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Barriers to Empowerment: How can gender equality training reduce the barriers that women farmers face in Nicaragua?

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Barriers to Empowerment: How can gender equality training reduce the barriers that women farmers face in Nicaragua?

**BARRIERS TO EMPOWERMENT: HOW CAN GENDER EQUALITY
TRAINING REDUCE THE BARRIERS THAT WOMEN FARMERS FACE IN
NICARAGUA?**

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PIM 75

A capstone paper submitted in partial fulfillment of the requirements for a Master of Arts in Sustainable Development at SIT Graduate Institute in Brattleboro, Vermont, USA.

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ABSTRACT

Women farmers worldwide face difficulties, unrelated to men, in their control over and access to resources and participation within farming systems. In Nicaragua women are legally allowed to own land and participate in cooperatives, however, due to social, political, and economic factors they face barriers in their equitable access to resources and participation. Feminist political ecology theorizes that gender plays a key role and determines access to knowledge and resources, additionally, gender motivates people to social and political activism differently, which in effect shapes human-environment interactions. Can women, women's groups, and NGO's find ways to reduce the barriers women face through various forms of consciousness raising to help change the knowledge, attitudes, and practices of communities? This paper studies the impact of 20 years of gender equality training at a cooperative in San Ramon, Nicaragua. Here, women came together with men to challenge the norms that acted to subordinate women - reducing barriers women farmers faced and transforming their roles both in the cooperative and their households. Though land ownership allows women a certain degree of empowerment, gender equality training further grows women's empowerment by reducing the barriers women face. This paper contributes to the academic and development community by more deeply examining the dynamic between gender equality training and the building of women's empowerment.

INTRODUCTION

Women who are small-scale farmers face barriers to their equal participation and access to resources within farming systems. Worldwide women play a crucial role in rural economies and agricultural output, producing 60 to 80 percent of all food, but are often denied decision-making authority, are less represented in agricultural cooperative management, and have less access to land and inputs to increase production (Food and Agriculture Organization, 2011). Gender plays a key role and can dictate how women access resources and participate in farming systems. The marginalization of women's roles in the agricultural sector is a missed development opportunity and can have repercussions both for households and the environment. However, it is noted that when women do have equitable access to resources and participation within farming systems, communities and households benefit.

Through their on-going struggle, women are organizing themselves to claim their rights to resources and participation. Legal literacy training, human rights training, and civic engagement are amongst the tools that women and organizations use to challenge the status quo, raise the consciousness of their peers, and change the knowledge, attitudes, and practices within their communities and nations that can act to subordinate their status (Deere & Leon, 2003; Goldman, Davis, & Little, 2016; Pena, Maiques, & Castillo, 2008). Gender equality training is another conscious raising tool that is being used within cooperatives and rural organizations. This will be the focus of my research on how women are confronting unfair roles and stereotypes that diminish their ability to access resources and participate on an equitable footing with men. I argue that gender equality training breaks down the barriers that woman farmers face to equitably access resources and successfully participate in farming systems.

I address this argument by analyzing the historical and present-day situations of women small-scale farmers at two agricultural cooperatives: Danilo Gonzalez and Dennis Gutierrez, both are members of the larger Union de Cooperativas Agropecuarias Augusto Cesar Sandino, hereafter known as, UCA San Ramon. The UCA San Ramon cooperatives Danilo Gonzalez and Dennis Gutierrez are located in the Matagalpa department of Nicaragua. UCA San Ramon is a second tier agricultural cooperative, focused mainly on fair trade coffee production, which since 1995 has implemented gender equality trainings every year to each of its twelve base cooperatives. This long time frame allows me to more deeply explore the historical and cultural barriers women farmers faced over time and how gender equality training changed the roles of women within their households and the cooperatives.

I came to my practicum and research site through my introduction to agro-ecology in the Issues to Sustainable Development class at the School for International Training (SIT). Agro-ecology is a particular way of farming and social movement that contributes to sustainable farming systems and communities. My practicum with The Chain Collaborative, a non-profit that partners with coffee communities to drive locally-led solutions for development, introduced me to the Community Agroecology Network, who has been conducting an agro-ecological project within UCA San Ramon. The intentions for my research were to understand the techniques and motivations behind why women chose to farm in an agro-ecological manner. Through my own interest of women's empowerment, my research also sought to gain an understanding of the barriers that women farmer's face and how women in developing countries are negotiating their positions within society. What my research findings led me to discover was a more impactful and pressing story outside of agro-ecology: how gender equality trainings helped women within UCA San Ramon to transform their roles within the cooperative.

The rest of the paper is structured as follows. The first section is a thorough review of literature inspired by my further inquiry into the capstone question and related to the barriers women farmers faced through themes of social, cultural, economic, and political participation. I introduce and explore the theoretical framework of feminist political ecology which I use as my lens to explore the obstacles women face to their access to resources and participation. I then discuss the strategies and tactics that women, women's groups, and non-governmental organizations (NGO's) are using to combat women's marginalization within farming systems and how they are empowering women to claim these rights. The last section of my literature review explores four gender equality trainings where I discuss their contents and analyze their merits. I then move into my case study within Nicaragua, exploring the agrarian reform and cooperatives act and narrow down my research into UCA San Ramon. I then lastly, analyze, discuss, and show the impact that gender equality training, provided over the course of 20 years, has helped to break down barriers that women have experienced through the lens of changing knowledge, attitudes, and practices.

LITERATURE REVIEW

When the Sandinista government came to power in Nicaragua in 1979 they sought to influence gender-egalitarian policies by implementing laws which specifically stated that women had legal rights to landownership and equal participation and management of agricultural cooperatives (Deere, 1985). However, even though women could legally claim these rights there were social, cultural, economic, and political barriers that reduced women's ability to access these rights on an equal footing with men. I use the cross-cutting themes of social, cultural, economic, and political barriers as a lens to explore women's marginalized status in farming systems, not only in Nicaragua but throughout the world, as women farmers face considerable

constraints in agricultural systems globally (Food and Agriculture Organization, 2011).

Additionally, I use feminist political ecology, which was introduced in our Theory and Practice of Sustainable Development class, as a lens to explore how gender and power drive human social and environmental transformation. Lastly, I review women's empowerment literature and four gender equality trainings to understand the tools that women and women's organizations are using to circumvent their disadvantaged roles within their communities and farming systems. The focus of the literature review will be to explore the relevant theoretical and empirical literature related to the issues women face in their control over and access to farming systems and participation in cooperatives. My research site is in Nicaragua, however, I have cast a wider net to review literature that pertains to women's issues over agroforestry systems and cash and subsistence crop systems throughout Latin America, Asia, and Africa. As often times women are responsible for not only producing work for coffee systems but also for subsistence crops to feed their families.

Women's roles in farming systems is crucial for rural economies, however, worldwide women represent 43% of the agricultural labor force but continue to be a minority in both access and ownership of resources and decision-making positions in private and public spheres (Food and Agriculture Organization, 2011; United Nations & Department of Economic and Social Affairs, 2015). Patriarchal institutions and the power and authority they yield in societies can often dictate the social roles women play leaving women to internalize their subordinate status and to assume lesser roles of power and decision making authority (Kaarhus & Dondeyne, 2015; UNNATI, 2009). Despite providing a large majority of work on farms and in cooperatives there has been an under-representation of women on committees and in administrative roles within producer organizations (Terstappen, Hanson, & McLaughlin, 2013). Men can hold the primary

power in determining who can access rights to resources, how women participate in cooperatives, and the productive and reproductive roles women play which can lead to an economic dependency on men, lower-wage work, or longer working days (Ceci, 2005; Kaarhus & Dondeyne, 2015; Mayoux, 1993). Power and authoritative tactics used to decrease women's social roles in society include male jealousy or domestic violence, restricting women's mobility, and bringing up opposition to women's roles in cooperative membership (Bacon, 2010; Kabeer, 1991; Lyon, Bezaury, & Mutersbaugh, 2010; Mayoux, 1993). The marginalization of women's social roles, therefore, affects their productive lives or economic resources but also subjugates their knowledge and ability to equitably contribute to decision making positions within cooperative organizations.

The cultural views of the 'proper' sexual division of labor also affect women's social roles of productivity and reproduction. Women are often thought to be particularly well suited or not well suited to certain areas of agricultural work which places women in a "strict dichotomy that has been assumed to exist between the roles of men as economic providers and women as domestic caretakers" (Lyon et. al., 2010, pg. 94). Within male headed households, women's farming is often seen nested within men's farming systems, where there is a 'dominant' land use operated by men, which is seen as more valuable and lucrative than the activities of women's systems (Rocheleau, 1995). Men and women alike have viewed women as simply helping out their husbands or viewed their own work as less important or when women do work their work is seen as less efficient and productive (Mayoux, 1993; Pena et al., 2008). This can have the effect of deterring women from wanting to participate in cooperative productive work since they do not want to be judged by their lack of skills and technical abilities (Mayoux, 1993). These discriminatory assumptions of gendered responsibilities have shaped women's unequal access to

resources and participation which can leave women behind when it comes to accessing technical education and contributes to women's social exclusion and participation in cooperative memberships.

