation occur in Paraguay, where Paraguayans are beginning to realize that the country's heavy reliance on industrial soy as its economic foundation is unstable and carries profound consequences. Sustainable soy initiatives and mono-cropped reforestation programs (Cardozo et al., 2016; Ezquerro-Cañete, 2016) are among the tactics used by agribusinesses to evade criticism and allow them to continue to accumulate capital in the countryside. There is a rich literature on the co-optation of various resistance strategies by agribusinesses so as to devoid them of their politically, socially, and economically just potential to reduce dependence on agribusinesses. However, the precise weaknesses within agroecology which may make it susceptible to these forces remains a little-studied area. Similarly, the tactics used by agribusinesses to entice small-holders and *campesinos* to contribute to their production have not been carefully scrutinized.

Throughout this thesis, I have sought to offer some insight into the complex interrelationship between land, gender, agroecology movements, and industrial agriculture as they manifest in Paraguay. Ultimately, it is a story about people who are seeking out paths that allow their survival, both in a literal sense and in terms of their identity. Through its workshops, protests, campaigns, and information networks, Conamuri has shaped the ability of rural Paraguayans, particularly *campesina* and indigenous women, to enact new survival strategies. A few weeks after the fire at Oñoirũ, we were living through one of the cold spells of a Paraguayan winter. The women's committee, myself included, had spent the day preparing ingredients for *kagure*, a corn-and-mandioca flour cheese bread that we would bake on sticks over coals and sell

Image 19: Making kaguré (manioc cheese bread) over an open pit. Photo by author.

to passersby on the main road. We were doing so to raise some money to help pay for one of the construction workers brought in for the repairs. As the sun began to slowly descend, we gathered by Oñoirũ's offices and began churning out warm bread. The coals kept us warm against the growing chill. The men who had been working at the construction site all day came over to purchase the *kagure*. We called out to families passing us on the road to join us. Our numbers grew. Laughter echoes off the tin walls of the offices. We ran out of chairs to offer new arrivals. At this moment, I was reminded of something Ña Nina had said when I first arrived in Edelira in June: "[To me, agroecology] primarily means health…good health. A healthy life…we take care of the environment, of the family…but agroecology begins here at home. In my home."[80]

[80] Interview, Nina, June 9, 2019.

For Claudio, "agroecology is everything."[81] To Celia, "agroecology and feminism can sustain each other."[82] All told, agroecology carries a multitude of meanings that extend beyond agricultural science. By paying attention to how its practitioners understand its value and limitations in their own life, we might be able to more effectively mobilize agroecology's political content in ways that support a multitude of identities, not only class-based ones. However, in order to do so, careful attention must be paid to how the people enacting agroecology understand how power operates within their movements and in the wider landscape.

[81] Interview, Claudio, June 23, 2019.
[82] Interview, Celia, June 10, 2019.

Appendix A: Interview Log

Name or Pseudonym	*Date*	*Role*
Hilaria	1 June 2019	Conamuri
Alicia Amarilla	1 June 2019	Conamuri
Elsy Vera	5 June 2019	CDE researcher
Quintin Riquelme	5 June 2019	CDE researcher
Nina	8 June 2019	Conamuri Itapúa
Pedro	11 June 2019	Conamuri Itapúa, Oñoirũ
Celia	11 June 2019	Conamuri Itapúa, Oñoirũ
Zunny	11 June 2019	Conamuri Itapúa, Oñoirũ
Irineo	11 June 2019	Oñoirũ
Alicia Amarilla	13 June 2019	Conamuri
Julia	18 June 2019	Conamuri Repatriación
Marina	18 June 2019	Conamuri Repatriación
Teresa	20 June 2019	Conamuri Repatriación
Claudio	23 June 2019	Conamuri Repatriación
Gabriela	23 June 2019	Conamuri Repatriación
Irineo*	3 July 2019	Oñoirũ
Zunny*	3 July 2019	Conamuri Itapúa, Oñoirũ
Irineo*	5 July 2019	Oñoirũ
Ramona	11 July 2019	Conamuri Itapúa, Oñoirũ
Emilce	11 July 2019	Conamuri Itapúa, Oñoirũ
Papai	11 July 2019	Oñoirũ
Lumia	22 July 2019	Conamuri Repatriación
Juliana	23 July 2019	Conamuri Repatriación
Antonela	24 July 2019	Conamuri Repatriación
Viviana	24 July 2019	Conamuri Repatriación
Graciela	24 July 2019	Conamuri Repatriación
Alicia Amarilla*	5 August 2019	Conamuri
Bernarda	9 August 2019	Conamuri

**indicates a follow-up interview*

Appendix B: Select Documents from Conamuri's Archives

Avalos, Vicky. (2014). *Convención interamericana para prevenir, sancionar, y erradicar la violencia contra la mujer: 20 años*. Lima: Programa Regional combatri la violencia contra las Mujeres en Latinoamérica.

