

THESIS

DECONSTRUCTING HOMEGARDENS: FOOD SOVEREIGNTY AND
DEVELOPMENT IN NORTHERN NICARAGUA

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ABSTRACT

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Through analysis of data from interviews, documents, and participant observation this study addresses the challenges and opportunities of homegardens as an effective strategy to promote food sovereignty and prepare for the projected negative climate change impacts. Why may farmers in the Segovias region of Nicaragua resist changing their food production and consumption strategies? This research examines the conceptualization of food sovereignty from the level of international food governance and highlights the disconnects that arise from NGO interventions. I suggest that promoting food sovereignty effectively will require concrete counter development strategies that lead NGOs to transform and democratize how they work.

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CHAPTER 1

INTRODUCTION

In the fields of Nicaragua, food security and food sovereignty are buzzwords for funding of rural development projects. Development practitioners in northern Nicaragua promote food sovereignty and the localization of food systems to prepare for the projected negative impacts of climate change (Holt-Gimenez 2002; McIntyre et al 2009; Bacon 2011). The implementation of biodiverse homegardens is seen as a way not only to localize food production but also as a strategy in line with a food sovereignty agenda (Schneider and Niederle 2010). Food sovereignty is a social movement and policy agenda brought to the international world stage in 1995 by La Via Campesina, a peasant social movement fed up with ineffective international development policies that fail to address the root problems of inequality in the international food system (Windfuhr and Jonsen 2005; Patel 2009; Lawerence and McMichael 2012).

Mass resistance movements and strategies are not new to Nicaraguans. Communities exist in a present day reality that is still colored by the radical social movement and revolution of the 20th century. Starting in the 1960's and gaining more popular legitimacy in the 1970's, the Sandinista National Liberation Front (FSLN) fought against an oppressive dictator and U.S interventionist policies that were seen to perpetuate centralization of power, neo-colonization and increasing inequality (Kinzer 1991). The Nicaraguan countryside still holds sentimental remnants of the 10 years when the revolutionary government took power and worked to establish their version of Marxist communism. In contemporary times, the revolution is still fresh in the minds of

those directly impacted by the fighting. The participants of this study often referenced their political pasts fighting and living through times of social revolution.

Now, farmers in the Segovias region of Northern Nicaragua find themselves in a much different political context--working with an internationally funded NGO intervention project to increase both food security and food sovereignty. The latter is an intrinsically social movement agenda bathed in political intentions. Food sovereignty aims to dismantle the current unjust food system and envision a new, human-centered production and consumption arrangement from the ground up. Food security policies on the other hand, tend to focus on insuring that people have sufficient calories on a regular basis and ignore the difficult political questions of how, by and for whom food is produced. Food security policies tend to move in formation with normative policy agendas, fitting without struggle into a neo-liberal trade system. NGOs have historically been involved in food security projects, but their interventions with food sovereignty projects are comparatively recent.

An examination of the history and politics of NGOs quickly reveals a paradox of NGO practices steeped in a development discourse (Escobar 1984) that leads to practices and procedures that may inhibit the success of sustainable development projects. When projects are steeped in the dominant discourse of development they may not address the needs of the local populations, a challenging paradox when attempting to promote a food sovereignty agenda.

This research aims to grapple with the challenges and opportunities of homegardens as an effective strategy to promote food sovereignty. My central research

inquiries lie at the intersection of two overlapping questions: First, are homegardens an effective strategy to reach food sovereignty? Second, why may farmers be resistant to changing their food production and consumption strategies? These questions are based in the curiosities of Nicaraguan practitioners who asked, “why don’t farmers just change” to improve their livelihood conditions? The second question gets at farmer attitudes and behaviors concerning homegardens and the implied diet change to increased vegetable consumption.

The theoretical framework is structured through literature and debate on food sovereignty as a policy and social movement framework. Food sovereignty embraces strategies not only for localizing the control of production and markets, but also the right to food, people’s control over lands, water and genetic resources, and for promoting the use of environmentally sustainable approaches to production (Windfuhr and Johnson 2005; Patel 2007, 2009).¹ La Via Campesina argues that for food security measures to be effective, they must be align with a food sovereignty agenda (LVC 2000). While current UN policy development alludes to food sovereignty, the more popular Right to Food (RtAF) policy is currently being developed and debated at the level of international food system governance. This research highlights the ontological distance between the envisioning of food sovereignty policies at the international level and the reality of carrying out complex social movement agendas in the Segovias.

NGOs implement food governance policies that have a tendency to intertwine outside agendas and perpetuate the dominant discourses of development (Apthorpe

¹ Its important to recognize that I do not address the entire breadth or all the components of food sovereignty in this paper but a more simplified version for reasons of length and focus. A more through analysis would be beneficial once has been defined by the participating cooperatives or regions.

and Gasper 1996; Escobar 1997; Ferguson 1990; Crush 1995) and may not align with local farmer interests. Escobar draws from Foucault's analysis of power and will to knowledge and applies it to the 'Third World'. Escobar identifies 'development discourse' or "the hegemonic epistemological space of development –inscribed in multiple forms of knowledge, political technologies and social relations" (1992:23). He draws important connections between the processes through which power is exercised in both the Central America and the 'developed' nations. In the presence of the dominant development discourse, funders and NGOs perpetuate the field that reproduces the bureaucratic structures for communication between farmers and practitioners. A product of these procedures is that development discourse (Escobar 1984) then veils farmer preference and inhibits the trajectory toward food sovereignty. Since this is precisely the form of discourse that the food sovereignty movement intends to dismantle, NGO involvement in food sovereignty paradoxically challenges the goals of a food sovereignty agenda.

Food sovereignty proponents argue for more localization of food systems as an alternative to development discourse and a food system that is seen to perpetuate inequality. Localization is often referenced as synonymous with the term *re-peasantization* in peasant studies literature. Some scholars and practitioners allude to subsistence and local agricultural practices as food sovereign in and of themselves. It's important to recognize that while this study cites the international policy and social movement definitions, food sovereignty

conceptualizations are quintessentially determined by communities themselves. Food sovereignty implies the ability of some social unit (community, nation-state) to make effective choices about what its food will be and how that food will be produced, whether the food be grown by farmers for household subsistence or the processed fried plantains imported from Mexico at the local *supermercado*. In this way, many advocates have used food sovereignty as a basis for arguing for local production, when the essence of food sovereignty is the ability to make effective choices about food. This homogenizing move contradicts the food sovereignty agenda's context relevant decision-making, precisely the critique of modernization projects that the Via Campesina movement is trying to overcome.

Homegardens also entail a change in consumption habits for farmers in northern Nicaragua. Eating habits are influenced by symbolic and cultural experiences as well as socio-economic position. In relation to the latter, past research shows that distance from the necessities of life allows for an experience in the world that is less bounded by urgency to meet basic survival needs, such as food, water, and shelter (Bourdieu 1984; Wheeler 1985). So even though healthier eating may lead to a more dignified life, pertinent to food sovereignty project goals, eating more vegetables as diet diversification may not resonate with farmers more distant from meeting their basic economic necessities. Food preferences also have deep roots in local customs, making them challenging to alter. In relation to a food sovereignty agenda, it's important to consider if food options fulfill nutritional needs with foods and practices that are culturally meaningful and nutritionally sound (Windhufur and Jonsen 2005).

I find that as an ideal type homegardens certainly have the potential as part of a larger food sovereignty strategy. Indeed, the importance of production for self-provisioning, or home consumption is a strategy for the internalization of productive resources and for the decommodification of food consumption (Schneider and Niederle 2010)². Previous research shows that gardens provide direct access to a diversity of fresh foods and nutrients as well as an important source of supplementary income (Ninez 1984, 1987; Mendez et al 2001; Von Braun et al 1993; Moskow 1996). Gardens may become a principle source of food and income in times of environmental and economic stress and demonstrate farmers' agency to have control over their food source. Schneider and Niederle (2010) argue that home garden production shows farmer capacity "to resist the pressures of the dominant socio-technological regime" (399) and to respond to the reproduction needs of the household.

Farmer preferences and levels of participation in an NGO-led food sovereignty project are also shaped by the history of the Nicaraguan political economy (Enriquez 1991; Gwynne and Kay 2004; Smith 1999) and international development projects (Bebbington and Farrington 1992; Clark 1995; Hickey and Mohan 2005; Roberts 2005; Kurjanska 2012). While projects may exhibit farmer interest and participation, some farmers are making decisions not to participate in the project, evidencing resistance to the processes of change defined by project decision makers.

Moving past the challenges, NGOs are in a unique position for contributing to positive change. What if the food sovereignty agenda was harnessed to transform the

² A note on vocabulary: throughout this paper I use the terms self-provisioning, homegardens, and home consumption interchangeably. The term 'practitioner' encompasses both NGO administrators and field technicians such as agronomists.

institutional framework of intervention and assist NGOs re-envision and re-structure their discourses of development? How can we bridge the gap between the policy envisioned and project implementation in communities? I argue that if practitioners can grapple with and work toward a food sovereignty agenda alongside farmer organizations, they themselves might start the process of breaking free from the enclaves of dominant development discourses. NGOs are well positioned to participate in a way that engages with the underlying processes of development. I suggest that NGOs seek to further transform and democratize the process of planned intervention through counter development strategies (Galjart 1995; Acre and Long 2000). A focus on counter development helps to avoid viewing development simply as geographical and administrative processes of incorporation. While social movements strive for structural changes on a national and international scale, NGOs may currently be receptive to more minor tweaks at the community and institutional scale. In this way, if NGOs were to actively embrace a food sovereignty agenda while also supporting farmers through the process, there may be a more effective, collaboratively transformed trajectory.

Returning to the research question: why may farmers be resistant to change their food consumption and production strategies (to adopt homegardens)? This study examines data from interviews, document review, and participant observation to show how 1.) dominant forms of development discourse inhibit farmer agency; 2.) re-peasantization and the essentialization of local/subsistence food production may not be aligned with farmer's ways of doing things; and 3.) some farmers are not accustomed to cooking and eating the diversity of fruits and vegetables harvested from homegardens.

To these obstacles I propose a few concrete strategies within a counter development philosophy: first, I suggest that farmer cooperatives be involved in the envisioning of what food sovereignty means to the region. This would lead to a collaborative effort for defining the problem in a way that allows for shared accountability. Second, in order to not repeat historical mistakes, research on past development projects involving homegardens is crucial. Third, alternative methodologies such as the Farmer-to-Farmer program, or Programa de Campesina a Campesina (PCaC), can be employed as a social process method for farmers to share their expertise on developing and maintaining homegardens. Fourth, if Segovian regions decide to participate in a food sovereignty agenda it may be beneficial to participate in international conferences or gatherings of peasants going through their own envisioning process.

The remainder of this paper continues the conversation on food security, sovereignty, and RtAF policies and how they are and are *not* played out on the ground in Nicaragua.

Chapter 2 lays out a multi-scalar framework through a review of relevant literature on food sovereignty, security, and Right to Food (RtAF) as policies that aim to address inequality and food insecurity in the global food system. These policies have impact at the international, NGO, and local levels. I discuss their interconnections, differences, and relevance to homegarden projects.

Chapter 3 lays a framework for examining the challenges of implementing homegardens in the Segovias. This chapter sheds light on the question asked by

members of the project management team, 'why don't farmers just change?' The chapter highlights discourses of development, maintaining a diverse livelihood strategy and changes in consumption habits as inhibiting factors to successful homegarden adoption. You will see the influence of a guiding theoretical framework outlined in chapters 2 and 3 literature reviews throughout the paper.