There are political factors, such as women's legal rights to land and participation in cooperatives, that substantially reduce a women's ability to access land and contribute on an equal level with men (Deere & León, 2001; Kiptot & Franzel, 2012). A comparative analysis completed by Deere (1985) reviewed 13 agrarian reform laws that took place in Latin American countries during the 1960's through 1980's. What she found was that very few of the reforms produced significant female beneficiaries. Of the reforms that did offer gender disaggregate data, Cuba represented the country that had the most significant number of female beneficiaries in regards to cooperative membership at 26%, followed by Nicaragua at 6%, and Honduras at 3.8%; in all other countries gender disaggregated data was not collected (Deere, 1985). There has been a noted gender bias in terms of cooperative membership where males in male-headed households are the ones who participate and benefit from cooperative membership in some cases men have been unsupportive of sharing resources or uncompromising of women in their ability to shed household responsibilities (Abebaw & Haile, 2013; Deere, 1985; Kiptot & Franzel, 2012). Agricultural census data collected by Deere & Leon (2003) during the 1990's and early 2000's reflect the low amounts of women having access to land ownership. Of countries that have recorded gender disaggregated data on land ownership, Paraguay held the highest number of female landowners at 27% and Brazil with the lowest at 11%. It is also noted that when women do gain ownership of land, there is a gender gap in terms of the amount of land owned compared to men (Deere & Leon, 2003). Low numbers of women landowners benefiting from the agrarian reforms can be explained for due to the lack of joint titling of land or land only

being titled to the heads of households, which was often assumed as the male (Ceci, 2005; Deere, 1985; Pena et al., 2008). Even though broad, national laws and policies allow women to access land and cooperative participation, cultural bias towards women limit their inclusion to land titles and cooperative membership resulting in increased marginalization and uncertainty in their social and economic development.

The most prominent economic factors that impede women's entry into cooperatives or prevents them from participating on an equal footing with men is that women are often primarily responsible for unpaid reproductive tasks of the home (Ceci, 2005; Mayoux, 1993). This is due in large amount to their responsibilities of domestic and caring work, which includes caring for children and the elderly, procuring water and cooking food, cleaning the house, washing clothes, and taking care of animals (Ceci, 2005.; Mayoux, 1993). These duties leave women financially dependent on their husbands or provide them with less time to allocate to income generating activities (Gammage, 2010; Lyon et al., 2010). Being the sole person responsible for these activities not only restricts women's ability to contribute to cooperative activities and productive work but also perpetuates social exclusion, as reproductive tasks can take up to 17 to 19 hours a day (Ceci, 2005; Mayoux, 1993). There are also particular hardships that female single-headed households face, of which 38% of rural households in Nicaragua are headed by females (Food and Agriculture Organization, 2011). Mayoux (1993) notes if single females wanted to participate in cooperative functions or provide an income for their family, they often times had to lock their children in the house and hope nothing would happen to them while they were away. Even though women contribute to large amounts of work to both productive and reproductive functions they still are faced with relatively little decision-making power in regards to these duties (Lyon et al., 2010). This can be seen through women's access, or lack thereof, to labor

help, time-saving technologies, or education and information which could help them to conduct their reproductive responsibilities more efficiently (Kiptot & Franzel, 2011).

Despite women's marginalized roles and low participation in farming systems, there are many positive associations to women's increased access to resources and participation. When women do have access to resources it has been found to increase child and family welfare, increase school attendance for children, increase family medical care, and provide additional security for women in their old age (Agarwal, 2003; Kabeer, 1991; Pena et al., 2008). The importance of resources and participation for women's empowerment has also been linked to increased women's self-confidence, increased bargaining power, greater access to government programs, the transformation of gender relationships, and decreased domestic violence, (Agarwal, 2003; Goldman et al., 2016; Pena et al., 2008). Organizations such as the United Nations, United States Agency for International Development (USAID), the World Bank and others have also called for women's formal rights to land and an end to gender discrimination in laws that diminish women's access to resources as an essential way to reduce poverty and increase women's empowerment (Agarwal, 2003; Deere & Leon, 2003; Goldman et al., 2016). However, the social, political, and economic relations of power that in effect shape the allocation of resources and participation of women within farming systems need to be holistically addressed before women can compete on an equal footing with men.

Feminist political ecology is a conceptual framework that theorizes how gender plays a key role in determining unequal access and control over resources. Because of different use rights of resources, men and women experience the environment differently. This leads to gender differences being significant in shaping human-environment interactions (Rocheleau, Thomas-Slayter, & Wangari, 2013). The following are the three main themes in feminist political

ecology that explore the different gendered access and control issues that shape human-environment interactions:

1. Gendered knowledge, defined by how women and men have different access to knowledge whether training, education, or specific knowledge of the spaces they care for which is often times crucial for household survival.
2. Gendered environmental rights and responsibilities which explores unequal access to land and resources, in addition to, gendered household and labor responsibilities.
3. Gendered environmental politics and grassroots activism which argues that varying access to resources and power motivate women to social and political activism differently than men.

The first theme, gendered knowledge, explores how women's subjugated knowledge of resources has social as well as environmental impacts. Robbins (2004), Nightingale (2006), and Fehr and Moseley (2017) all discuss how men's environmental knowledge is privileged and given precedence to women's knowledge. In the studies, women were not consulted or their knowledge was seen as nonessential when discussions were held regarding local policy and resource allocation decisions that directly affected them. This privileging of male knowledge over female knowledge in research provided by Nightingale (2006) showed how natural resource management decisions were deferred to men even when it involved women. An example of this can be seen in leaf-litter collection in Nepal, which is a women's labor task. In this case, local forest rangers and high-caste men in Nepal decided that women's leaf-litter collection was associated with environmental degradation and forced women to collect leaf-litter only during certain times of the year. Women's knowledge about collection, land conservation, and seasonal timing was seen as dispensable. Meanwhile, no restrictions were made on men's work in the

region. This led to not only frustration on behalf of the women but also an increased labor burden on them during these specific times of the year. Female experiential knowledge has been studied and deemed significant in regards to their inclusion in resource management decisions because women tend to manage more bio-diverse landscapes compared to men who tend to manage more intensive and mono-crop systems (Rocheleau, 1995). A disregard for female knowledge can prove to be detrimental socially and environmentally as resource management decisions are made without women whose knowledge is seen as nonessential or expendable.

In Rocheleau et al. (2013) second theme, gendered environmental rights and responsibilities, explores both women's unequal access to natural resources and the gendered responsibility of caring for these resources. Empirical evidence shows that men are always favored and in a better position to own land over women, whether acquiring land through inheritance, joint-titling, or through the market (Agarwal, 2003; Deere & Leon, 2003; Pena et al., 2008). Furthermore, if women do share access to land, their portion of the land, activities, and products are often seen as nested within men's property and seen as inferior and subject to change regardless of whether it increases women's workload (Fehr & Moseley, 2017). This prejudicial and secondary view of women's land ownership and labor places women in a precarious situation as they have less control over what products they produce. There are economic as well as survival repercussions as well. Women have less say in what happens to the land if a spouse dies, which threatens the livelihood of themselves and their family. Less control over land use subjects women to the primary property owners decision of land use regardless if this increases women's household and agricultural duties (Agarwal, 2003; Robbins, 2012).

The third theme, gendered politics and grassroots movements discusses and examines how women are motivated to calls of action and social movements differently than men.

Mutersbaugh (1999) describes how women in Mexico organized collectively in response to a demand for their increased labor for cooperative agricultural production even though they were not members of the cooperative; ultimately the women recognized their value in the agricultural production process and used their collective leverage to establish their own cooperative.

Nightingale (2006) discusses the empowering effect of collective action and defiance by women saying that, “environmental social movements are seen to have tremendous potential for the emancipation of women and impoverished communities” (p. 169). Women's collective action and gender consciousness-raising, which is brought about by the continual struggle and access over natural resources, is another way in which women gain greater access to resources and participation.

Though women's access and ownership of resources is important, Deere & León (2001) and Pena et al.,(2008) both argue that it is critical to hold awareness-raising workshops either before or alongside the provisioning of resources. Workshops surrounding gender awareness, legal literacy, land rights and human rights are important because they help and support women on their journey to gain control over resources and additionally they empower women either collectively or individually to claim these resources and rights (Deere & León, 2001; Goldman et al., 2016; Pena et al., 2008). The process of having access and ownership of resources as Goldman et al. (2016) and Agarwal (1994) describes is one of ‘iterative change’ and therefore empowerment is the result of going through the process of obtaining natural resources that lead to women realizing their rights. Women, women's groups, and NGOs, as a result, use various approaches for empowerment to claim access to resources.