CLOC/Via Campesina Paraguay. (2011). CLOC/Via Campesina Paraguay. *Campaña por la soberanía alimentaria*. Cartilla de formación (1).

CLOC/Via Campesina Paraguay. (2011). Los agrotóxicos. *Campaña por la soberanía alimentaria*. Cartilla de formación (2).

CLOC/Via Campesina Paraguay. (2011). Tierra y territorio. *Campaña por la soberanía alimentaria*. Cartilla de formación (3).

Conamuri. (nd.) *Cartilla Semilla Roga: campaña de Conamuri por las semillas y la soberanía alimentaria*. Asunción: Conamuri

Conamuri. (2010). *Mba'eicha romba'apo ha mba'e rohupyty: relatdo del camino compartido en el fortalecimiento de una organización de mujeres campesinas e indígenas.* Asunción: AECID.

Conamuri. (2012). *Géneros, patriarcado, feminismo: curso de formación pytyvõhára* (1). Asunción: Conamuri.

Pompa, Dea with Oxfam Paraguay & Conamuri. (2019). Semilla Róga: recuperando semillas con Conamuri. Accessible at: https://www.youtube.com/watch?v=n-rqCvwL2QU.

Red TECLA. (2018). *Del Ka'a He'e a la estevia*. Asunción: Red TECLA.

Riquelme, Quintín, & Víctor Imas. (2014). *Políticas públicas en la agricultura familiar*. Asunción: Decidamos.

Zevaco, Sarah with Conamuri. (2008). *Planificación estratégica y operativa: Conamuri (2008-2011).* Asunción: AECID.

Ñe'é Roky Newsletter

Conamuri. (2009). *Ñe'é Roky*. 1(1).

Conamuri. (2010). *Ñe'é Roky.* 1(4).

Conamuri. (2010). *Ñe'é Roky*. 2(6).

Conamuri. (2011). *Ñe'é Roky.* 3(8).

Conamuri. (2011). *Ñe'é Roky.* 3(9).

Conamuri. (2011). *Ñe'é Roky.* 3(10).

Conamuri. (2012). *Ñe'é Roky.* 4(11).

Conamuri. (2012). *Ñe'é Roky*. 4(12).

Conamuri. (2014). *Ñe'é Roky.* 5(15).

Conamuri. (2014). *Ñe'é Roky.* 5(16).

Conamuri. (2016). *Ñe'é Roky*. 7 (19).

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Adams, Ellis Adjei, Luke Juran, & Idowu Ajibade. (2018). ‘Spaces of exclusion’ in community urban governance: A feminist political ecology of gender and participation in Malawi’s urban water user associations. *Geoforum*. 95: 133-142.

Agarwal, Bina. (2014). Food sovereignty, food security, and democratic choice: critical contradictions, difficult conciliations. *Journal of Peasant Studies*. 41(6): 1247-1268.

Agarwal, Bina. (2000). Conceptualising environmental collective action: why gender matters. *Cambridge Journal of Economics.* 24: 283-310.

Agarwal, Bina. (1992). The gender and environment debate: lessons from India. *Feminist Studies*. 18(1): 119-158.

Altieri, Miguel A., Fernando R. Funes-Monzote, & Paulo Peterson. (2012). Agroecologically efficient agricultural systems for smallholder farmers: contributions to food sovereignty. *Agronomy for Sustainable Development*. 32(1):1-13.