Chapter 4 lays out the research methods and procedures. I situate myself as a researcher in and as part of the development discourse critiques. This chapter gives an overview of the larger food security and sovereignty project, followed by an overview of the study, including the collaborative process to develop and refine the research question followed by my rationale for choosing qualitative methods. Next, I outline my research design. I describe the sampling universe, the population of interest, and my unique sampling strategy. I also provide an overview of my data collection methods, which included in-depth interviews, document review, and participant observation. Then, I outline the steps I took to analyze the data. I conclude with a discussion of the methodological issues and challenges I faced during the course of this research.

Chapter 5 provides findings and recommendations. Homegardens are a potential component of a food sovereignty agenda but could be improved by addressing three main obstacles that help explain farmer resistance to their implementation. First, farmer preference may be veiled by development discourse after decades of participation in top-down projects. I examine discourse as observed in overlapping dimensions: the customary forms of communication and interactions between farmers and practitioners that perpetuate the top-down nature of development strategies. These interactions are

lodged into the stubborn, structural bureaucratic methods that persist as remnants from post WWII modernizations. The findings concretely demonstrate how policies are enacted quite differently on the ground than envisioned at the UN.

Importantly for food sovereignty, I argue that these dimensions contribute to suppressed farmer agents. Farmers actively engaged in working toward food sovereignty as a social movement agenda participate in overt agency; they are working in the policy arena, protesting, and engaged in progressive forms of emancipatory education. In contrast, an NGO-led food sovereignty project allows for subtler action that may surface through decisions to not maintain NGO instigated strategies. More broadly, I argue that interactions with NGOs perpetuate a development discourse that must be overcome in order to move forward with a food sovereignty agenda.

Second, homegardens move farmers toward a more subsistence-based livelihood, or what peasant studies calls *re-peasantization*. I examine farmers' ways of thinking about subsistence and market integration. I argue that there is misinterpretation and essentialization of subsistence practices as a golden ticket to achieving food sovereignty and this may not be in line with a food sovereignty agenda that calls for communities to decide at what level they choose to be integrated into the market. Ultimately, food sovereignty needs to be regionally defined.

Third, farmers perceive an infringement on local customs when non-traditional eating habits are introduced. While many understand the benefits of eating a diversified diet, farmers are often resistant to changing what they eat, making homegarden implementation more challenging as a long-term food sovereignty strategy. The findings

chapter concludes with recommendations to address these challenges. I offer some concrete ways to start the counter development process of change within development agendas themselves.

Chapter 5 concludes this paper by reiterating the core aspects of food governance at the international policy level. I situate the study in the larger food sovereignty framework and outline my principle findings. I refine my main arguments and leave on an optimistic note; encouraging use of counter-development strategies (Galjart 1981; Acre and Long 2000) and suggest that NGOs take on a role that transforms and democratizes the process of development and its discourses.

CHAPTER 2

FROM POLICY TO PRACTICE: UNEARTHING FOOD GOVERNANCE THROUGH HOMEGARDENS

In this chapter I lay out a multi-scalar framework structured through literature and policy debate on food sovereignty, food security and the most recent discourse coming out of the United Nations, the Right to Food (RtAF). Understanding the depth of food policy is important not only for locating projects such as homegardens in the larger international development policy context, but also to understand the premise that practitioners use to inform strategies such as homegardens on the ground.

I historicize, define, and critique food sovereignty, food security, and the Right to Food policies. Beginning with food policy at the scale of international institutions, I respond to the questions: What are the historical roots and how are the concepts of food sovereignty, food security, and the Right to Food characterized in policy? Food security “exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (Windfuhr and Jonsen 2005).

A more politicized food sovereignty is a process that embraces strategies not only for localizing the control of production and markets, but also the right to food, people’s control over lands, water and genetic resources, and for promoting the use of environmentally sustainable approaches to production (Windfuhr and Johnson 2005; Patel 2007; 2009).

Historically, food sovereignty as a social movement agenda has clashed with food security initiatives stemming from post-WWII westernization and modernization as development programs. However, in contemporary research on food security, the methods used for measuring it as well as the subsequent strategies to address hunger have taken on a holistic perspective that include not only socio-economic, political but also ecological impacts on access, utilization, and availability of food (Ericksen 2008; HLPE 2012). With the worldwide recognition of climate change, food system governance cannot be separated from its biophysical domain. After this discussion I examine the places of divergence between food security and food sovereignty before addressing the Right to Food.

In parallel discussions on international food and agriculture development policy, the U.N Committee on World Food Security frames the Right to Food (RtAF) as an international human right. They are currently writing RtAF into policy instead of the more politicized food sovereignty concept. This upsets some food sovereignty proponents that see RtAF policies as not addressing the underlying inequalities in the international food system. Yet, the UN facilitated negotiations on RtAF include an organized civil society group that aims at bringing those most affected by food insecurity to the *mesa*, including La Via Campesina (CSM 2012). The participation of the people most affected by food insecurity offers a potential for social movement agendas to be integrated into international food system governance. I ask if RtAF is a normative compromise or if it represents a radical model for civil society participation. I further consider the policy implications of implementing these three loaded concepts. I examine their similarities

and points of divergence to situate homegardens within these international debates of food system governance.

The point of this section and the thesis as a whole is to present a backdrop for project management team decision-making about homegarden implementation in the Segovias. Therefore, as the discussion moves from policy to the community level, it becomes increasingly applied in nature.

Food Sovereignty, Security and the Right to Food

Food Sovereignty

The term food sovereignty is defined differently across nations, civil society organizations, and international institutions. However, a review of the core food sovereignty declarations starting with the 'Tlaxcala Declaration of the Via Campesina' in 1996 to the definition provided in the Declaration of Nyéléni in 2007 indicate that civil society's underlying concern about the need for the principles of food sovereignty remain unchanged. The international peasant movement La Via Campesina formally put forth the vision as a radical framework to redefine sustainable development and food systems. The historical trajectory of the term is widely documented elsewhere (McMichael 2008; Wittman, Desmarais and Wiebe 2010; Beuchelt and Virchow 2012).

Amongst various overlapping definitions, I'm drawn to the following developed at the United Nations World Food Summit in Rome for its effective bridging of Via Campesina as civil society's voice to that of the international policy arena. They suggest three principal characteristics of food sovereignty: "(1) that food be produced through a

diversified, farmer-based system; (2) that people have the right to determine the degree to which they would like to achieve food self-sufficiency and the ability to define terms of trade that are consistent with the sustainable use of natural resources and the health of local economies; and (3) that people not only have the right to sufficient calories, but also the ability to fulfill their nutritional needs with foods and practices that are culturally meaningful” (Windfuhr and Johnson 2005). They encompass La Via Campesina’s definition, “food sovereignty is the peoples’, Countries’ or State Unions’ RIGHT to define their agricultural and food policy, without any dumping vis-à-vis third countries” (FAO 1996).

La Via Campesina calls for a redefinition of social relations and how we relate to food and the global agricultural market. On one hand, according to food sovereignty, food represents a cultural commodity that much of the world regards in terms of its nutritive value, taste, and tradition (Schanbacher 2010). On the other, the agenda proposes an innovative and radical vision of a food system that places human relations at the center of policy decision making in lieu of capital accumulation.

Food sovereignty may be thought of as a social movement vision developed to rebut the dehumanizing neoliberal trade deregulation processes that are understood to globalize hunger and poverty worldwide. Advocates highlight the failures of multilateral economic policies and argue, for example, that the World Trade Organization (WTO) should be banned from agriculture (Mann 2009). Without a move toward food sovereignty, proponents see a continued destruction of local production capacities and impoverishing of rural societies to an increasing extent.

Food sovereignty agendas are situated in a 'development as modernization' landscape characterized by top-down development schemes left over from post World War II policies. In essence, interventions after the war were geared toward combating the rise of communism in the "Third World" by implementing free trade ideologies, often coined as the 'new colonialism' (Enriquez 1991).

A modernization mentality such as this collides with the food sovereignty characteristics pointed out by well-known scholar Raj Patel, "democratic participation, an end to dumping of food and the wider use of food as a weapon of policy, comprehensive agrarian reform, and a respect for life, seed, and land" (2009). To envision a food system that encompasses these characteristics, food needs to be seen as a human right because questions about relations of power characterize decisions about how food security should be attained. A common misconception that are arguably aligned with food sovereignty principles is that La Via Campesina defines a predetermined trajectory to achieving food sovereignty.

Yet at the core of the vision is a focus on the *farmer's right to determine* the conditions of achieving food self-sufficiency and terms of trade. To insure formal food sovereignty rights, the movement maintains that the content of these rights (access to land, credit and fair trade, and to decisions about what food to grow and how) is to be determined by the communities and countries themselves – thereby asserting a substantive reformulation of sovereignty through context-specific rights, situated in particular, historical subjectivities (Patel 2007). Different socio-economic and cultural contexts call for farmers to translate the policies in a way that fits their communities and

regions. The food sovereignty movement views rights as a ‘means to mobilizing social relations’, in turn ‘a call for a mass re-politicization of food politics, through a call for people to figure out for themselves what they want the right to food to mean in their communities, bearing in mind the community’s needs, climate, geography, food preferences, social mix and history’ (Patel 2007:88, 91; McMichael 2008). Nevertheless, in practice it is not always the case that farmers themselves initiate and drive food sovereignty agendas. As has been the case for decades, farmers might work in collaboration with support organizations such as governments and/or local and international non-governmental organizations (NGOs). Since these are precisely the governing organizations driving the development model that the food sovereignty movement intends to challenge, these collaborations (discussed later in this chapter) muck up the waters of how food sovereignty agenda is carried out on the ground.

Food sovereignty scholar Hannah Wittman adds that the organization and control of one’s natural resources is intrinsically linked with food access and sovereignty (2009; Wittman et al 2010). The recognition of natural resources is particularly relevant as the world considers how to adapt to the projected negative impacts of climate change on access to resources. Agrarian citizenship is a concept expanded upon by Wittman and is relevant here since it encompasses the political and material rights and practices of rural populations (2009). She argues that the bureaucratization of the industrial farming model excludes agriculturalists unable to access land titles, bank accounts, or futures markets. The “deep social and ecological effects of the consolidation and industrialization of agriculture have contributed not only to social displacement and

ecological degradation, but have also changed the socio-ecological practices of citizenship" (Wittman 2009). Conceptualized with a backdrop of Marx's metabolic rift³, this model of agrarian citizenship envisions the ability of a diverse array of rural actors to articulate and act on political demands, constituting an active citizenship that provides the foundation for improved access to material and ecological resources (Wittman 2009) and thus food security and sovereignty. An integral aspect of a food sovereignty agenda, agricultural citizenship bridges the human-ecological interface through cohesion of citizenship rights with a farmer's need for/connection with natural resources. Wittman offers a compelling argument for local control of food production and consumption through homegardens.

Food Security

To realize a food sovereign agenda, farmers also need not only access to sufficient calories, but also the ability to fulfill their nutritional needs with foods and practices that are culturally meaningful (Menezes 2001). This notion encompasses food security as defined by the United Nations and other stakeholders involved in the 2005 World Food Summit: "Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (Windfuhr and Jonsen 2005).

³ Marx and Engels applied the idea of metabolism, an exchange where an organism draws upon materials and energy from its environment and converts these by way of various metabolic reactions into building blocks necessary for growth, to society and saw a major disconnect or "rift" in the recycling of nutrients back to the soil, this was the basis of his arguments against a capitalist agriculture that could no way maintain a consciousness to regenerate the resources it was extracting from the soil (Foster 1999:382-384).

In contrast to a peasant-led food sovereignty, the term food security is most often associated with programs propagated by large international development institutions such as the United Nations Food and Agriculture Organization (FAO) or International Fund for Agricultural Development (IFAD) with policies pursued by organizations like the World Bank and IMF.