Being aware of legal rights, in this case, rights to land and human rights, is an approach women use to gain access to resources. Deere & Leon (2003) note that growing legal literacy led

to more women becoming aware of their inheritance rights to land, additionally, when people did become more aware of national laws there was a rise in gender-egalitarian inheritance of land. In contrast, when women were unaware of their rights to land, particularly in cases where land was jointly acquired, husbands had registered themselves as the sole proprietor, therefore, disowning women of their rights if there was ever a marital breakup (Deere & León, 2001). However, women with resources and gender awareness training negotiate differently than a woman without the same access to resources and knowledge (Pena et al., 2008). Goldman et al. (2016) in their research discovered that women, even before having finalized rights to their land, spoke about the personal empowerment they felt by going through the process of owning land, in addition to, seeing improved gender relations in the community which they concluded was because of access to not just land but also access to knowledge, social relations, and political participation they had been involved in. The process of acquiring formal access to land is important, however, the iterative change that happens with accessing other resources such as social networks and support groups, as well as, knowledge and training proves to be crucial not only to land ownership but also women's empowerment and more gender-egalitarian access to resources and participation. More than just access and formal rights to land women and women's groups are finding that multiple forms of access to knowledge, social networks, and political participation are empowering women to claim their rights to resources and participation.

Building social relations is a key strategy and approach to women's movement building and empowerment. Pena et al. (2008) describe how Fundación Mujer y Desarrollo Económico Comunitario (FUMDEC) an NGO in Nicaragua helps women to organize into groups while providing them with education in leadership skills and civic engagement so they are better able to defend their rights to land. The benefits of women organizing were also noted so women can

pool resources, better negotiate and access persons of authority, learn from each other, and gain access to technical and educational training to better themselves professionally (Goldman et al., 2016; Hovorka, 2006; Kaarhus & Dondeyne, 2015; Pena et al., 2008). FUMDEC argues that, “economic independence is meaningless, if women have not undergone a process of gender consciousness and if they are not aware of their rights; all the above is not enough if women are not supported in the process to organize themselves in groups, so that they can participate politically” (Pena et al., 2008, p. 63). The importance of interpersonal networks and organizing is a key approach to women's empowerment to claiming their rights, additionally, gender consciousness-raising or gender awareness training is another resource that is being used to break down barriers women face to equitably access resources and participation.

A review of four gender awareness training modules composed by various non-profit and international non-governmental organizations reveals several approaches to increase gender consciousness and integrate the learnings into programs and policies. The four training manuals or modules reviewed were composed by the United Nations Educational, Scientific, and Cultural Organization (UNESCO), UNNATI Organization for Development Education, Community Partnerships for Sustainable Resource Management (COMPASS), and the Cooperative for Assistance and Relief Everywhere (CARE) (Aksornkool, N., 2004; CARE, 2014; Omambia, D., 2003; UNNATI, 2009). The trainings are devised to create greater gender awareness within communities or to create greater gender awareness surrounding organizational culture and program planning and management. A review of their contents, which is shown in figure1, paints a clearer picture of how gender awareness training is acting to change the knowledge, attitudes, and practices of communities and organizations that are interested in challenging gender equality issues. The gender equality themes are provided with a short description in the table notes.

Figure 1 Gender equality trainings by theme and organization

Themes	UNNATI	UNESCO	Compass	CARE
Understanding Sex and Gender ¹	X		X	X
Understanding Gender Stereotypes and Roles ²	X	X	X	X
Gender Socialization ³	X		X	
Gender Gaps ⁴	X	X	X	X
Institutions of Patriarchy ⁵	X			X
Violence Against Women	X			X
Single Women: Issues and Challenges	X			
History of Women's Movement	X			

Notes:

1 Seeks to differentiate the meanings between sex and gender and how various characteristics or behaviors are either socially or biologically constructed

2 Discuss how roles are associated with gender and how these affect the various responsibilities each gender carries, especially as it is related to the sexual division of labor

3 Reflects on how gender roles were assigned and learned at a young age and how these tendencies are reproduced today within families

4 Addresses the discrepancies between boys and girls and men and women in educational, economic, and political achievements

5 Critically analyzes how men in some societies historically have benefitted from the subordination of women

As figure 1 reveals, UNNATI's training is the most critical and comprehensive. I argue that identifying the various roles and stereotypes that are assigned to genders is important but without identifying the larger institutions of patriarchy and how this in effect trickles down to affect the roles and stereotypes that women are subordinated to play, fails to create the type of liberating awareness that could be beneficial to women's development within communities or organizations. Additionally, by creating awareness not just around gender but also single women and people with disabilities is another level of sensitizing that leads to more understanding of the

challenges that create vulnerabilities amongst groups of people. However, all of the trainings do a competent job of seeking to bring awareness to both men and women on how gender plays a role in the basic assumptions, attitudes and behaviors and how this affects both social and economic development within their communities, organizations, and nations. Lastly, I argue the overall importance of providing gender awareness training, whether it is fully comprehensive or a general education, before programs and policies are delivered for both community acceptance and program effectiveness.

SITUATIONAL ANALYSIS

After ruling the country for 44 years, the Somoza dictatorship was overthrown in July 1979 by the Nicaraguan people led by the Frente Sandinista de Liberación Nacional (Sandinista Front of National Liberation, FSLN). When the FSLN came to power they began to confiscate Somoza assets, particularly land, which would be utilized by the Sandinista government to transform the Nicaraguan countryside of which 25% of Nicaragua's land or 5.6 million hectares would be distributed to state-run enterprises and thousands of cooperatives (Bacon, 2010; Martí i Puig & Baumeister, 2017; Rocha, Jose Luis, 2003). The Ley de Reforma Agraria (Agrarian Reform Law) began in 1981 and allowed large landholdings that were underutilized, unproductive, or owned by hacienda style owners to be re-distributed of which cooperatives received 19% of this land (Martí i Puig & Baumeister, 2017). In Matagalpa and Jinotega, large coffee-producing regions in Nicaragua, 42% of coffee producers received land titles due to the Agrarian Reform Law (Rocha, 2003). Taking a closer look at the international and national policies that affected how the agrarian reform lands were distributed shows how the Sandinista government intended to positively influence gender-egalitarian policies of land distribution and

cooperative membership among men and women, both who fought alongside the FSLN during the revolution (Deere, 1985).

During the 1970's the UN led the way and defined the vision for people focused human development and ushered in the UN decade for women (Jolly, 2005). The succession of global conferences that followed in the 1970's, most notably the first UN Conference on Women in Mexico City in 1975, signaled a turning point in development policy that stressed the incorporation of women's issues in national policy and the importance of women in country-led sustainable development initiatives (Ceci, 2005; Jolly, 2005). What grew out of the conferences was greater global awareness of women's issues and increased connections with international women's movements around the world. This acted to mobilize support globally and nationally which would subsequently promote national commitments to establish and strengthen women's issues in national policies and institutions (Jolly, 2005). In particular, Article 14 of the UN General Assembly Resolution, also known as the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW) in 1979, creates legal standards for the rights of women to equally benefit in agrarian reforms and resettlement plans. Subsequently, Nicaragua would ratify the CEDAW in 1981 setting the stage for greater gender egalitarian policies to move forward (Ceci, 2005).

With the Sandinista government signing on to the international commitments of the CEDAW they agreed to not only strengthen women's roles in national and agricultural institutions within the country but also make gender inclusion a goal of state policies (Ceci, 2005; Deere, 1985). In 1983, The Women's Office was set up followed by the Nicaraguan Institute for Women in 1987, both set out to influence the mainstreaming of gender equality in state body programming (Ceci, 2005; United Nations, 2007). The Agrarian Reform Law

instituted in 1981 was seen as one of the most progressive agrarian reforms to take place in Latin America because it specifically provided direct beneficiary status to land regardless of marital status or sex (Ceci, Sara, 2005; Deere, 1985; Deere & Leon, 2003). In opposition, agrarian reforms in Honduras, Mexico, Venezuela, and Costa Rica often openly assumed that beneficiaries of agrarian reforms would be male with the wife only being able to access the land after the husband had passed away or abandoned the farm because if an adult male and an adult female were in a household the male was considered the household head and only one person could claim the benefits to land (Deere, 1985). Furthermore, the Nicaraguan 1981 Cooperative Act required that women be incorporated into cooperatives with the same rights and duties as men. This explicit objective specifically targets women to enjoy the equal rights of not only participation but also their equal rights to management and economic positions and decision-making roles within the cooperative (Ceci, 2005; Deere, 1985; Mayoux, 1993).

However, looking at the data during the early years of the implementation of the agrarian reform in Nicaragua shows that only 10% of women during 1979 and 1989 were beneficiaries of property titles (Ceci, 2005). In 1982, women only accounted for 6% of cooperative members and only rose to 11% by 1989 (Ceci, 2005; Deere, 1985; Mayoux, 1993). An official study by the Centro de Investigaciones y Estudios de la Reforma Agraria (Center for Research and Studies of Agrarian Reform, CIERA) in 1982, found that women who were participating members in cooperatives were almost always single headed households and typically in dual headed households men were the ones who became the cooperative members and enjoyed the benefits (Mayoux, 1993). Additionally, during the 1980's only 11% of women in Nicaragua held administrative roles in cooperatives (Rocha, 2003). As Ceci (2005) points out, "women's restricted access to land and other natural resources is part of a wider lack of equality in public

and private life so that removing the institutional obstacles to land access for women does not necessarily remove the accompanying economic, social and cultural bars” (para. 3). Even though broad, national laws and policies guarantee women’s equal access to land and cooperative participation, cultural bias towards women in Nicaragua limit their inclusion to land titles and cooperative membership resulting in increased marginalization and uncertainty in their social and economic development.