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EDUCATION

Exp. May 2020	Master's Student in Geography, Syracuse University
May 2016	Bachelor of Arts, Magna Cum Laude, Colgate University Concentrations: International Relations; Latin American Studies

RESEARCH INTERESTS

Industrial agriculture, gender, agroecology, food sovereignty, land access, Paraguay

HONORS & AWARDS

2020	NSF Graduate Research Fellowships Program (GRFP) Honorable Mention
2019	Program on Latin America and the Caribbean Summer Travel Award *Moynihan Institute, Syracuse University*
2019	Conference of Latin American Geography Field Study Award *CLAG Specialty Group*
2018	Roscoe Martin Fund for Research *Maxwell School for Citizenship & Public Affairs, Syracuse University*
2016	High Honors Distinction in Latin American Studies *Colgate University*
2016	Organization of American States Excellence in Latin American Studies Award *Africana & Latin American Studies, Colgate University*
2016	Pi Sigma Alpha Political Science Honor Society *Political Science Department, Colgate University*
2015	Jim P. Manzi Fellowship for non-profit internships *Colgate University & Facing History and Ourselves*

REASEARCH EXPERIENCE

Ongoing	***Proposed Title:*** "Agroecology Feminisms: Paraguay's Conamuri in the struggle against industrial agriculture." Master's Thesis. Department of Geography, Syracuse University. *Supervisor:* Dr. Tom Perreault, Professor of Geography, Syracuse University.

May 2016 "Co-Producing Memory Projects in Space: The state and civil society memorializing ex-Clandestine Center of Detention & Torture Virrey Cevallos in the Buenos Aires Memoryscape."
Honors Thesis, Africana & Latin American Studies, Colgate University
Supervisor: Dr. Teo Ballvé, Assistant Professor, Peace & Conflict Studies and Geography, Colgate University.

July 2015 – May 2016 ***Research Assistant,*** Peace & Conflict Studies Program
Colgate University, Hamilton, NY
Edited draft book manuscript, published in 2018. Assessed international journalism and primary source documents from Rwanda.

Jun.- Aug. 2014 ***Research Assistant,*** History Department
Colgate University, Hamilton, NY
Inspected English and Spanish 17th century primary sources to relate scientific thought across colonial English and Spanish colonial societies.

Nov.-Dec. 2014 ***Independent Field Research***
School of International Training, Buenos Aires, Argentina
Designed an ethnographic research project on contextualizing a memory site in Buenos Aires. Resulting paper competitively selected to be informally published in the School of International Training's online library.

Jan.- May 2014 ***Research Assistant,*** Political Science Department
Colgate University, Hamilton, NY
Assessed scholarship on transitional justice mechanisms in post-Cold War Eastern Europe to identify gaps in the literature.

TEACHING EXPERIENCE

Fall 2018 & Fall 2019 ***Graduate Teaching Assistant (In-Person)***
GEO 103: Environment and Society
Geography Department, Syracuse University, Syracuse, NY

November 2019 ***Guest Lecturer***
GEO 103: Environment and Society
Geography Department, Syracuse University, Syracuse, NY

Oct. 2017–June. 2018 ***Instructor of Record***, multiple English as a Foreign Language Courses, BridgeEnglish Argentina, LV Studio Language Institute
Buenos Aires, Argentina

Jan.-May 2019 ***Grader (In-Person)***
GEO 367: Gender in a Globalizing World
Geography Department, Syracuse University, Syracuse, NY

CONFERENCE PRESENTATIONS

2019 Chair, "The Amazon: fires, livelihoods, and the state," panel session, Nature-Society Annual Workshop.
Syracuse University

2019 "Cross-Generational Mobilization: Land Rights, Intersectionality and Social Movements in Paraguay," Cultural and Political Ecology (CAPE) Poster Session, Association of American Geographers (AAG) Annual Conference.

DEPARTMENT SERVICE

Aug. 2019–May 2020 ***Graduate Student Representative*** to the Faculty, Geography Department, Syracuse University.

PROFESSIONAL EXPERIENCE

Aug. 2016–Jun. 2017 ***Program Coordinator,*** Africana & Latin American Studies, Colgate University
Hamilton, NY
Maintained a budget of $60,000 and student records for the program. Organized the Second Annual New York Six Regional Model African Union Conference. Implemented original events to support program visibility and community.

Jun.–Aug. 2015 ***Programs Intern***, Facing History and Ourselves
Boston, Massachusetts
Evaluated a recently completed project by conducting interviews and evaluating primary sources. Facilitated operation of training seminars for secondary-level educators.

CERTIFICATIONS & SKILLS

November 2017 TEFL Certified, *BridgeTEFL*

Languages English (native), Spanish (fluent), Guaraní (conversational)