Conventional Westernized thinking on food security is that maximizing farmers' profits is the most effective way of capitalize on agricultural production and thus food security (OECD/FAO 2012). While such a narrow definition has mostly fallen out of international food policy, it is important to recognize that programs and practices developed under this premise still linger in developed and developing countries alike and may be inhibiting the more progressive holistic conceptualizations discussed below.

The underlying conception of food security is linked to economic development and a numeric value placed on calories rather than conceiving of food as a cultural commodity intimately linked with particular values such as interdependence and environmental sustainability (Schanbacker 2010). In this way, a food sovereignty agenda would argue that food is disconnected from its cultural context and considered an abstract commodity; some view this form of food security discourse as part of the reformist trend within the corporate food regime rooted in modernization theories of highly critiqued state-led development models (Holt-Gimenez and Shattuck 2011). Reformism in the food regime is rooted in modernization theories of economic development, which saw the path for economic development in the Third World as following the same industrial path as that of the industrial North (Rostow 1960). Food

security as a reformist strategy is broadly oriented toward state-led assistance and seeks to regulate, but not directly challenge market forces to reconstruct existing human social relations within the food system. A reformist approach grapples with maneuvering inside a capitalist driven development model. Such strategies, it is argued, face the risk of not addressing the base economic inequalities that contribute to food insecurity.

However, a more contemporary understanding of the causes of food insecurity has evolved alongside the worldwide recognition of climate change. Informed by anthropological research, farmer households are situated in a web of social, economic, political, and ecological conditions that impact their capabilities to achieve food security (Potteir 1999). Anthropologists have argued for some time that when food security policy interventions ignore the local imbalances in power and resource uses, they will themselves obstruct the course of social development (Pottier 1999). Anthropologists caution policy makers to insure integration of food domains in a framework which simultaneously addresses food production, consumption and marketing and which establishes how these domains are mediated through various sets of discourses in which economic, social and moral arguments are mixed (Pottier 1999). In this way it is difficult to discuss food security and ‘why farmers don’t just change’ to achieve it without considering the various components – social, political, economic, and environmental realities on the ground.

In current international policies dominated by concerns of changing climate, food security programs emphasize the importance of the biophysical environment where food production takes place. A succession of important reports highlights a common concern

with the important link between the deteriorating environment and food security: the Millennium Ecosystem Assessment (2005), The *Stern Review* (Stern 2006), the IAASTD report (2009), the World Bank's *World Development Report* (2007) and the *World Food Summit Memorandum of Understanding* (FAO 2008) (Lawrence and McMichael 2012). Citing research on agriculture's contribution to ecosystem stress, these reports see the paradox of an industrial farming/food provision system that will inevitably deplete the resources we need to grow food. Also a common theme is a growing scientific consensus that agro-ecological farming methods offer the most sustainable solution in both social and environmental terms (Rossin et al 2012; Lawrence and McMichael 2012).

The current shift in research redefines food insecurity, how it's measured, strategized, and demands an integration of both socio-economic and biophysical systems. The FAO Committee on Food Security aims to develop and strengthen the human, infrastructural and institutional capacity for climate change while at the same time addressing food security. The most recent FAO report states, "adaptation of the food system will require complex social, economic and biophysical adjustments to food production, processing and consumption" (HLPE 2012). Adaptation to climate change is thus seen in the broader context of building a more resilient food system. Identifying and supporting food production and distribution practices that are more resource efficient and have fewer environmental externalities are considered high priority (HLPE 2012).

Alongside the FAO, this reconceptualization of food security is being taken up by national and international food security research projects. Under the umbrella of the

Environmental Change Institute at University of Oxford, the 'Global Environmental Change and Food Systems' (GECAFS) Joint Project of the Earth System Science Partnership (ESSP) are searching for a more holistic framework to address issues of food security. Food security, they argue, should be seen as the outcome of multiple factors, operating at household up to international levels. It depends upon not only availability from production but also a suite of entitlements that enable or protect economic and social access to food (Ingram et al 2010). As a multi-scalar solution, all levels of society, across sectors - agriculture, health and education - and across the local and global food system will require the implementation of adaptation strategies (HLPE 2012).

The FAO and GECAFS are at the fore of redefining food security in a more holistic way.

This important redefining and problematizing of how we think about food security has its roots in the work of economist Amartya Sen. Sen is universally credited with establishing the importance of access to food, as opposed to only availability, as critical to food security. His research on historical famines shows that they occur where supply was not the issue, but rather poverty, conflicts or an inadequate social contract to protect people from hunger (Devereux 2000; Maxwell and Slater 2003). In attempt to address the inadequacies of the traditional post-war food projects, there is a need to focus on 'acquisition' of food by the respective households and individuals. The fact is that the overall production or availability of food may be a bad predictor of what the vulnerable groups in the population can actually acquire (Sen 1981; Dreze and Sen 1989). Access is determined by how well people can convert their various financial,

political, and other assets into food, whether produced or purchased (Sen 1987). This insight explains inequity in food distribution and allocation, based upon income, political and social power, a more holistic perspective than the traditional food security plan.

Building on the importance of acquirement, the GECAFS framework aims to lay the traditional view of food security to rest by including the analysis of multiple environmental, social, political and economic determinants. The framework further encompasses components of food availability, access and utilization to develop a comprehensive analysis of how the current organization of food production, processing, distribution and consumption could contribute to food security (Ericksen 2008).

Food *availability* is the amount, type and quality of food a unit has at its disposal to consume; food can be available through local production; availability can rely on distribution channels to get food where it needs to be; and availability depends upon mechanisms to exchange money, labor or other items of value for food (Ericksen 2008). So if people rely on subsistence plots as well as local markets to attain food, *availability* refers to the quantity, type, and quality of food offered at these locations.

Access to food is the ability to gain access to the type, quality and quantity of food required. It can be analyzed in terms of the affordability of food that is available. Also, access takes into consideration how well allocation mechanisms such as markets and government policies function and whether consumers can meet their social and other food preferences (Ericksen 2008). Homegardens may have plenty of availability but at the same time could be inaccessible due to the cost of seeds.

Food *utilization* refers to individual or household capacity to consume and benefit from food; it thus depends upon the nutritional and social values of food, and the safety of available and affordable food (Erickson 2008). For example, homegardens may produce an abundance of food but people may not be accustomed to cooking those particular types of food. Importantly, food security outcomes are influenced by *access*, *availability* and *utilization*, while these activities are further determined by socio-political and environmental influences.

The GECAFS framework remains undeveloped and in need of further research contributions, but nevertheless calls our attention to the complexities and interconnectedness of measuring and attending to food security, something the traditional definition does not address. A GECAFS perspective is unique for its inclusion of environmental and socio-economic changes happening simultaneously through cross- scale interactions, between processes and actors in different arenas, and at different levels (Cash et al. 2006), for example from local to regional. This introduces even greater complexity and uncertainty for food security. Understanding how to manage food systems in this multifarious context poses considerable research and policy-making challenges but it aims to get to the root of the people having enough to eat on a consistent basis.

Until the GECAFS framework is further developed, international organizations may fall back on the traditional western conceptualization, and as has for decades, result in ineffective programs.

The difference between food sovereignty and security and why it matters

The original objective of the food sovereignty agenda was to encourage NGOs and civil society organizations to discuss alternatives to the neo liberal proposals for achieving food security. The Via Campesina argues that food security is not possible without following the principles of food sovereignty:

'We, the Via Campesina, a growing movement of farm workers, peasant, farm and indigenous peoples' organizations from all the regions of the world, know that food security cannot be achieved without taking full account of those who produce food. Any discussion that ignores our contribution will fail to eradicate poverty and hunger. Food is a basic human right. This right can only be realized in a system where Food Sovereignty is guaranteed.' (Via Campesina 1996).

The food sovereignty agenda was developed by and for farmers in resistance to the modernization strategies invoked through food security policies and development projects.

Crucially, it is within the strategies for reaching food security that I locate the relevant relationship between security and sovereignty. To be effective in combating food insecurity, actions and programs must be in-line with a rights-based food sovereignty. The holistic GECAFS framework for food security begins to get at the need for a more integrated and multi-scalar approach for addressing the ability for communities to feed themselves. But its application and effectiveness have yet to be tested in diverse contexts. For now, the original food security infrastructures still have influence in the Nicaraguan countryside where government-run food security initiatives rely on free handouts subsidized by western European countries (see case study chapter for more detail). For this reason I focus attention on the so-called 'out of date'

(but still being practiced) traditional view of food security in this section. In this way I will highlight the disconnect between policy and practice.

A core food sovereignty principle states that people have the right to determine the degree to which they would like to achieve self-sufficiency and define their terms of trade. This is absent from food security policies, entailing consequences from the implementation of the concepts that should be considered since food security language has been historically used to further modernization projects in the global South to the demise of local culture and ways of doing things (McMichael 2006). Further, the concept of food sovereignty is written from the, often silenced by modernist development, farmer perspective --the peasant organization La Via Campesina. So as a vision it is conceptualized by and for farmers, something the UN Commission on Food Security still struggles with. By definition food security doesn't attend to community-based decision-making around food selection (Bacon 2011).

The traditional food security vision is criticized for holding distant and intangible implications by focusing on global, national or regional issues. There is a significant gap between this and food sovereignty rights-based approach that starts at the entitlement of the individual or family. Food sovereignty defines more precise policy proposals that challenge political inactivity and other failures to pursue appropriate strategies (Windfuhr and Jonsen 2005).

Food security defines a goal open to interpretation that allows governments to claim they are working for it although this may be a far off priority with few concretely implemented policy actions (Beuchelt and Virchow 2012). Food security as a policy

does not hold states accountable for being co-responsible for the situation of hunger and malnutrition of its people (Windfuhr and Jonsen 2005).

Food security as a concept claims that people should always have access to safe, sufficient, and nutritious food, but the term does not address the historical context of the food production system or the social and economic conditions under which food ends up on our plates. A farmer could be dependent on outside aid, such as gifted seeds from international agencies, but still falls short of attaining long-term sustainable access to sufficient food in a dignified way. Instead, accessing resources to feed *oneself* is encompassed in the rights-based approach to food sovereignty that argues for a more honorable, less dependent life for farm families.

Although both loaded terms layout a vision with principles and strategies for reaching the respective goals, it's important to consider how they influence rural livelihoods in distinctive community contexts. In the case of northern Nicaragua, the term food security resonates more with community members than does sovereignty. The traditional definition of food security is fading from the policy declarations as an older, out of date terminology. In some cases, NGOs and social movements are aiming to move toward sovereignty as a response to the challenges with the implementation of food security policies (Gimenez and Shattuck 2011). At the same time, other NGO-supported sustainable agriculture centers have instead embraced the peasant understandings of food security, while remaining skeptical of 'mismanaged, modernist' agrarian reform and the food sovereignty campaign (Boyer 2009).

Boyer offers a particularly relevant argument, stating that food security resonates more cohesively with deeply held peasant understandings of 'seguridad' (meaning security or safety). Peasant farmers are more often concerned for their continued social reproduction in historically insecure social and natural conditions. In contrast, the word sovereignty generally understood as powers of nation states, faces semantic confusion and distance from rural actors' lives (Boyer 2009). Indeed, not all farmers have the interest or privilege, as does La Via Campesina representatives, to participate in international food policy discussions. He finds that transnational agrarian movements and food campaigns tend to ignore local peasant understandings, needs, and organizations at their own peril (Boyer 2009). This throws a very tangible bone in the gears of an applicable food sovereignty policy.