When the agrarian reform was first drafted and implemented in 1981 the low numbers of women initially benefiting from the agrarian reform and distribution of land can be explained for due to the lack of joint titling of land (Ceci, 2005; Deere, 1985). Even though the law explicitly stated that women regardless of marriage could benefit from the reform, the land was still titled to one person. Due to cultural expectations, the household head would apply and receive access to land but it would not be titled under the families name, leaving the wife in a precarious situation if the marriage should dissolve (Ceci, Sara, 2005; Deere, 1985; Pena et al., 2008). However, in 1993 the government instituted joint titling of land where land would be allotted jointly to couples (Deere & Leon, 2003; Pena et al., 2008). Additionally, the 1995 Law on Property Stability Act recognized that titles that were previously administered under the agrarian reform act to families would be recognized under the law as being owned jointly by the family (Deere & Leon, 2003; Pena et al., 2008). This was significant and provided increased protections to women under the law to have access to land. Subsequently, the numbers rose from 10% of women having access to land before the Law on Property Stability Act to 31% of land after the law was enacted. Even though the Agrarian Reform Law legally allowed women despite marriage to own land, due to cultural norms gendered rights were surpassed which perpetuated

women's unequal access to resources resulting in few women coming forward to claim their rights to land.

The Nicaraguan Agrarian Reform Law and Cooperatives Act explicitly stated the inclusion of women in their state policy to equitably access land and participate in cooperatives but there are certain cultural and social norms and practices that marginalize women and perpetuate uncertainty in their social and economic development. The gendered unequal access to resources, marginalization of women's knowledge, and gendered rights and responsibilities have in effect contributed to the low numbers of women accessing land from the agrarian reform and their participation in cooperatives. However, the mobilization of women, during and after the Nicaraguan revolution has been crucial not only in building a strong feminist movement within the country but also helping to shape how state policies provide women with equal opportunities to access land and participate in cooperatives (Ewig, 1999). Additionally, on the ground efforts by women's organizations have also brought attention to specific gender issues, in particular, the lack of women's access to land (Ceci, 2005). These movements and the work of women's organizations have helped to spur political laws, such as joint-titling, in addition to, gender awareness workshops which have helped women to claim their rights and slowly break down the structural characteristics of gender inequity (Ceci, 2005; Deere & León, 2001; Pena et al., 2008).

The distribution of land to state-run enterprises and cooperatives that began in the 1980's aided in the formation of cooperatives and helped 100,000 small-scale farmers, of which 42% of coffee producers from Matagalpa and Jinotega, gained access to land (Bacon, 2010). To continue to help transform the countryside, the Sandinista government aided in the process of the cooperatives formation by creating coffee export channels, providing access to credit and agricultural inputs, and in some cases provided funding for upper management (Bacon, 2010).

Under this government supported pro-cooperative environment, in 1990 peasant organizers joined together to form UCA San Ramon. UCA San Ramon was initially formed to provide legal and political support for indigenous farmers in San Ramon, Matagalpa to protect the land that they had gained during the agrarian reform (Bacon, 2010). However, in 1992 the organization formed to what it is today, providing commercialization and marketing of their members coffee, corn, beans, fruit, and dairy products, providing access to credit, offering technical agricultural assistance, providing programs that offer assistance for rural housing, and developing workshops surrounding human rights and gender equity (K. Pelletier, personal communication, November, 2016; Bacon, 2010). Today, UCA San Ramon represents 12 cooperatives with 1,080 members of which 400 work in coffee (K. Pelletier, personal communication, November, 2016). In an effort to continue their growth and find a professional way to export their coffee internationally, in 1994 UCA San Ramon gained their fair trade certification and started exporting their members coffee to European markets (K. Pelletier, personal communication, November, 2016; Bacon, 2010). Through the visionary leadership of UCA San Ramon, in 1997 they joined forces with three other cooperative unions in Matagalpa to create the Organization of Northern Coffee Cooperatives (CECOCAFEN) in order to gain an even better price for their coffee through achieving larger markets that would allow them to export premium fair trade coffee to specialty markets (K. Pelletier, personal communication, November, 2016; Bacon, 2010). Today, CECOCAFEN is one of two of the largest coffee producing cooperatives in Nicaragua (Bacon, 2010).

Since the 1990's UCA San Ramon has been a touchstone for innovative practices within the agricultural cooperative industry. They are consistently looking for various ways to improve the production of their members coffee through informational exchanges to build the capacities

of their members, they have hosted various academic researchers who have covered various topics related to fair trade, la roya (a fungus that affects coffee production), and gender equality, and in 2013 after the devastating effects of la roya they partnered with US-based non-profit Community Agroecology Network (CAN) to introduce an agro-ecological coffee program to recoup their losses and look for innovative ways to strengthen their coffee cultivation systems. Additionally, they look to expand and diversify their member's income by escalating beyond the fair trade markets into direct trade, they have implemented agricultural tourism projects, and have started a café in San Ramon to provide additional job opportunities, and lastly in 2016 they are looking to transition their member's farms to meet Rainforest Alliance certification standards (K. Pelletier, personal communication, November, 2016). The site of my research was within two of the agricultural cooperatives that participated in the CAN agro-ecological coffee program, Danilo Gonzalez and Dennis Gutierrez. When I was on-site at both of the cooperatives because of la roya all of the coffee trees had to be replanted and were only two years old, they would start bearing fruit in one more year. La roya had economically hurt both of the communities since much of their income was derived from coffee. After learning about the difficulties of small-scale farming from my own research at SIT this seemed to intensify my own vision of how fragile coffee communities are when they are faced with environmental and economic shocks.

The two cooperatives, Danilo Gonzalez and Dennis Gutierrez, received their names from young men from San Ramon who had both perished in the Sandinista revolution but are regarded as heroes within the community. Dennis Gutierrez was founded in 1985 with 15 members, 13 men and 2 women. In 1992 they joined UCA San Ramon. The community at the beginning was small about 80 people, today there are 49 families totaling 182 people. Prior to the Sandinista revolution and the subsequent agrarian reform, the land now occupied by the cooperative was

owned by elite persons from Matagalpa who at the start of the revolution abandoned the land. The land was acquired through the agrarian reform and is composed of mountains and arable land of which to grow basic grains and coffee and spans 292 manzanas, which is equivalent to roughly 500 acres. One manzana of land is equivalent to 1.72 acres. Each founding member of the cooperative received 11 manzanas of land, where they grow coffee, vegetables, fruit trees, and other basic grains such as beans and corn. The cooperative is managed by a president, vice-president, secretary, treasurer, and vocal, who are elected to three-year terms. The cooperative management is responsible for representing the partners by making decisions on projects, organizing cooperative meetings and technical trainings, making decisions regarding cooperative memberships, and analyzing and discussing financial and economic decisions and situations related to cooperative agricultural work. Separate from the cooperative, there are community representatives since everyone in the community does not work in the cooperative. They are responsible for organizing community meetings and have organized projects with the government to deliver economic projects such as handing out livestock and installing electricity to the community. In 2014 the cooperative started growing coffee with agro-ecological methods on behalf of their partnership with CAN due to the coffee rust disease, la roya, a fungus that destroyed close to 100% of their coffee plants in 2013.

Danilo Gonzalez was formed in 1987 by 53 members, 30 men and 23 women. Today there are 67 members, 34 women and 33 men. They received the land due to the agrarian reform of which the founding members organized to obtain the land. Prior to the start of the Sandinista Revolution, the land was occupied first by German owners and then by American owners. The American landowners fled in 1986 at the beginning of the revolution. Many of the founding members worked for the American owners and earned 4 Córdoba's a day, working as

agricultural hands or as maids. Each founding member received 6.75 manzanas of land of which 1.75 manzanas are to grow coffee and 5 are to grow basic grains. The members grow coffee, bananas, beans, corn, yucca, and other vegetables. They sell about 75% of their coffee to UCA San Ramon of which a portion is sold to CAN and the other 25% they sell to the national market. The cooperative is managed by a president, vice-president, secretary, treasurer, and vocal, who are elected to four-year terms. The cooperative management is responsible for representing the partners by making decisions regarding the production of coffee and other agricultural products, organizing technical trainings with UCA San Ramon and other non-profit organization, and make decisions regarding cooperative memberships. The cooperative also takes part in agro-tourism and in 2014 joined with CAN to begin the agro-ecological coffee project after la roya destroyed close to 100% of their coffee plants.

Both cooperatives are required by national and cooperative law to allow equal membership and participation of women to both access land and hold administrative positions. Additionally, both cooperatives have taken part in gender equality training every year since 1995, provided there is enough funding to pay for the trainings each year of which both women and men are invited to participate. Lastly, both cooperatives have been offered technical training regarding improved agricultural techniques from UCA, CAN, and CECOCAFEN.

METHODOLOGY

In my research, I sought to understand the barriers women farmers face in their access to and control over farming systems. I also sought to gain a deeper understanding of women's roles within farming systems and how and if their roles have changed over the years since the inception of the cooperative in the 1980's and through training and capacity building. With these

themes in mind, I used a conceptual framework that looked at the social, political, and economic dimensions that may affect barriers faced by women and also used a feminist political ecology theoretical lens to understand more deeply how the gendered dimensions of power shape women's roles and their access to resources within farming systems. My on-site research and the literature I reviewed allowed me to synthesize what was happening not only on a local level but also pull in the larger themes of the barriers women farmers face on a national and international level.

The purpose of the research study was to gain a deeper understanding of women's lived experiences, their circumstances, and their situations within the coffee agricultural sector. My professional, as well as, academic interests drew me to this line of research because of my personal interest in women's empowerment and sustainable development at the intersection of agriculture and economic development. Furthermore, previous academic research at SIT surrounding the difficulties small-scale farmers faced provided me with a baseline of knowledge which led me to want to explore the topic more in-depth. However, I wanted to delve into the topic of the difficulties small-scale farmers faced but with a further nuanced approach of looking at how gender, and more specifically women, face unique barriers unrelated to men in their equitable participation and access to resources within farming systems.

It was important for me to explore, engage, and design a research study that was participatory in nature. My intention was not to take from the communities that I was working with but contribute and collaborate with the research participants and their communities, through implementation and follow-up and by conducting research that would be both meaningful and practical to the communities that I was working in. The process began with a formal letter to the general manager of UCA San Ramon to gain community acceptance, describe my topic of

research, and state my intentions for receiving feedback on my design. Subsequent meetings with a UCA San Ramon program manager and community organizers delved into my research and intentions of my study and sought feedback on my data collections methods. Lastly, it was agreed at the completion of my research and findings that I would write an executive summary with recommendations, translate my completed thesis paper into Spanish to share my findings with UCA San Ramon, and devise a capacity building training that would be beneficial to the cooperative.

I conducted 16 qualitative interviews within two base cooperatives of UCA San Ramon, Nicaragua. The base cooperatives named, Danilo Gonzalez and Dennis Gutierrez, acted as the site of my research. Both cooperatives are participating in an agro-ecological coffee program initiated by the United States based non-profit Community Agroecology Network who through my practicum organization, The Chain Collaborative, acted to initiate my research and introduce me to UCA San Ramon. My study sample included nine women coffee farmers from Danilo Gonzalez plus the male vice-president of the cooperative. The sample also included five women coffee farmers from Dennis Gutierrez and one interview with the president of the cooperative who was also a male. Participants were identified with the specific criteria of being female and coffee farmers, in addition to, senior members of both cooperative boards.

Data was collected over a period of two weeks from November 11th to November 29th, 2016. Due to my intermediate fluency in Spanish, I employed an assistant to act as my translator for all of my interviews and meetings. An initial meeting was held with a Project Manager of UCA San Ramon who connected me to two community organizers within both Danilo Gonzalez and Dennis Gutierrez who acted as my informants and helped me to recruit participants. The informants helped me to gather a convenience sample of participants, however, there were

instances due to outside circumstances where the informants were incapable of organizing all of my interviews for the day so snowball sampling took place to attain further interviews.

Research participants were asked a series of open-ended questions in a semi-structured format. The questions sought to understand women's access to and control over farming systems, to understand the barriers women farmers face, how and if their roles have changed over the years, and how training may or may not affect their changing roles. Additionally, my research explored, when women do have access to and control over farming systems, what techniques they use to develop soils and what their motivations are behind the techniques they use. While I was conducting my interviews at the base cooperatives, I was also a participant observer taking tours of the coffee fields, witnessing coffee processing, witnessing daily life, and observing gender and social dynamics.

Through observing the dynamics of both cooperatives and interacting with the interviewees I noted differences in the cooperatives. What I observed was more female subordination at one of the cooperatives due to the fact that the men expressed that they wanted to accompany me to the interviews with the females in the community. One interviewee did have her husband present, however, after reviewing the interview with the female where her husband was present, I noticed that she felt comfortable exploring the barriers that she had experienced and discussed how her role has changed. After comparing the data from the two cooperatives, there was not a noticeable difference in their experiences, therefore, the data is combined as one data set. Additionally, as per my participant informed consent form I agreed to keep any identifiable information confidential, therefore, all of the names in the following analysis have been changed.

DISCUSSION

At the beginning of the formation of both the Danilo Gonzalez and Dennis Gutierrez cooperatives, gender played a key role in determining access to resources and participation. The four most common themes that were mentioned in my interviews in terms of the barriers experienced by women in the cooperatives were; a lack access to technical training (43%), a lack of decision making (43%), a lack of participation in cooperative management and meetings (36%), and unequal household responsibilities (21%) (K. Pelletier, personal communication, November, 2016). The cooperatives were formed in 1985 and 1987 during the agrarian reform and the signing of the Cooperatives Act. Both the reform and the Act legally stated men and women have equal rights to land and participation in cooperative management and functioning (Ceci, 2005). Nevertheless, the patriarchal ideologies of men within the cooperative denied women their equal access to resources and participation (K. Pelletier, personal communication, November, 2016). However, the 1970's decade of women led the way to help create a strong presence of national and local women's movements in Nicaragua and San Ramon. These movements and the organization of women, coupled with help from international development agencies, laid the foundation for sustentative and holistic training regarding gender equality at UCA San Ramon (Bacon, 2010; Ewig, 1999). The gender equality training provided by UCA San Ramon would challenge the gendered assumptions previously held by men and women within the cooperatives and provide a space for women and men to critically analyze the barriers women face in their equal access to resources and participation within their respective cooperatives and community at large. The following discussions and analysis will pursue each of the four themes surrounding barriers women experienced in the cooperatives. This is followed by a discussion and analysis of the dynamic between gender equality training and the building of

women's empowerment which has acted to reduce the barriers women faced within their cooperatives and households.

One of the themes surrounding feminist political ecology discusses how gender plays a role in determining access to knowledge building opportunities or how gender plays a role in how knowledge is counted or valued within societies. Patriarchal ideologies, within both Danilo Gonzalez and Dennis Gutierrez, had created a social system that normalized the subordinate status of women within the cooperative, and more specifically, due to the power that men held denied access to knowledge-building opportunities in regards to technical training. Women in both cooperatives described how they were denied access to trainings. Co-op member Cecilia stated, "some time ago we didn't share training workshops, nor meetings, nothing" (K. Pelletier, personal communication, November, 2016). Additionally, Cristina a member of the Danilo Gonzalez cooperative stated, "because sometime before, it was much noticed that women were not allowed to participate in meetings, trainings, and they were rejected" (K. Pelletier, personal communication, November, 2016). The quotes illuminate the early frustrations of women. The word 'rejected' implies that women were willing and interested in participating in meetings and trainings but were denied access to these resources of knowledge and rights. The trainings, I am assuming during this time were about farming technologies, teaching new cultivation and plant care methods. Feminist political ecology explores how inequalities in access to knowledge between men and women cause environmental issues because women's subjugated knowledge produces and affects the environment. For example, what I witnessed is that many women in the cooperative helped in the cultivation of coffee crops and were also responsible for home garden crops for family consumption. The denial of technical agricultural training may have influenced how coffee and home garden crops were produced. This could lead to food insecurity by

impacting the volume and quality of food produced. In addition, the women could engage in harmful agricultural techniques which could affect family health, water supplies, and soil fertility. The power that men held within the cooperative which effectively regulated the actions of others and denied women's access to knowledge building opportunities, therefore, is deeply entwined with how women produce and interact with their environment.

Patriarchal ideologies that dominated gender dynamics in regards to decision making came up in 43% of my interviews. When asked how women's roles have changed over the year's women described their previous inability to make decisions on their own regarding money and how they worked. As Francesca of the Dennis Gutierrez cooperative stated, "well if I—with money, I manage money and not my husband anymore, it's me who does it. Sometime ago women could not make decisions and now I decide and not my husband" (K. Pelletier, personal communication, November 2016). Additionally, when asked how women's roles have changed women discussed how men in the past would limit their mobility saying that they were unable to leave their houses without permission from their husbands to attend meetings or technical trainings. Martha from Danilo Gonzalez stated, "at the beginning, it was difficult to leave to get further training" (K. Pelletier, personal communication, November 2016). The quotes show the denial and difficulty women faced in their ability to make strategic life choices, i.e. attaining more training for their economic and professional development, and other choices, i.e. managing money, which limits their ability to make choices surrounding family well-being. It has been noted that when women do share in the responsibility of managing family money they are more likely to spend it on the well-being of their family, this, therefore, has the potential to reduce family well-being if men are the sole income earners in the household. When women's decision-making authority is marginalized it maintains the gender gap in terms of educational attainment,

it limits their role to contribute to household well-being, and diminishes the skills they need to attain outside employment, therefore, creating a reliance on their husbands for money and maintaining the subordinate status of women.