Overall, illuminating the differences between agendas, there is a contrasting vision of human relations embodied in food sovereignty. In contrast to modernist themes of competition, efficiency, unfettered growth and consumption, and autonomy, food sovereignty emphasizes themes of sustainable development, environmental conservation, genuine agricultural reform, mutual dependence, and local, small-scale community engagement, thus juxtaposing both neoliberal and developmental notions of food security (Schanbacher 2010). Ultimately the food sovereignty movement argues that healthy, nutritious, and culturally important food is a human right, a right that obligates multilateral and state institutions to ensure its protection through more equitable land distributions and local production for local consumption through regional control over natural resources such as land and water.

The community-level consequences entailed from the implementation of the divergent agendas are quite relevant. Food security's relationship with historically ineffective modernization and development projects in the global South did not always respect local conditions and customs. There is a significant distance between this imposition of policy and the rights-based approach that starts at the entitlement of the individual or family, putting farmer voice at the fore. Food sovereignty defines more precise policy proposals that challenge political inactivity and other failures to pursue appropriate strategies (Windfuhr and Jonsen 2005). Further, the concept of food sovereignty represents farmers having their voices heard as a larger movement to resist multinational homogenizing development policies.

Food security may never be as politically charged as food sovereignty but the lines have begun to blur between the policy definitions with the more contemporary conceptualization of food security. The more holistic approach to food security marries biophysical determinants with socio-economic and political considerations. In this way, food security policy may be moving closer to the more encompassing definitions of food sovereignty. Food scholars and international institutions defining food security are beginning to use overlapping discourses and perhaps drawing from peasant understandings of what a secure and/or sovereign food system looks like. However, as a quick trip to Nicaragua farms will show, while the policy debate and envisioning are ideal inside the white-washed walls of a conference room at the UN, there is a significant disconnect with the projects carried out on the ground. The development community can appreciate meaningful, concrete measuring apparatuses developed by

scholars like Emmerson et al. but when will we see effective changes in the practice of carrying out the collaborative visions? The next section examines RtAF policies as a potential exercise to address this disconnect.

Current Policy Arena and the Right to Food: a normative compromise or radical participation?

As part U.N Committee on World Food Security agenda, the Right to Food (RtAF) presently dominates debate in the international food policy arena. RtAF agreements are currently being debated with a diverse set of voices at the table. International development organizations, governments, and civil society – including farming and other grassroots organizations- are being organized to develop guidelines and policies in order to achieve the RtAF. Coming out of what may be considered a normative context, some insist government and industry should be held accountable if they advance policies or enterprises that undermine the human right to food (Brock and Paasch 2009; De Schutter 2008).

The Right to Food is seen as a human right derived from the International Covenant on Economic, Social and Cultural Rights (ICESCR). A UN Special Rapporteur from 2002 defines:

“Right to adequate food is a human right, inherent in all people, to have regular, permanent and unrestricted access, either directly or by means of financial purchases, to quantitatively and qualitatively adequate and sufficient food corresponding to the cultural traditions of people to which the consumer belongs, and which ensures a physical and mental, individual and collective fulfilling and dignified life free of fear” (FAO 2002).

The right to adequate food should not be seen as mechanical or limited to the right to a minimum daily consumption of calories, proteins and micronutrients (Cotula et al. 2008; UN-CESCR 1999). It is realized only when each individual has physical and economic access to adequate food or to the means to procure such food (UN- CESCR 1999). Access can be realized through self-provisioning of food, through income-generating activities or through a mix of both, but must be achieved in ways that are sustainable and with dignity (Beuchlt 2012). The rights-based framework is often interpreted as mirroring the food sovereignty principle of citizens consuming, rather than trading, their food. The UN Special Rapporteur on the Right to Food, Olivier De Schutter, advocates domestic production to reduce food dependency (De Schutter 2011:13; Lawrence and McMichael 2012).

In his recent report, DeShutter explains that the most pressing issue is for states to reorient their agricultural systems toward a 'progressive realization' of the human right to adequate food (2010). The questions of reorientation implies reinvestment and not *how much*, but *how* to invest. By asking the 'how' question, DeSchutter solicits a rethinking or redefining of international development schemes as they are related to food access and maintaining of a dignified life for all peoples.

The RtAF is essentially the international policy and institutional response to including more tangible actions and accountability for international food security initiatives. The proponents of food sovereignty consistently critique the use of the concept of food security for not addressing concrete strategies and actions to truly achieve food security (Windhfur and Jonsen 2005). RtAF is presented as a framework

for the identification of the food security problem as well as guidance for the design, implementation and monitoring of initiatives (FAO 2009). The RtAF framework aims to improve governance of public institutions that monitor, design and implement food security policies and programs (FAO 2009). United Nations Secretary-General Ban Ki-moon pushed the right to food as a necessary “basis for analysis, action and accountability” in promoting food security (FAO 2009). The language in the policy implies an obligation of all states to effectively protect the right to food by regulating the activities of companies at all levels of the system of production and distribution of food.

The policy currently being developed through the United Nations Committee on World Food Security (CFS) is unique for its innovative institutional design that allows a broad range of civil society organizations to participate in global food governance. Under the name International Food Security and Nutrition Civil Society Mechanism (CSM), the UN is facilitating civil society participation in agriculture, food security and nutrition policy development at national, regional and global levels in the context of the CFS. (Duncan and Barling 2012). Importantly, this process may overlap with a food sovereignty agenda by including the people most affected by food insecurity in the debate. Amongst other food sovereignty activists, La Via Campesina are Civil Society Organization members on the CFS Advisory Group, this is in addition to having constituencies in the CSM. This process of inclusion represents a unique moment where a social movement is at the negotiating table for international food system governance.

Interpretations and critiques of RtAF

Critiques of the policy depend on whom you ask. An analysis of the proposed policy measures demonstrate the 'less-radical' but more widely accepted character of RtAF. While acknowledging the mobilizing potential that the concept food sovereignty has among civil society actors, it is nevertheless argued that the right to food is more precise, has stronger support among states, and operates on a much higher level with regard to legally binding obligations compared to the food sovereignty concept (Haugen 2009). It works within the same system that food sovereignty aims to completely reconstruct. While RtAF continues within the development paradigm that has yet to eradicate poverty and hunger, RtAF is perhaps more attainable as an intermediary to reach food sovereignty. Current Right to Food literature argues that RtAF is a more effective strategy for combating against hunger (Beuchelt and Virchow 2012). Yet, although both concepts use the common language of food as a human right, the means for achieving the vision diverge in important ways. It is symbolic to consider *who* is in the driver's seat, so to speak, defining the terms and the strategies to reach the right to food vision. In the end, I wonder if it compromises the food sovereignty agenda for a more widely accepted 'right to food' language at the level of international food governance. Is this simply perpetuating a 'development' plan that has been pushed, and in many ways, fallen short of creating structural, long-lasting changes?

RtAF may be critiqued as an inherently technocratic nature of international agreements that assume a universality of progress and development through science and technology. They tend to assume a need for continuous improvement in living

conditions, improving methods of production and making full use of technical and scientific knowledge including principles of nutrition and ensuring the most efficient development and utilization of natural resources. The idea of the right to food is “thus intimately bound within a particular culture that stresses legal and contractual relations, not social relations and responsibility, and technological rather than social means of implementing it” (Kneen 2009).

By contrast, a food sovereignty agenda values local forms of agriculture and experiences, skills and knowledge of traditional food providers are excluded as being neither technical nor scientific in RtAF policy. In their place, the activities and policies of the Food and Agriculture Organization of the UN until very recently, is the “technical and scientific knowledge” on which the western model of industrial agriculture is based, including synthetic fertilizers, agri-chemicals, monoculture cropping, and genetic engineering (Kneen 2009). It says nothing about how food is to be produced, where food is to come from, or who is to get it at what price, the prior two being at the core of a food sovereignty agenda.

Instead, a look at the most recent report released from a joint OECD/FAO endeavor is titled: *Increased productivity and a more sustainable food system will improve global food security*. "Increased productivity, green-growth and more open markets will be essential if the food and nutrition requirements of future generations are to be met," said OECD Secretary-General Angel Gurría (OECD/FAO 2012). The report encourages governments to promote *better* agronomic practices, create the right commercial, technical and regulatory environment and strengthen agricultural innovation

systems (e.g. research, education, extension, infrastructure), with attention to the specific needs of smallholders. Creating the right enabling environment also means ensuring that the business climate is conducive to domestic and foreign investments, so governments should limit trade restrictions as well as those domestic support schemes that distort incentives for production and investment in agriculture (OECD/FAO 2012). In this way, the FAO is still furthering an open market neo-liberal development agenda that has historically hurt small farmers and continued cycles of food insecurity, precisely what food sovereignty intends to deconstruct. Such multiple agendas – RtAF and the new OECD/FAO report – coming from the same source leaves serious doubts in this researcher’s mind when considering the potential for CFS and importantly, the activities and voices of the Civil Society Mechanism (CSM) to be effectively integrated into tangible outcomes.

The UN declarations also face the challenge of enforcement, namely that there is no indication of who is obliged to ensure that everyone gets enough to eat. Conventional use of the term ‘rights’ would indicate that it is a government responsibility yet there is no legal authority to enforce it. Calling for more regulations directly contradicts the goals laid out in the above report calling for more de-regulation of markets. The best the UN Commission on Human Rights can do is expressed in a resolution on the right to food and “encourages all States to take steps with a view to achieving progressively the full realization of the right to food ...” (FAO 2005). Further concrete enforcement has yet to be seen, bringing doubt that a social movement agenda will be played out for international food system governance.

In these ways, translating a Right to Food agenda into international food policy challenges the food sovereignty plan despite the commonality in language. For this reason, it remains unclear to me why McMichael finds it appropriate to mention that the rights-based framework “mirrors the food sovereignty principle of citizens consuming, rather than trading, their food” (Lawrence and McMichael 2012); citing that the UN Special Rapporteur on the Right to Food advocates domestic production to reduce food dependency (De Schutter 2011). And from this “landmark decision” the FAO is supposedly taking food sovereignty seriously (Lawrence and McMichael 2012).

Indeed, La Via Campesina includes food as a human right in their definition of food sovereignty. Patel distinguishes the rights-based language, “to talk of a right to shape food policy is to contrast it with a privilege” (2009). Our food system has been designed by the decisions of a handful of privileged people and is therefore illegitimate. Given the above understandings of terms, it seems that governance is as central to food sovereignty as it is to food security and the Right to Food. But as has been shown, the food sovereignty approach most clearly necessitates considerations of how and by whom sovereignty will be exercised. This may make international government institutions who may consider this their role to facilitate, such as the UN and FAO, nervous.

In any case, RtAF has brought optimism to farmers and the food activist community. It is seen as a potential for a social movement agenda to be implemented in international policy and this is exciting. At the same time, it cannot be denied that food sovereignty is a social movement that evolved out of a sincere discontent with

development policies, some of which have come directly from international institutions such as the OECD and the UN commission. It remains to be seen if the UN can so drastically alter their agenda to attend to the people its policies claim to help.

In practice, the attractive right to food policies (and not food sovereignty principles) are actively being integrated into food security agendas. FAO workshops are showing, in practical terms, how the right to food can be integrated as an overall objective and a set of principles influencing the process of decision-making, in the development and implementation of programs and work related to food and nutrition security, such as the National and Regional Programmes for Food Security (NPFS and RPFS) that are implemented on an international scale.

Conclusion

Much has been written about food sovereignty as part of the social movement spearheaded by La Via Campesina. Taking the concept as an ideal type, my research is concerned with how these strategies aiming for the social movement's goals play out on the ground. Particularly when harnessed by non-governmental organizations as development strategies that are challenged to escape the homogenizing nature of development discourses. How are the larger structural inequalities in the food system being addressed on the ground? And does current food and climate change policy have the potential to offer more decision-making/voice to those most affected by the food insecurity and the implementation of the policies themselves.