Another theme that has been empirically studied and occurred in 43% of my interviews is the denial of participation of women in cooperative membership and management. Even though legally, women were allowed to equitably participate in cooperative management, patriarchal attitudes and beliefs denied women their rights. Here is a quote from Martha that reflects the early struggles women went through, “lots of men were against women being members of the cooperative and they did not want women to have a big role.” (K. Pelletier, personal communication, November 16, 2016). Additionally, from Eden a cooperative member from Danilo Gonzalez, “well, there was a time that only men wanted to be in charge. I think it was around the 90’s. Because they would say that because women were not strong as men” (K. Pelletier, personal communication, November 2016). Here we see the power and also moral superiority that men held both denying women’s legal rights to participation and being vocal about sabotaging how women would participate. Additionally, men made essentialist arguments of women's physical requirements being less than men, therefore, dictating the roles they could play.

Unequal household responsibilities were also a common theme that came up in 21% of my interviews when discussing barriers and how women’s roles have changed since the start of the cooperative to the present day. This theme is similar to the previous theme of decision making in respect to how women were denied the rights for decision making and how to control one’s own labor. Reflecting on current situations, Ramona from Danilo Gonzalez stated “and then there are women who still stayed with that thing that you think the only role is to be in the kitchen, to take

care of the husband, to wash and care for children and everything” (K. Pelletier, personal communication, November date, 2016). This quote reflects the women’s marginalized status, women had been denied access to participation and knowledge building skills that some had effectively internalized and assumed their subordinate status to think that their only role was to care for the reproductive responsibilities of the house. Eden in my own interview said women had to prove to men that they were not worthless and that they had rights and that men had to help out in the household reproductive duties (K. Pelletier, personal communication, November 16, 2016). Men had effectively created ‘gendered spaces’ and had culturally placed a lesser value on the roles that women played within the family unit (Rocheleau, 1995). The gendered spaces that were socially constructed also held lesser value economically, additionally, the reproductive household tasks assigned to women are unpaid which are inextricably linked to decision making and dependency on men for wealth management decisions. Women are responsible for food procurement, child rearing, home-garden crop production, and attainment of water, however, at the same time are denied the rights that could affect the provisioning and care of these responsibilities.

In conclusion to the themes surrounding barriers, I look at women’s access to land within both Danilo Gonzalez and Dennis Gutierrez. Due to the agrarian reform law, women were specifically mentioned to have legal rights to land ownership. When both cooperatives were formed, Dennis Gutierrez had 15 members of which 2 were women or 13% of the cooperative members were women. Danilo Gonzalez was founded with 53 members, of which 23 members were women or 43% of members were women. Compared to the 1989 national average of 11% of cooperative members being women, Dennis Gutierrez is slightly higher than the national average, while Danilo Gonzalez is 32% higher than the national average. Each founding member

of Dennis Gutierrez received 11 manzanas of land or 18.92 acres of land. Each founding member of Danilo received 6.75 manzanas of land. One manzana is equal to 1.72 acres of land. Figure 2 provides information regarding the age, number of manzanas, and how the land was acquired for each woman I interviewed.

Figure 2 Women's ownership of land at Danilo Gonzalez and Dennis Gutierrez

Cooperative	Owns Land	Age	Manzanas of Land	How land was acquired
Danilo	Yes	52	6.75	Beneficiary of agrarian reform
Danilo	Yes, joint title with husband	50	5	Beneficiary of agrarian reform
Danilo	Yes	69	5	Beneficiary of agrarian reform
Danilo	Yes	50	2	Father inherited her land
Danilo	Yes	36	1	Brother-in-law inherited her land
Danilo	Yes	40	1	Father inherited her land
Danilo	No	47	-	-
Danilo	No	23	-	-
Danilo	No	46	-	-
Dennis	Yes	58	9	Beneficiary of agrarian reform
Dennis	Yes	60	2	Inherited from father
Dennis	Yes	30	.5	Inherited from parents
Dennis	Yes	29	1	Inherited from father
Dennis	No	24	-	-

Out of the fourteen women interviewed, 62% owned or jointly-owned land with their husbands.

Twenty-five percent of the women received their land from the agrarian reform while 37%

inherited land from their families. Of the four women who received land from the agrarian reform, they on average held 6.43 manzanas of land. Of the six women that inherited land, their land holding sizes were on average 1.25 manzanas of land. Women, who were beneficiaries of the agrarian reform, did benefit in terms of the average number of manzanas compared to women who inherited land from their parents. On average, the women who benefited from the agrarian reform were 17 years older than the women who inherited land from their families. Once the land was divided amongst the founding members of the cooperative, there was no land left, so, therefore, any members of the cooperative who came after them could only inherit land since there was no more land to purchase, which came up often in my interviews, it is an issue of shortage. However, with 62% of women interviewed owning land this goes to show that solely providing women access to land does not necessarily equate to women's empowerment either. I discovered, it is not enough just to provide women access to land because women still experienced barriers even though they owned land and were partners in cooperatives. This is evident especially in Danilo, who had 43% of their members as women, who then had access and ownership 6.75 manzanas of land. Therefore, I believe, in order to break down the barriers that women farmer's face in their access to resources and participation, gender consciousness training is critical.

Starting in 1995, UCA San Ramon began by organizing women to attend meetings to talk about the rights of women in Nicaragua and how to value oneself as a woman. As the meetings grew in size, they started to integrate men into the meetings and began their procurement and design of gender equality trainings offered to the cooperatives. As Eden from Danilo Gonzalez stated, "because initially the organization, they were reuniting women, they would mention rights that we had as women, then they would put together men that we were not worthless and

man had to help women” (K. Pelletier, personal communication, November, 2016). The gender equality trainings are offered every year to all of the base cooperatives, dependent on funding, as I was told by the project manager. I was provided with a gender equality training that is given to each of the 12 base cooperatives of which I will describe the themes and content delivered in the trainings.

In an analysis of the training, I discuss the content of the trainings and describe how the trainings are used to spur further discussion and critical inquiry of women and men’s roles to paint a picture of what a training would look like on-site at UCA San Ramon. The trainings start off with a reflection and analysis on the concepts of sex and gender, where they break into groups for one hour and are provided with the silhouettes of men and women. The group is asked to analyze the characteristics of men and women and place them on the silhouettes and discuss how these characteristics are assigned by sex or by gender and how they are socially constructed. Within the discussion of sex and gender, discussions are held that explore how gender can be used to discriminate and disadvantage women, additionally, how the expectations placed on women are learned from a young age, therefore teaching about gender socialization. The next theme is the sexual division of labor. The participants discuss a day in the life of men and women and note the activities of a normal day and count the number of hours and discuss who works more. They then analyze the sexual division of labor and the impact this can have on the life of women, where they discuss productive and reproductive labor tasks and how this can affect the education, participation, management, and life possibilities women seek. The session then moves on to discuss the concepts of equality and equity. Participants are asked to construct what the terms mean. A group discussion is then followed by how equity is a term that celebrates equality between all people and that equity is a process which gives fair treatment to both men

and women. They then go on to deliberate what gender has to do with the development of families, communities, and production where they examine the participation of women from their personal empowerment in the social, cultural, political and economic spheres of the home and community. Lastly, they discuss how women have the power to influence the changes which will contribute to improving the conditions of economic and community development.

Comparing UCA's training to the previous trainings in figure 1 reveals similarities in four key areas, namely understanding sex and gender, understanding gender stereo types and roles, gender socialization, and gender gaps. I will note that I was provided with only one training from UCA so, therefore, previous trainings could have covered the remaining themes. However, in the context of this analysis and from the training that I was provided by UCA, I will make suggestions for additional training topics to be covered. Violence against women I believe would be a good addition to the training provided by UCA because as some people noted in my interviews, violence against women, although it has diminished significantly since the 1980's is still an issue in households in the communities (K. Pelletier, personal communication, November, 2016). Violence comes in many forms other than physical violence so understanding mental and emotional violence could provide greater awareness surrounding this issue and could potentially lead to greater community support for women that are experiencing violence in the community. Thirty-five percent of the women I interviewed were single, so therefore, providing training surrounding the challenges and difficulties that single headed households face could lead to more awareness but also could lead to single mothers advocating for programs or projects within the cooperative that help to provide services to single mothers such as free or cheap childcare or better connections to government resources, if this is already not being done. Lastly, the women's movement in Nicaragua has a long and dynamic history, providing a historical

timeline of achievements could produce pride, allow women to see how far they have come in their access to rights and participation, and carve out a space for women to see what still needs to be done, therefore, potentially creating more political activism amongst women.

The trainings, now having been provided for over 20 years to each of the base cooperatives of UCA San Ramon, have had the effect of breaking down the barriers that women experienced and have changed the knowledge, attitudes, and practices of both men and women within both of the cooperatives that I studied. When asked if there were any barriers that women face today 63% responded that no, there were no barriers that they experienced. Thirteen percent stated there may be barriers but they were unaware. And 13% stated economic barriers, such as the shortage of access to land or being incapable of paying farmer's to work their fields. Even though my sample size is small, 63% of women reporting today that they do not experience barriers is a great achievement, especially since women had discussed their previous inability to access technical training, make decisions, participate in cooperative management and meetings, and held unequal household responsibilities. Keeping with the themes surrounding barriers, I will analyze, discuss, and show the impact that gender equality training provided over the course of 20 years has helped to break down barriers that women have experienced through the lens of changing knowledge, attitudes, and practices.

Women in both cooperatives had previously experienced rejection from participating in trainings. Changes in knowledge provided by the trainings surrounding women's rights, the important roles that women play in community and economic development, amongst others, have acted to embolden women to claim their access to knowledge through technical training. A quote from Gabriela expresses how women's knowledge and attitudes have shifted since the start of gender equity trainings, "yes, a time ago women did not know- women did not have any idea

what an organization was. Women learned to be independent, things were different some time ago. But now, all has changed. Today, a woman says “I don’t do that” and that is it. Today she says, “I wish to receive training at San Ramon”, and there she goes.” (K. Pelletier, personal communication, November, 2016). The women who had participated in the trainings have become more aware of their rights and their contribution to society and have therefore ceased to accept their subordinate status that was once placed upon them, especially in this instance in regard to decision making and technical training. The quote reflects how women have claimed their voice and power within and shows how women now consider themselves as persons with authority to make decisions regarding their mobility and their rights to knowledge to receive training that will increase their well-being and economic empowerment. Here is a quote from Luisa that reflects a growing confidence in women when they are provided with training, “We attended a meeting every eight days. And when we came here, they were coming to train us on how to make the products. The UCA used to come and we learned how to do it, and now we are the ones who make the products alone.” (K. Pelletier, personal communication, November, 2016). Other women had also discussed and taken pride in the fact that they were the ones that were now teaching their husbands knowledge on agro-ecological farming techniques. The gender equity trainings and the openings to women to attend technical trainings have therefore created spaces for women to be the ones whose knowledge is counted and valued.

Women had also discussed their previous inability to make decisions both at home and in the cooperative, regarding money and how to work. This quote from Belma reflects the increases in knowledge men have acquired through the gender equality training regarding decisions, “well, here before was taken the opinion only of men. They said that men were the only ones who could make decisions. But now, with the implementation of gender training, they have been able to

make men aware of their decisions. The decisions of women and the opinion of women.” The gender equality trainings have increased men's knowledge surrounding the value of women's opinions and their ability to contribute to decision making. Additionally, the trainings have changed the practices of men and women, which is reflected in this quote from Francesca a cooperative member from Dennis Gutierrez, “hmm, well, at least, I, in my case and in my home I decide if I feel like going to work or not, some time ago women had always to go. Well if I— with money, I manage money and not my husband anymore, It’s me who does it. Sometime ago women could not take decisions and now I decide and not my husband” (K. Pelletier, personal communication, November, 2016). The trainings have helped to change men’s attitudes and practices, giving greater authority to women in how they work, how they decided to manage money, and how they manage their farming systems. The quotes signal how women are gaining greater power over the decisions in their life surrounding work and money management which runs parallel to the first quote from Belma on how men are now valuing the opinions and decision making ability of women.

Women have also previously discussed how they were often denied roles within the cooperative or that men did not want them to play a large role. This quote is from Jose the vice-president of Danilo Gonzalez, “well, as I tell you, there is a reason the cooperative was founded because there is a big involvement in women. Not only in the cooperatives, but rather at the community level. There are women, for example, who are in important positions, both in cooperatives, in communities, and even in NGOs, and in the municipal government. So, from the 80's the roles have changed, which is good for women” (K.Pelletier, personal communication, November, 2016). This quote speaks to the changing attitudes and consciousness of the cooperative members. The men have gone from not wanting women to play a large role in the

cooperative to acknowledging women's shared commitment and contribution to the community. He also acknowledges in a positive light how the roles of women changing are important. A quote from Martha reflected on women's changing roles, "Oh well, the woman have had a lot of participation inside the cooperative. The woman can be in charge of the executive office and the council too, us women can take any role." (K. Pelletier, personal communication, November, 2016). Thirty-six percent of the women had specifically discussed their previous rejection to participate in cooperative meetings and management while today when asked if there were any barriers for women to play an equal role 67% said no, there were no barriers. This is a reflection of changing attitudes where women are fully acknowledging their right to any role in the cooperative, they acknowledge their ability to participate on an equal footing with men, and they acknowledge and do not marginalize their contribution to cooperative culture. Through increased knowledge provided by the gender equality trainings the attitudes of both men and women have changed in regards to women's participation and management within the cooperative, and therefore the practices of incorporating women into cooperative management and meetings have changed.

Unequal household responsibilities in small-scale farming households came up often in the literature I reviewed, in addition to, 21% of the interviews I held. Unequal household reproductive tasks are also a central theme that is covered within the UCA San Ramon training. Both men and women have attended the gender equality trainings and I argue the importance of incorporating both men and women. Here is a quote of Jose one of the cooperative vice-presidents who has undergone the gender equality training, "and now the roles have changed, but men still maintain a bit of machismo, and if they look at me cooking they make fun. Obviously we have been trained in the subject, because we understand and know how difficult the work of

women is” (K. Pelletier, personal communication, November, 2016). This is an important finding as it points to a change in knowledge, by understanding and accepting the difficulty of women’s reproductive tasks and it points to a change in attitude by acknowledging there are still machismo practices within the cooperative that create the unequal household responsibilities. Additionally, this quote from Jose represents the changes in practice that men have undergone, “and that's what we have to teach our children. Do not say "washing is women's things" and "cooking is a woman's thing" (K. Pelletier, personal communication, November, 2016). The quote signals how men who have undergone the training and have increased their knowledge and attitude of the subject are now socializing their children to deny practices that were previously normalized which represents a break in the generational chain of subordinate and marginalized practices towards women. Eden also spoke of the changes she has witnessed in practices related to the sharing of household responsibilities, “well, let’s say now that men give freedom to the woman, she can go to work, they stay at home working” (K. Pelletier, personal communication, November, 2016). Francesca from Dennis Gutierrez stated, “well, if we speak of tasks at home, I feel ok because it is not me who does all of them” (K. Pelletier, personal communication, November, 2016). The gender equality trainings are therefore breaking the barriers related to women’s subordinate economic status because women are now have the power over their decisions and are able to have the mobility to leave their houses and contribute economically to their families. Additionally, women are able to share these tasks with their husbands, allowing women to spend more time on productive activities which could have benefits to family welfare.

Due to the incorporation of gender equality trainings at UCA San Ramon, the barriers women once faced are changing the knowledge, attitudes, and practices of both the men and women in the cooperatives. Many would say the women have become empowered to claim their

rights to resources and participation, but what does empowerment in this sense mean? I want to use a quote from Naila Kabeer to express the term empowerment,

One way of thinking about power is in terms of the *ability to make choices*: to be disempowered, therefore, implies to be denied choice. My understanding of the notion of empowerment is that it is inescapably bound up with the condition of disempowerment and refers to the processes by which those who have been denied the ability to make choices acquire such an ability. In other words, empowerment entails a *process of change*. People who exercise a great deal of choice in their lives may be very *powerful*, but they are not *empowered* in the sense in which I am using the word, because they were never disempowered in the first place (1999, p. 437).

At the beginning of the cooperative during the 1980's up until the mid-1990's Nicaraguan women were disempowered. They were denied the ability to make basic choices surrounding their access to training, participation, and work. However, the process of change that Kabeer discusses happened when women started organizing to demand and claim their rights to resources and participation. This is reflected in a quote from Eden, "that's it, then later things began to change, it was like from 95 up to now, because from 95 up to now there were groups, women were part of them and women were starting to realize things, concepts, at that point that we were already strong." (K. Pelletier, personal communication, November, 2016). When women have access to knowledge and are informed of their rights, the process of change, from disempowerment to empowerment, can start to take hold. Here is another example of the process of change from disempowerment to empowerment that was documented from Jose's perspective, "eh, here, for example, there were women to go out to the 'street' we say, she had to ask permission from the husband. If the husband said yes, well, if he said no, she would not go.

Today, these women do not have to be asking permission from anyone” (K. Pelletier, personal communication, November, 2016).

The trainings have also helped women to value themselves and their contributions to their communities and households. Here is a quote from Martha, “during the trainings we talk you know, about gender equality. Gender equality came up because before men were um—and now not anymore, we are more. And I think that here in Nicaragua we have a lot of power.” (K. Pelletier, personal communication, November, 2016). A quote from Gabriela also represents a growing value and power within, “today, she says, “I want to be someone in life” and she does it because she has rights as a woman.” (K. Pelletier, personal communication, November, 2016). Both of these quotes reflect an emergent agency where women are able to make choices and act upon them and also they reflect the shedding of the disempowered status where women are acknowledging their own power to create their destinies and act upon them. The gender equality trainings have acted to reduce the disempowered status women feel and to empower women to claim their rights which nurtured a sense of agency and power within to contribute to their cooperatives and households.