The act of homegarden adoption itself represents a locus point to explore food security and sovereignty agendas. In my experience as a researcher with Nicaraguan farmers, the idea of food security resonates more commonly than sovereignty. It's interesting to consider not only what farmers say but also what they do not say. Not one farmer mentioned or alluded to food sovereignty although it is clearly laid out in the project objectives. In contrast, each farmer asked for some sort of aid, usually in the form of seed, in order to start the garden. In this way, wouldn't farmers be in-line with a food sovereignty agenda since they are ultimately choosing their level of integration into the market and in their relationships with NGOs. Paradoxically, if people choose *not* to plant gardens wouldn't this in itself be a decision made by farmers to define their participation in the food system?

In the following chapter, I design a framework to situate my findings that help explain why farmers may resist food sovereignty strategies like homegardens. I frame food sovereignty as a development agenda lodged into the structural bureaucratic methods that characterizes NGO development discourses. This is followed by an examination of alternatives to development discourse as proposed by peasant studies scholars, specifically homegardens as a potential food sovereignty strategy. The chapter is concluded with a section on altering of farmer consumption habits, a necessary component of a successful homegarden strategy.

CHAPTER 3

FOOD SOVEREIGNTY AS A DEVELOPMENT AGENDA

As discussed in previous sections, the concept of food sovereignty stemmed from the vision and actions of the international peasant organization and social movement, La Via Campesina. In the case of homegardens in northern Nicaragua, we are confronted with a unique circumstance where a food sovereignty agenda is not led by farmer organizations themselves but directed by local and international non-governmental organizations (NGOs). Ironically, the social movement agenda originally emerged, in part, as a response to decades of failed NGO-led development projects.

Now, this case of homegardens as a development strategy cannot escape the historic pitfalls of NGO-farmer interactions. In this chapter I briefly outline some of the predominant challenges of NGOs and their planned interventions. I show how as bureaucratic institutions, NGOs often bring outside agendas that tend to perpetuate the dominant discourses of development (Apthorpe and Gasper 1996; Escobar 1997; Ferguson 1990; Crush 1995) that may not be aligned with local farmer's interests. Bringing the analysis to the mid-range where international and national NGOs interface with coffee cooperatives in small farming communities, I argue that the homogenizing and normalizing tendencies left over from western, modernist development models actually veil farmer preferences and contribute to farmers resisting proposed homegarden strategies. This may paradoxically challenge the goals of a food sovereignty agenda, which calls for farmers to decide the degree to which they would like to achieve self-sufficiency.

A common critique of NGO intervention points to the large-scale out of the box 'recipe' projects driven by funder interests that lack recognition of what are quite diverse socio-economic and cultural community contexts (Bebbington and Riddell 1997). The anthropology of development scholars often argue for methodologies and project designs that account for the diversity of needs and perceptions in specific spaces and times (Acre and Long 2000). To reconceptualize how development is carried out, specifically NGO-led projects and their often top-down rigid model, some anthropologists propose a post-development theory that calls for an 'end to development' and a complete overthrow of development discourse perpetuating institutions like NGOs. However, given that NGOs are unlikely to disappear anytime soon, I draw from the anthropology of development to layout alternative approaches to reach project goals.

In this same vein, peasant studies scholars praise the popular *re-peasantization* phenomenon as the answer to an international trade system that perpetuates the impoverishment and food insecurity of farmers. Re-peasantization entails a more autonomous lifestyle where farmers break free from agroindustry and organize their land and resources according to their own characterizations of needs and prospects (Van der Ploeg 2010). Homegardens are seen as in line with re-peasantization and a strategy toward food sovereignty.

I complete this multi-scalar analysis by considering the altering of eating habits at the community-level. Homegardens can have up to 70 species including vegetables, fruit trees, and herbs (Mendez and Somarriba 2001) where the average farmer diet

traditionally does not entail consumption of such diverse foods. I draw on sociological and anthropological research to examine the multitude of influences on food preferences and diet change. I focus on both the material and symbolic nature of food habits by developing a perspective that locates a middle ground. I explain consumption preferences as influenced by the intertwining of group identity and socio-economic status (Bourdieu 1984; Caplan 1997; Mintz 1996). Food choice in rural Nicaragua is further shaped by the pragmatic decisions based on daily access and availability opportunities. The current project efforts toward homegardens may benefit from an altering of methods to account for these layered dimensions.

Homogenization and non-governmental organization led development

The rise of non-governmental organizations (NGOs) since the 1980s within international development has been extensively documented (Edwards and Hulme 1992; Hulme and Edwards 1997; Lewis 2005). Alongside their emergence and plans to reduce poverty, the challenges of NGOs implementing international development projects has not escaped more than twenty years of evaluation and historical critiques. The complex nature of NGO directed community development in the unregulated global South has led to issues of accountability, representativeness and efficiency in leading development projects (Biggs 1989; Bebbington 2007; Hickey and Mohan 2005; Roberts 2005; Kurjanska 2012). Underpinning these critiques is a normative approach in which mutually beneficial relationships between NGOs, civil society, and the state are assumed to follow liberal democratic trajectories which have evolved in place of engagement with wider debates about the politics of development (Mercer 2002).

Relevant to the Nicaragua case is the homogenizing character of international food security and sovereignty projects that may not employ methodologies to allow for shared group collective interests as well as individual family diversity. This effect is attributed to, in part, the fact that the relations between community and NGO partners are not even and that the funder tends to determine policy agendas to a far greater degree (Edwards and Hulme 1996; Bebbington and Riddell 1997; Fowler 1998).

As bureaucratic institutions, NGOs as funders tend to have short-term funding patterns geared towards results, products, and descriptions that fit neatly into reports. This brings conflict because the slow, flexible, culturally-specific processes occurring in communities do not translate easily into the fast turnaround demanded by administrative, or bureaucratic institutions (Mohan 2002).

Issues of homogenizing and top-down development projects are further attributed to foreign NGOs that may lack the local knowledge or legitimacy to enter local communities (Mohan 2002), inhibiting an approach which would allow practitioners to analyze the dynamics of practices and experiences by local actors and not just their responses to so called induced changes and socially-engineered experiments identified with modernization theory and strategies (Acre and Long 2000). Outside directed and funded projects struggle to be accountable to both the community beneficiaries and to need to outside funder interests in that without the funding they would not be able to run the projects at all. Such priorities leave little room for a flexible process where community members can engage in decision-making and directing despite their beneficiary status. Instead, the goals of food sovereignty has not been brought to the

table by the local community but is being implemented through planned intervention, affixing the NGO baggage onto the food sovereignty agenda.

Discourses of Development

Given the extensive critiques of NGOs that do not meet their goals of sustainable development and inequality reduction, a trend in development studies emerged that emphasized the production and reproduction of development discourse (Apthorpe and Gasper 1996; Escobar 1996; Ferguson 1990; Crush 1995).

A central theory in postcolonial studies, scholars argue that mainstream development discourse focuses on modernization theory, which follows the idea that in order to modernize underdeveloped countries, one should follow the path of developed Western countries. It is characterized by free trade, open markets and capitalist systems as the way to development and implemented by bureaucratic institutions that perpetuate the discourse. Mainstream development discourse focuses on applying universal policies at a national level and is critiqued as: being disengaged from other scales such as the local or community level; not considering regional, class, ethnic, gender etc. differences between places; continuing to treat the subjects of development as subordinate and lacking knowledge; and by not including the subjects' voices and opinions in development policies and practices (Lawson 2007).

In this section I argue that NGOs can perpetuate a development discourse through homogenizing bureaucratic practices in two ways. First, the operational norms that require bureaucratic procedures (as discussed above) are not in-line with community-level customs and ways of doing things. Second, the language used by development

practitioners, in reports, within development organizations and with farmers is in itself a replica of bureaucratic norms. It limits the possibilities for sustainable development projects to truly meet local needs. In these ways, discourses of development sculpt individual and group perceptions, “which in turn shapes the context for more visible forms of political participation” (Mohan 1997:313). In many cases, participatory methods are employed, such as surveys and democratic votes through base-level cooperatives to gauge farmer preferences. Yet, farmers may still resist adoption of the same strategies they themselves voted in favor of, such as homegarden implementation. This means there is yet something not encapsulated in direct farmer participation. What happens when democratic methods are employed yet farmer preferences remains elusive? I return to this question in the findings section chapter five.

Development has been the primary mechanism through which parts of the world, including Nicaragua, have been produced and have produced themselves, thus marginalizing or precluding other ways of seeing and doing (Escobar 1992). International NGO interventions have played a key role in shaping the Nicaraguan countryside for decades. The operational norms of NGO-led development projects including the institutional language used, streamlined reporting methods geared toward pleasing funders with out of the box products (Mohan 2002) is not only out of touch with local ways of doing thing but it also veils farmer preferences. Aphorpe argues that development discourses not only often misrepresent the ‘realities’ faced by those for whom development is planned, but they differ greatly among the development institutions themselves (1996).

Instead of sharing preferences that may be rejected by development project practitioners, farmers and their cooperatives have become accustomed to managing these interactions to most effectively benefit from the resources offered from the international interventions. This is important since farmers with 'development potential' or who are considered to be 'receptive to change' will receive most of the credit, livestock or technology (Long and Ploeg 1989). While those that divert the predestined resources to other, possibly more contextually useful investments are considered delinquents, thus serving to reinforce the original goals and normative values of the project (Long and Ploeg 1989).

Farmers in rural Nicaragua have become accustomed to planned intervention and the need to entertain the use of development discourse. Since NGOs and governments channel resources and services through farming cooperatives, farmers interested in receiving them conform to institutional agendas. Eversole suggests that as communities shift into a relationship with bureaucratic organizations, such as NGOs, they begin to adopt bureaucratic ways of doing things. In doing so, they become visible and recognizable within a bureaucratic frame: as engaged participants in rural development processes (2011). The visible face of community agency becomes the face that engages with institutions. Yet diverse communities have their own governance processes and these work quite differently than those initiated by governments and other institutions. What this translates to on the farm level are practitioners that work directly with farmers: technicians, coordinators, NGO administrators, and researchers receive survey or information on farmers that want to appear as good investments or

'high potential' for development resources. In this way, farmers seek validation from outsiders while responding to information gathering in a way that veils to true farmer preference, potentially leading to failures in the implementation of food security/sovereignty strategies.

The development discourse is furthered by the language used in reports, within development organizations and with farmers. The institutional vocabulary is itself a replica of bureaucratic norms and limits the possibilities for sustainable development projects to truly meet local needs. When talking about projects in interactions with beneficiaries, practitioners draw from a particular lexicon that is informally agreed upon within the development community (Long and Ploeg 1989:232). It's the same Spanish language type found in reports, emails, and spoken between project participants. This may be partially attributed to the fact that historically NGOs have been funded out of English or other foreign countries, internationals often arrive with a limited command of Spanish, informed by reports written in the development bureaucratic/institutional language. In some ways this is useful since it allows for a common language to enable communication across multiple language borders. People from different countries and cultures can arrive and speak a similar language to move projects forward.

On the other hand, this form of development discourse limits the vocabulary and ways of thinking for both the practitioner and farmer. In an interaction with a farmer, he told me that he speaks 'farmer Spanish'. We tried to converse in his native dialect with little success since I am not from the region and did not speak the local dialect that allowed me to fully understand their ways of knowing. By being limited to this

institutional discourse, the possible actions that may actually take place within development projects is limited to what can be communicated in this predetermined language. Given that the language is bureaucratic/institutional it then informs such an agenda. Further, if a food sovereignty agenda is to be realized, it should be from the perspective and ways of knowing held by the local group, not in the language lexicon found in formal reports to outside funders.

Alternatives to Development Discourses and the road to food sovereignty: peasant studies proposes prospects

To these structural examples of development discourse, post-development scholars argue for an end to development as the only way out of Western dominated oppressive cycles of intervention. While people in the global South may have had their voices silenced, they can speak through their actions as a way to protest against mainstream development and create their own visions for development (Desmaries 2007; Woods 2008; McMichael 2006; Edelman 2008). Subaltern groups are creating social movements which contest and disassemble Western claims to power. These groups use local knowledge and struggles to create new spaces of opposition and alternative futures (Escobar 1998). Further, some post-developmentalists claim that grassroots organizations represent 'new social movements' that reject 'development' and articulate local identities and knowledges concerning 'alternatives to development' (Escobar 1992; Esteva 1992).

The arguments for social movements to deconstruct, or resist 'development' are supported by the belief that the cause of poverty is the very terms of poor people's

insertion into particular patterns of social relations. For critical perspectives in agrarian change and peasant studies, it is important to always locate one's analysis of agrarian transformation within this relational perspective (Bernstein 2007; Borras 2009).

Other common themes in agrarian and peasant studies include: engaging with critical theories in order to interpret actual conditions in the rural world, taking politics seriously in order to engage on questions of how to contribute to changing existing conditions in the agrarian world, and utilizing rigorous and appropriate research methodologies in order to equip us with the necessary analytical tools to carry out the first two tasks (Borras 2009:17).

In order to view agrarian change, Borras argues "taking politics seriously in rural development theory and practice offers a more dynamic, not static..." perspective of the countryside (19). It is the constant political struggles between different social classes and groups within the state and in society that largely determine the nature, scope, pace and direction of agrarian change (Byres 2009). As is the case with NGOs, more often than not politics have been (re)interpreted within 'administrative' or 'institutional' perspectives. To this, radical scholars in agrarian studies have consistently questioned the trend towards de-politicized development research and policy practices and argues for an emphasis on the importance of questions of power and politics in rural development processes (Borras 2009). Along these moves to take politics more seriously, some relatively recent critical scholarship has re-politicized development discourses around 'rights' and 'empowerment' that have gained currency in development studies and development policy circles (Borras 2009).

In this same vein, peasant studies scholars document a resurgence of peasant/rural identity and re-peasantization as central to rural politics (Desmarais 2008; McMichael 2010; Ploeg 2010; Schneider and Niederle 2010). Re-peasantization entails a search for autonomy where farmers seek freedom from the obligations imposed by banks, traders, and agroindustries in order to organize their property and their labor process according to their *own* possibilities and needs. Other food scholars also speak of resisting the corporate capitalist food system by advocating for a return to the local and relocalization as alternatives to capitalist agriculture (Pacione 1997; McMahon 2002; Pothukuchi 2004).

This re-emergence of the peasantry is characterized as a defense of traditional forms of agriculture and against neoliberal agrarian reforms, economic liberalization, and the practices of transnational agri-food corporations (Desmarais 2009). Ploeg argues that farming is increasingly being restructured in a peasant-like way as a constructed response to the agrarian crisis that has grown out of five decades of state-induced modernization.

These styles emerge from the farmers' capacity for resistance to construct new congruent responses to the dominant modernization project (Ploeg 2010). Like the rural identity movement, this mobilization originates as a response to the restructuring of rural communities and a perceived need for better representation of rural interests, but it has adopted a stronger focus on practical initiatives rather than protests (Desmarais 2007). Indeed, in the face of a development model geared to ensure the depletion of small-scale farms, La Via Campesina is redefining what it means to be a peasant. A process

of re-peasantization is occurring as rural movements proudly embrace the term “peasant” to describe themselves (Edelman 1999; 2003). Ploeg concludes that the reconstitution of the peasantry is strategic to future world food security. And homegardens are considered a practice for re-peasantizing, if you will, and at the same time breaking the enclaves of both industrial trade systems and development discourse.

Homegardens as a Strategy for Achieving Food Sovereignty

Homegardens have existed historically as part of Nicaragua’s traditional farming systems but do not necessarily thrive after decades of agro-export modernization and development projects. However, in recent years they have surfaced as a sustainable development strategy with the potential to contribute to food security and sovereignty agendas. Most respondents in my study experienced two main benefits from homegardens. Gardens are recognized as contributing to a more diversified and healthy diet alongside an economic justification that growing your own saves more money than having to purchase goods at the local supermarket. Other farmers were not interested in the benefits of starting homegardens since it’s cheaper to plant more coffee, sell that on the international market, and then buy from the local market.

Other studies have shown diverse attitudes towards homegardens. Gardens provide direct access to a diversity of fresh foods and nutrients as well as an important source of supplementary income (Ninez, 1986; Von Braun et al, 1993; Moskow 1996). Typical homegardens are characterized by providing a diverse and stable supply of socio-economic products and benefits to the families that maintain them (Ninez 1986).

The term *homegarden* is preferred to other terms used to describe these garden production systems because it emphasizes the close interrelationship between the social group living at home and the garden (Eyzaguirre and Linares 2004; Veteto and Scarbo 2009). Homegardens are socially constructed spaces that exist close to the household and are managed by various household members, thereby contributing not only to subsistence and commercial production, but also to the continuance and reproduction of cultural identity (Veteto and Scarbo 2009; Eyzaguirre and Linares 2004). Most commonly homegardens tend to be considered a 'women's space'. Gender segregation in production and accounting may enhance women's ability to control the proceeds of their labor, which in turn enhances the possibility of achieving household food security (Kabeer 1994:118). We can ask how do women (and which women) negotiate and strategize to keep households food secure?

In a recent study of Nicaraguan homegardens, Mendez et al found the diversity of plant species ranged from 22 to 106 with an average of 70 (2001). Plants such as medicinals, fruit trees, ornamentals, and plants for timber and construction are consumed in the home or sold on the local market. Advocates have claimed that food production controlled by households is more reliable and sustainable than nutrition programs that rely on government anthropy and financial support (Ninez, 1984; Von Braun et al, 1993; Moskow 1996). Also, gardens may become a principle source of food and income in times of stress such as the negative impacts to food production from future climate change.

Scholars have portrayed the subsistence-oriented agricultural practices such as homegardens as a manifestation of food sovereignty. Peasant studies literature locates homegardens as a form of localization and de-commodification, or re-peasantization (Desmarais 2008; McMichael 2006, 2007, 2008; Schneider and Niederle 2010; Ploeg 2007). For example, David Barkin (2002, 2006) insists that farmers are rejecting the unstable and exploitative forms of capitalist provisioning by expanding cultivation of maize using traditional methods in Mexico. He posits that the cultivation of maize for subsistence purposes reflects a type of 'post-capitalist politics' (Gibson-Graham 2006). Schneider and Niederle (2010) argue that home garden production shows farmer capacity "to resist the pressures of the dominant socio-technological regime" (399) and to respond to the reproduction needs of the household.

But the above accounts on localizing food production, often housed under the social movement umbrella with the Via Campesina peasant rights and food sovereignty agendas, may glorify self-provisioning and project a politicized countryside that is not always reflective of reality. There is certainly a strong international peasant movement: La Via Campesina comprises about 150 local and national organizations in 70 countries from Africa, Asia, Europe and the Americas. Altogether, it represents about 200 million farmers (viacampesina.org). While I am in solidarity with and actively support their mission, I would argue that some of the western armchair activist-academics portray an over zealous view that subjectively generalizes peasant livelihoods globally, whether farmers claim membership in the movement or not.

In addition to a potentially over politicized view of the countryside, the essentialization of repeasantization as intrinsically subsistence farming misses the food sovereignty mark by entailing that subsistence and local agricultural practices are themselves food sovereign. Food sovereignty is much more complex and all encompassing, for example as defined in policy, implies the ability of some social unit (community, nation-state) to make effective choices about what its food will be and how that food will be produced (Schanbacher 2010) whether the food be grown by farmers for their household units subsistence or the packaged chips imported from Costa Rica at the local *supermercado*. In this way, many advocates have used food sovereignty as a basis for arguing for local production, when the essence of food sovereignty is the ability to make effective choices about food. This homogenizing move contradicts the food sovereignty agenda's context relevant decision-making, precisely the critique of modernization projects that the Via Campesina movement is trying to overcome.

Other research falls closer to the reality in Nicaragua by balancing the integration of both market and subsistence approaches, not necessarily following a strict trend toward de-commodification or repeasantization. A closer read of Van der Ploeg's conceptualization of repeasantization actually shows an integration of diverse livelihood mechanisms, including reliance on market wages (Van der Ploeg 2010). In some cases the market can support a food sovereignty agenda by subsidizing subsistence farming practices. Small-scale farmers in the global South, particularly Latin America, have long supplemented their agricultural production with income from wage labor and the production and marketing of nonagricultural commodities (Deere 1990; Kay 2001;

Bernstein 2009). On the one hand, priority is given to food production for greater food security that growers might then have since they are not dependent on market exchange for food (Dreze, Sen, and Hussain 1991). For example, Nicaraguan farmers plant and maintain corn, beans, and sorghum crops. Sen contributes that this must be balanced against uncertainties arising from other sources like climatic reasons (or pest problems in Nicaragua). An argument is often made that suggests that a lot of resources be put into agricultural production since food output has suffered due to unreliable climates. Sen argues to not put “all eggs in highly unreliable basket”. The need is for diversification of the production pattern in a situation of such uncertainty. This calls our attention to the dual reliance on not solely a subsistence means of production but also taking advantage of local, national, and international markets to insure food security and sovereignty. In this way, participation in the market economy does not appear to be associated with the dissolution of the peasantry (Isakson 2009). However, the term repeasantization continues to be oversimplified in academic literature and may harm food sovereignty efforts that draw from that research.

A diversified approach to livelihoods has been extensively researched by Amartya Sen; focusing on distributional issues, relations of production, and the rights of people. As noted above in reference to food security, he shows that the wage earner who is paid money and must exchange that money for goods, is able to command more commodities than the share cropper or the farmer, who receives goods that must first be sold or bartered (Sen 1990). Based on his research in Africa, without income people could not buy food and the food supply did not move to where it was needed most.

Worker entitlements collapsed as they lost the ability to feed themselves and their families. Many people died because poor rural workers could not obtain food without adequate wages (Dreze, Sen, and Hussain 1991:99). So Amartya Sen's capability approach shows us that that people need to have the capabilities to provide themselves with the food they want and this may not be fully in-line with a strictly subsistence re-peasantization strategy.

Anthropological and Sociological Perspectives on Food Consumption Habits

Whether considering the implications of reliance on international commodity markets, subsistence farming, or some combination of the both, consumption habits are impacted by the realization of homegardens. In general, farmers are not always accustomed to eating the diversity of vegetables harvested from homegardens. As mentioned above, gardens tend to have a variety of fruit trees, plants both ornamental and medicinal as well as an assortment of vegetables. Given the proximity to the home, they have the potential to provide a diversity of nutrients from fresh fruits and vegetables to the household - if taken on as a preference by Nicaraguan farmers.

Anthropologists and Sociologists have studied the intricacies of food consumption habits for decades from a variety of perspectives. Some see consumption as central to broad societal processes such as the political economy of commodities (Mintz 1985). Literature on the political economy of agricultural commodities places the production and distribution of food at the center of a person's choice by highlighting different commodity systems and their relationship to national and international food markets

(Bonanno et al. 1994; McMichael 1995; Friedmann 2007;). Scholars in this tradition tend to view food options as primarily influenced through the power directives of neoliberal strongmen and market forces. While I will not address this in depth, the following brief example paints the historical context of how global and politicized trade has set the stage for current Nicaraguan consumption preferences.