As a participant observer in the communities, however, I did witness what I felt like was continued subordination of women. In two of the interviews I held with Francesca and Cecilia, both of them had either their husband or father standing over them while we conducted the interview. I didn’t ask either of the husband or father to leave because I didn’t want to be rude, we were in their house, but it made for an uncomfortable interview process. I felt a strong sense of control from both the husband and father which was directed at the women. However, even with the husband and father standing there, the women both discussed the positive changes that they had been through, from sharing trainings and workshops and their previous inability to

attend the trainings, their ability to manage money, and how men are now helping with household responsibilities. After analyzing the interviews, it made me feel like the trainings have helped women, even if they are in households where men still display exaggerated masculine tendencies, to be more aware of their rights and have allowed them to bargain and negotiate their positions within their families such as being able to attend trainings and manage family expenses. It also makes me think that the gender equality trainings can and do apply a sense of social and community pressure. The trainings have provided the knowledge and are changing the attitudes and practices within the community and therefore others who have not changed their practices are pressured by others to do so.

Lastly, I argue the importance of gender equality training either before or alongside technical training so men do not try to sabotage the programs or trainings that women are involved in. Since I had the opportunity to interview participants that had participated in the CAN agro-ecology project, I believe the project was largely successful because both cooperatives had already been through the gender awareness process. The women and development era focused largely on projects that were specific to women's roles and also focused solely on women, creating conflicts between men and women for disrupting the social order or men blatantly sabotaged women's projects (Omambia, D., 2003). However, the UCA since 1995 had made it a point to raise the consciousness of both men and women which brought attention to the roles and responsibilities women played and how this could lead to subordination. The importance of incorporating men into the gender equality trainings I believe diffused future projects that focused on women because they had already gone through the process of understanding unequal gender roles and responsibilities and were willing to accept women taking on roles that were typically male-dominated tasks. The project allowed women to

teach men what they had learned, additionally, the project also acted as a catalyst for some women to receive their own acre of land to practice and grow agro-ecological coffee. From Francesca, “but, yes, the coffee is mine and I have more opportunities now as woman” (K. Pelletier, personal communication, November, 2016).

CONCLUSION

In this paper, I explore the barriers that women small-scale farmers face as it relates to their equal participation and access to resources within farming systems. Worldwide women’s productive and economic opportunities are affected by subordinate social roles which define and dictate how they are able to equitably contribute to decision making positions and cooperative organization. There are also unequal political factors, such as women’s legal rights to land and participation in cooperatives that substantially reduce their ability to access land and contribute on an equal footing with men. Lastly, there are economic factors, such as the unequal roles of household responsibilities that prevent women from contributing to cooperative culture. However, the gendered social, political, and economic relations of power that in effect shape the allocation of resources and participation of women within farming systems need to be holistically addressed before women can participate on an equal level with men.

Feminist political ecology is the conceptual framework used in this research for theorizing how gender plays a key role in determining unequal access and control over resources. The three themes, gendered knowledge, gendered rights and responsibilities, and gendered politics and grassroots movements, allows one to explore the social as well as environmental impacts the role of gender plays in communities. And how gendered power struggles drive human-social and environmental transformation and change.

The continual struggle by women for access and control of resources creates openings for women's collective action and gender consciousness-raising, Workshops surrounding gender awareness, legal literacy, land rights and human rights are helping women to break down the barriers they face on their journey to gain control over resources and participation. They are additionally empowering women either collectively or individually to claim their rights and resources.

I showed how gender equality training at UCA San Ramon over the course of 20 years has acted to change the knowledge, attitudes, and practices of both men and women within the cooperative. Women within the two cooperatives, Danilo Gonzalez and Dennis Gutierrez, expressed their previous inability to participate in technical trainings, were denied decision making abilities, were denied access to participate in cooperative meetings and management, and held unequal household responsibilities all which acted to marginalize their status within the cooperative. However, with the introduction of gender equality trainings in 1995 women started to realize their power within and started to act with increased agency to challenge the subordinate status that had been placed upon them, therefore, going through an iterative change of disempowerment to empowerment.

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APPENDIX

APPENDIX A: INTERVIEW QUESTIONS

Interview Questions for Cooperative Presidents:

- What is the history of this cooperative, land, and the community?
- What types of products do you grow? Do you sell these products?
- What techniques do you use to farm?
- What are the benefits you have seen from practicing this way?
- What type of technical training is provided to the cooperative farmers?
 - o Is it provided to both men and women?
 - o What are the typical attendance rates and ratios of men to women?
- What barriers exist for women to play an equal role in small-scale farming?
- What positions do women hold in administrative offices?
- How do men play a role in helping women succeed?
- How have women's roles changed over the years?
- What types of economic activities are women participating in?
- What are women's rights to land in Nicaragua?

Interview questions for women farmers:

- What is your name?
- How old are you?
- How many family members do you have?
- What is the history of this land, this community, this area?
- How would you describe the land when you first got it?
 - o How did you acquire this land?
 - o Why did you take over this land?
- Who owns the land that you currently occupy?
 - o Do you jointly own it with your husband?
 - o Do you farm different plots of land?
 - o How many acres do you own?
 - o How many acres does your husband own?
- What types of crops do you grow?
 - o Do you sell them or keep them for your own consumption?
 - o If you do sell them, who do you sell them to?
- If you have a husband, does he grow crops?
 - o What types of crops does your husband grow?
 - o Does he sell his crops, if so where?
 - o How would you describe his land?

- Do men help out in the production of home-garden crops? If so, how?
 - o Do men use different techniques when they farm? If so, why?
- What techniques do you use to develop soil? Do you use certain tools or technologies to help you farm more efficiently?
 - o Where did you learn these skills?
 - o What are the benefits of practicing this way?
- Have you participated in any trainings?
 - o Are the trainings offered to both men and women?
- What other types of economic activities are women participating in?
- What barriers exist for women to play an equal role in small-scale farming?
- How have women's roles changed over the years?
- What positions do women hold in administrative offices?
- How do men play a role in helping women succeed?
- What do you believe could improve your situation as a small-scale farmer even more?

APPENDIX B: PARTICIPANT CONSENT FORM

Title of the Study: Women's access to and control over farming systems in Nicaragua

Researcher Name: Krista Pelletier

You're invited to participate in a research study that will seek to understand the experience of women and their access to and control over land in Nicaragua. I am conducting research as part of my Master's degree at SIT Graduate Institute. Your participation in this study is voluntary. Please read the information below, and ask questions about anything you do not understand before deciding whether to participate. If you decide to participate, you will be asked to sign this form and you will be given a copy of this form.

PURPOSE OF THE STUDY

The purpose of this study is to understand the experiences of women and their access to and control over farming systems, and more specifically agro-ecological farming systems, at the Union de Cooperativas Agropecuarias Augusto Cesar Sandino in San Ramon, Nicaragua. Additionally, my research will explore, when women do have access to and control over farming systems, what techniques they use to develop soils and what their motivations are behind the techniques they use.

STUDY PROCEDURES

This interview/focus group will take approximately an hour and can take place in a location and at a time that is convenient to you. I would like to audio-record the interview, with your permission. If you are not comfortable with recording, I will take notes for my personal use only. I will not share my notes or the interview recording with anyone.

POTENTIAL RISKS AND DISCOMFORTS

There are no foreseeable risks to participating in this study and no penalties should you choose not to participate; participation is voluntary. During the interview/focus group you have the right not to answer any questions or to discontinue participation at any time.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

The benefits of the study for both parties may include: knowledge gained from perspective of those participating in interviews and focus group discussions, a chance for the participant to express their point of view, and the practice of an interview/focus group for educational purposes. Additionally, once I have finished my data collection and have analyzed the findings, I would like to come back to share my findings through a workshop with those that participated.

CONFIDENTIALITY

Any identifiable information obtained in connection with this study will remain confidential. I will keep all notes and audio recording in password locked files on my computer. At the completion of this I will delete any notes and audio recordings. I will remove your name and identifying information to maintain your privacy and confidentiality. I may quote directly from our interview, with your permission, in my capstone paper and presentation but I will remove any identifying information. When the results of the research are discussed in the capstone presentation, no identifiable information will be used.

PARTICIPATION AND WITHDRAWAL

Your participation is voluntary. Your refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study.

“I have read the above and I understand its contents and I agree to participate in the study. I acknowledge that I am 18 years of age or older.”

Participant’s signature _____ Date _____

Researcher’s signature _____ Date _____

CONSENT TO QUOTE FROM INTERVIEW

I may wish to quote you from the interview in the presentation or paper resulting from this work.

Initial one of the following to indicate your choice:

_____ (initial) I agree to be quoted from the interview.

_____ (initial) I agree to be quoted only if my name is not used

_____ (initial) I do not agree to being quoted from the interview.

Consent to Audio-Record Interview

Initial one of the following to indicate your choice:

_____ (initial) I agree to being recorded in the interview.

_____ (initial) I do not agree to being recorded in the interview.

RESEARCHER'S CONTACT INFORMATION

If you have any questions or want to get more information about this study, please contact me at krista.pelletier@mail.sit.edu or my advisor, Tamara Stenn, at Tamara.Stenn@sit.edu

RIGHTS OF RESEARCH PARTICIPANT – IRB CONTACT INFORMATION

In an endeavor to uphold the ethical standards of all SIT proposals, this study has been reviewed and approved by an SIT Study Abroad Local Review Board or SIT Institutional Review Board. If you have questions, concerns, or complaints about your rights as a research participant or the research in general and are unable to contact the researcher please contact the Institutional Review Board at:

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