In the Nicaraguan countryside, a significant amount of resources have historically been diverted from subsistence agriculture to large-scale agriculture operations for export. A process accelerated and in many cases initiated by the Green Revolution, development projects introduced 'superior' hybrid seeds, high-tech farm machinery, chemical fertilizers and pesticides to Third World countries. As a result, many Nicaraguans became food dependent on both imported food from the US and Europe as well as donated food aid that effectively altered food consumption habits. The massive amounts of food aid and cheap US food imports undercut the profitability of growing basic grains and pushed growers towards the agro-export model (Barraclough 2000:218). Food exports undermined peasant agriculture and rural self-provisioning, integrating production-consumption more firmly into the circuits of agro-industrial accumulation (Goodman and Redcliff 1991). These market mechanisms and integration into international trade have influenced the access and availability of foods in the region, showing how the global political economy certainly influences people's access and availability of food and therefore choice of food intake in the Nicaraguan countryside. But food preference is still more complex.

The type of food preferred has historical and cultural roots and contributes to the reproduction of dynamic social groups. Food scholars have located food preferences as characteristic of symbolic value-creation in one's culture (Munn 1992) and similarly as a reflexive practice drawn from the social construction of memory (Sutton 2001).

Research in this arena contemplates the influences on food intake, dietary structure and content, and describes sensory, economic, and symbolic factors influencing tastes and nutritional habits, especially those in the process of change as evidenced in community development projects (Messer 1984). They also emphasize ways particular foods are integrated into everyday life and cultural meanings (Macbeth 1997). McMichael states that the practical, daily livelihood concerns by stating that the power of food "lies in its material and symbolic functions of linking nature, human survival, health, culture and livelihood" (McMichael 2000: 21). An orientation toward cultural dimensions emphasizes the fact that it is increasingly difficult to "disentangle symbolic exchanges from actual material exchanges and processes" (Lin 1998: 315; Lind and Barham 2004). That is, cultural and symbolic justifications for food choice do not stand alone but material, or socio-economic functions, necessarily help us think about practical concerns in daily decision-making. Inherent in these identifiers of food choice are the pragmatic decisions influenced by daily food access and availability opportunities. In the remainder of the section, I aim to find a theoretical middle ground where we can see the influences of both group membership/identity and that of socio-economic status on food habits.

Bourdieu effectively captures and frames the habits and attitudes toward food preference by delineating the symbolic nature of food choice as wrapped up in the

socio-economic position of a person or group. In *Distinction*, he argues that tastes in food are indicators of position in social space such that trends in consumption seemingly correlate with an individual's fit in society (1984). Let me explain. Differing levels of economic, social, symbolic, and cultural capitals influence social space positioning.⁴ Each individual occupies a position in a multidimensional social space that is not defined only by social class membership. Judgments, or preferences, of taste are related to social position, or more specifically are themselves acts of social positioning.

Based on the conditions of a person or group's position in social space, he uses the concept of *habitus* to explain a person's disposition toward particular actions, practices and tastes that one develops over time. While each agent's conditions in social space are unique, those with similar positions can be assumed to have similar tastes and lifestyles, thus sharing a habitus, and the potential to form a class. Bourdieu explains, "habitus produces practices and representation which...are objectively differentiated; however, they are immediately perceived as such only by those agents who possess the code, the classificatory schemes necessary to understand their social meaning" (1989:19). Habitus is the classifiable tastes actions and practices that express one's position in social space, thus expressing a person's preference for particular foods.

Two important elements in the construction of habitus are education and distance from necessity. Each element mutually sways the other in practice, influencing opportunities and choice for the divergent locations in social space. Distance from the

⁴ For a more in depth reading of *social space* see: Bourdieu, Pierre. 1985. "The Social Space and the Genesis of Groups." *Theory and Society* 14:723-44 or on *Forms of capitals*: <http://www.marxists.org/reference/subject/philosophy/works/fr/bourdieu-forms-capital.htm>

necessities of life allows for an experience in the world that is less bounded by urgency to meet basic survival needs, such as food, water, and shelter. Relating this back to the food security and sovereignty project goals, eating more vegetables as diet diversification may not resonate with farmers more distant from meeting their basic economic necessities. Therefore, the ability to conceive of form rather than function of food consumption is dependent upon “a generalized capacity to neutralize ordinary urgencies and to bracket off practical ends, a durable inclination and aptitude for practice without a practical function” (Bourdieu 1979;1984:54). While diet diversification may be scientifically proven to reduce health problems, it is not a necessity for survival.

Elaborating on Bourdieu, anthropologists and sociologists study food preference and its socio-cultural influences that serve both to solidify group membership and to set groups apart. Food functions to engrain group memberships since ethnicity, race, nationality, class, and gender all make a difference to eating patterns. Caplan’s discussion on social positioning is reminiscent of Bourdieu’s, arguing that to understand food and eating we need to attend to a variety of social, cultural, and historical contexts as well as the many layers of knowledge and meaning held by individual subjects (1997). He states inclusively, “such knowledge is socially and culturally constructed as well as being developed by particular subjects in terms of their own identities, their life histories and their views of themselves and their bodies” (Caplan 1997:25). In this sense, anthropologists and sociologists have a preoccupation with gender, class, age, and ethnicity as a marker of difference in eating patterns.

As with most social patterns, material and symbolic meanings around food consumption are not stagnant but transform in time and space. Lupton helps us think about how this happens by pulling these multiple explanations of choice through the lens of a post-structural approach, privileging the notion of the fragmented and contingent rather than the unified self (1996). She prefers the term 'subjectivity' as less rigid than identity. 'Subjectivity' "incorporates the notion that the self/selves are highly changeable and contextual, albeit within certain limits imposed by culture, including power relations, social institutions and hegemonic discourse" (Lupton 1996). While we may locate a group in social space based on their levels of capital as Boudieu and Caplan conceptualize, this does not entail a forever-impermeable construction.

Mintz considers changing tastes, suggesting that to understand people's acceptance of new foods, we need to answer the questions: First, under what circumstances do people accept new food for reasons not necessarily of their own choosing; second, how do people create new consumption situations endowed with new meaning they themselves have engineered (1996:17)? Interestingly, he goes on to propose that major changes in consumption habits are usually brought on by major disruptions in ordinary routines. He argues logically that there needs to be not only the right ecological and political conditions but also some major social event that creates an opening for a new food or nutritional pattern as well as a reason for abandoning the old (1996). For example, in terms of homegardens, what might farmers deem a plausible motivation for altering their habits to eat more vegetables? What aspects of the larger development project might *detour* people from adopting new eating strategies?

A deeper look into past studies sheds light on why people may resist eating more healthy foods even if they are aware of the benefits. There is a need to appreciate how farming decisions, marketing strategies, income- generating activities and structures of authority interrelate and are demonstrated in consumptive decisions. Erica Wheeler examines variations of 'feed the children and teach the mother' models and how each one fails to address the key determinants in food access: employment and wages food prices, land tenure, and market structures.

She critiques the most common objective in nutrition programs, which is to 'feed the children and teach the mothers' (1985:135). The outcome she argues is that women are blamed for the end result of processes over which they have no control. The policy-makers assumption here is that 'if women only knew what to do, they would be able to deploy existing resources (time, labor, fuel, case, food) to feed their families better' (1985: 135). This prognosis uses models of a household where access to a healthy diet is constrained by women's ignorance and lack of skill, and where the vulnerable young child suffers without exception. Such an approach separates mothers and their children as a target group from the full range of structural factors that regulate household food supply and internal distribution (Pottier 1999).

Mintz might respond by understanding the 'webs of signification' related to a particular "thing" in terms of group differences. He suggests that the generation and transmission of meaning from one group to another is "perhaps the point where meaning and power touch most clearly" (Lind and Barham 2004; 1986: 158). In other words, power and meaning are always connected, "power... is never external to

signification” (Lind and Barham 2004; Mintz 1995: 12). Considering consumption of vegetables from home gardens, Nicaraguan farmers may not consider a diversity of vegetables as part of their food lexicon, or symbolic meaning that connects them with their national and regional collective groups. The interface where development practitioners attempt to alter community food preferences “may be the point where meaning and power touch most clearly,” conveying new meaning through complex power relations.

The understanding of what is considered food: beans, rice, corn, onions and peppers, is being shifted through a power-influenced relationship with the NGO and second-level cooperatives promoting home garden implementation. Practitioners have organized workshops to educate farmers on the benefits of eating healthy during which fresh veggies from demonstration gardens are plucked and added to local dishes. In this sense, project leaders are attempting to bring more diverse vegetable consumption into what farmers as a social group consider edible. Farmers may assert control and decision-making over their eating habits in response to having diminutive power over symbolic meaning creation as a by-product of the diet change.

Farmers have grown certain crops and varieties throughout many seasons and years, possessing multifaceted memories about them. These memories are “characterized by intimate impressions and understandings of the properties contained in seeds, combined with what individual farmers have learned from empirical experience, sensory embodiment, and social learning from others” (Nazarea 2005). In a practical way, the knowledge of local farming conditions and prescribed practices

means that farmers growing for subsistence will eat what they are accustomed to growing.

Conclusion

This chapter sheds light on some thorny realities that complicate the policy-level discussion on food sovereignty and security. This case is unique since food sovereignty is originally a social movement agenda that aims to deconstruct development discourses. However, the agenda is now being carried out by NGOs that work inside the very development framework that organizations like La Via Campesina are struggling to dismantle. This dynamic entails the clashing of a social movement agenda with the historical critiques of NGO-led community development projects. Bringing the analysis to the mid-range where international and national NGOs interface with coffee cooperatives in small farming communities, I argue that the homogenizing and normalizing tendencies left over from western development models actually veil farmer preferences and contribute to farmers resisting proposed homegarden strategies and detour a NGO-led food sovereignty trajectory.

Homegardens are often characterized as a practice of repeasantization, breaking the enclaves of both industrial trade systems and development discourse. Scholars have portrayed subsistence-oriented agricultural practices as a manifestation of food sovereignty that may be overly politicized. Localized, subsistence farming is often glorified, but this is a misinterpretation of the food sovereignty agenda that calls for local and regional visions to be developed. Other research shines light on the dual reliance of subsistence means of production as well as taking advantage of local, national, and

international markets to insure food security and sovereignty.

The variety of food harvested from homegardens may have at one point in Nicaraguan history been considered part of the daily diet for rural Nicaraguans. However, today rural peoples tend to eat less vegetables and fruits than is provided from homegarden harvests. Habits and attitudes toward food preference are characterized by a symbolic nature of food wrapped up in the socio-economic position of a person or group. Food preference is characterized by historical and cultural roots and contributes to the reproduction of dynamic social groups through symbolic value-creation.

In the following chapter, I describe the national and regional context of the communities represented in this study. Demographics and descriptive statistics from a project diagnostic paint the picture of how people make their livelihoods and consumption habits. I locate myself as a researcher in this context through a thorough illustration of research methods and procedures.

CHAPTER 4

RESEARCH METHODS AND PROCEDURES: ATTENDING TO LOCAL DISCOURSES, UNDERSTANDING POLITICAL CONTEXTS

In previous chapters I have critiqued NGOs and international food policy as being disconnected from local realities and employing discourses of development. As a researcher, I have participated in these same discourses. The discussion in this chapter can be seen as a critical dimension that highlights the relationship between the academic researcher and the study participants. I position myself personally and professionally within the context of the critique before proceeding to the empirical analysis in chapter five.

This study was collaboratively developed with rural development practitioners and a project management team directing a long-term food security and food sovereignty project. My interest in the topics of food sovereignty and security developed over the last several years while working in international development NGOs. I was invited by the U.S.-based international sustainable development organization, the Community Agroecology Network (CAN), to work as a partner researcher with the ongoing project in northern Nicaragua (see figure 1 below). The ongoing project is now being jointly implemented by a team of practitioners from a second-level coffee cooperative (ADECOOP), a local Nicaraguan NGO (ATSC)⁵, and U.S – based researchers from the University of Vermont, University of California Santa Cruz, Santa Clara University, and Colorado State University. I worked on a research team in

⁵ To protect the anonymity of the participating organizations the real acronyms were replaced with pseudonyms.

collaboration with the local NGO and second-level cooperative to find strategies for increased food security and sovereignty with nineteen base-level farmer cooperatives in the Segovias region.



Figure 1: Map of Nicaragua with the Segovias and project region highlighted.
Source: (Bacon 2011)

From June 2011 through August 2011, I conducted participant observation, document analysis, and 20 qualitative interviews with 20 different families from four different cooperatives in northern Nicaragua. As relevant to the larger project, I seek to understand why member households in coffee cooperatives may be resistant to participating in homegardens as a food security and sovereignty strategy.

In this chapter, I give an overview of the larger food security and sovereignty project, followed by an overview of the study, including the collaborative process to develop and refine the research question followed by my rationale for choosing qualitative methods. Next, I outline my research design. I describe the sampling universe, the population of interest, and my unique sampling strategy. I also provide an overview of my data collection methods, which included in-depth interviews and

participant observation. Then, I outline the steps I took to analyze the data. I conclude with a discussion of the methodological issues and challenges I faced during the course of this research.

Food Security and Sovereignty Project Overview

The primary goal of the development project was for the Community Agroecology Network (CAN) to develop and work in a partnership model with ADECOOP, the nineteen 1st level base cooperatives and CII-ATSC to build capacity within the cooperatives and decrease hunger and enhance food security by building resilient food and agricultural systems (CAN report 2011). The project aims to enable the 740 households (approximately 4,440 people) in the Segovias to reduce and eventually eliminate the months of food scarcity, locally referred to as “los meses de las vacas flacas”, and more successfully resist the negative impacts to food security from climate change in the future (Bacon 2011).

The project goals are to be measured by the following stated outcomes and as diagramed in Figure 2 below:

- Improved Food Availability, Food Utilization, and Food Access
- To improve nutritional outcomes as measured over the long term with standard anthropometric measures (for height, weight, body mass, etc.) characterized by regional experts and according to the standards use by the World Health Organization.

- Enhanced food sovereignty as participating families, cooperatives and communities are able to more effectively create and sustain their preferences of food and agriculture, and use these activities to improve their day to day food security as well as enliven their cultures.

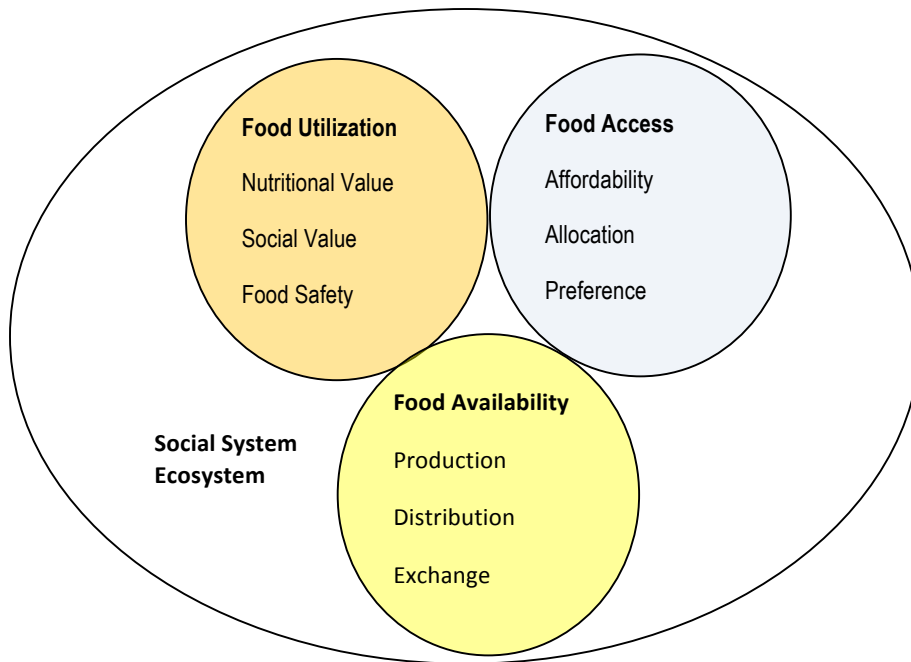


Figure 2: Source: (Bacon 2011)

The project envisions accomplishing these goals primarily through four overarching stages: first, diagnose the extent of food security through conducting a participatory diagnostic, identify best practices, and implement a Youth Promoter Training Program; second, development of a locally specific Food Security Action Plan for each of the nineteen 1st level base cooperatives; third, begin implementation and monitoring of the Food Security Action Plan; and forth, evaluate and disseminate the results.

To achieve these goals, the project team was facilitating a partnership-based model of social change. CAN conceptualizes this model as combining the participatory democracy of cooperatives with the organizational capacity of a cooperative union, such as ADECOOP, and the agility and innovation of ASDENIC, a local development, education, and technology focused NGO. ATSC has more than two decades of experience working in the same region, complementing the international expertise in agroecology, livelihoods and value chains that CAN will leverage throughout the project.

The larger project was further defined as a Participatory Action Research (PAR) Process a cyclical approach that attempts to involve a wider diversity of stakeholders as active participants in a process of both research activities and efforts to act for positive change (Bacon et al 2005). PAR's cyclical process traditionally includes looking, thinking (reflecting), and acting (Stringer 1999;Green 2004). Figure 3 illustrates this ongoing process:

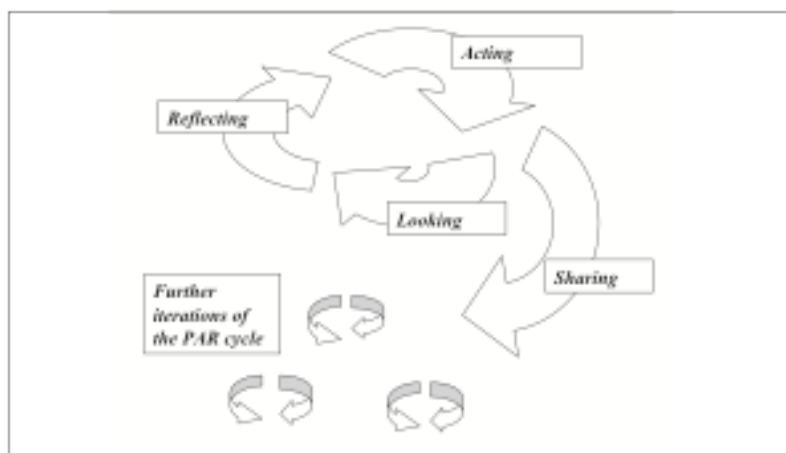


Figure 3: Source: (Bacon 2011)

Study Overview

I aimed to develop a research project that would be relevant to decision-making processes surrounding the broader food security and sovereignty project. During several formal and informal meetings, I worked closely with the project team and community practitioners to develop my research questions in order to ensure the research would serve a functional purpose. ADECOOP and ATSC wanted to know how to change farmer 'attitudes' and behaviors to make project strategies, such as homegardens, more effective and sustainable. When discussing improvements to conditions of livelihood, the director of the NGO asked, "Why don't farmers just change" to improve their livelihoods?

The project team was interested in social and attitudinal factors related to household's food security and gardening success. They believed that the success of homegardens could be attributed to reasons beyond the material, or available resources factors, such as access to water, productive soil, and quantity of arable land. This inquiry was partially ascribed to past experiences where some communities had already participated in homegarden projects. In these cases when the project aid - often in the form of vegetable seeds - ran out, a percentage of the farmers ceased homegarden maintenance. This insight was particularly relevant to developing a question that investigates the larger social processes of international development, food systems and agriculture, and how these processes play out in the sample communities.

To study these topics, my research question evolved into:

Why might farmers in the participating communities of northern Nicaragua be resistant to changing their food production and consumption strategies?

This question addresses farmer attitudes and behaviors toward homegardens as was requested by the project team. It illuminates an underlying assumption that participants for some reason may not find value/benefits in garden products and therefore may not have reason to invest energy and resources in garden maintenance.

The promotion of homegardens aims to change food production and consumption to more sustainable and healthy practices. However, the act of adopting the homegardens as a strategy itself represents a locus point to explore this food sovereignty agenda that the project more broadly aims to promote. Also, studying homegardens as a phenomenon focuses a lens on just one of what are a diverse number of strategies undertaken by the larger project. Other project strategies include activities such as the implementation of seed banks and grain storage silos. These activities were accompanied by larger organizational development/strengthening processes such as harmonizing the project team to develop a shared vision, and building local capacity through training internal organization personnel (Bacon 2011).

Qualitative Rationale

In this research I am interested in understanding people's lived experiences with both a food security and food sovereignty agenda. Though current research on food security/sovereignty initiatives indicates that home food provisioning, such as homegardens, contribute to food sovereignty and security (Ninez 1984; Von Braun et al 1993; Moskow 1996; Schneider and Niederle 2010) we cannot fully understand this pattern without understanding what these concepts mean to this group of people

themselves (Marshall and Rossman 2011). According to Ambert, Adler, Adler, and Dettzner, qualitative research seeks to “acquire in-depth and intimate information about a smaller group of persons,” and “to learn about how and why people behave, think, and making meaning as they do” (1995:880). In this case, utilizing qualitative research methods provides the means for gaining a better understanding of local definitions, perceptions and behaviors on my core topics of food security and sovereignty. Utilizing a qualitative approach in this way “vividly color(s) in the meanings, motivations, and details of what quantitative research can convey only in broader aggregates” (Ambert, Adler, Adler, and Dettzner 1995:885).

In contrast to positivistic quantitative models, the use of qualitative methodologies allowed for a continuous, flexible, and adaptable research project (Rubin and Rubin 2012). I maintained *continuity* by leaving space and time to redesign the study throughout the project as demonstrated above with the evolving research question. In this way, I was not confined by my original ideas. Having *flexibility* allowed me to explore new information and insights offered by the project team, community members, and academic advisers. *Adaptability* allowed me to deal with the unexpected (Rubin and Rubin 2012). Logistically speaking, adaptability and flexibility were especially important on occasions when home visits required me to hike through miles of rainforest, or when it was necessary to devise alternative plans to replace original strategies that were deemed ineffective. For example, as will be explained below, adaptability and flexibility were crucial when adjusting my sampling strategy after emersion into the local context.

Research Site and Sampling Universe

Nicaraguan is known as the only country in Central America whose revolutionary forces actually succeeded in extracting a repressive dictatorship and replacing it with the revolutionary government, FSLN (Frente Sandanista Liberacion Nacional or the Sandinista National Liberation Front). When the Sandinistas came to power in 1979, enabling every Nicaraguan to have an adequate diet was one of their primary endeavors. Through revolutionary policy changes, they sought to break out of the agro-export model and the dependent international relationships which accompanied it. The difficulties and achievements of the Sandinista food policy have been documented elsewhere (Enriquez 1985; Enriquez and Spanding 1987; Utting 1987; Deere et al 1985; Austin and Fox 1985; Warnock 1987; Collins 1985; Well 1990; Weinberg 1991). Here I will briefly situate the experience of farmers in northern Nicaragua in the history of a revolutionary government's food policies aimed at feeding the population.

The FSLN's revolutionary agenda aimed at land reform that initially focused on subsistence farming and the achievement of national agricultural self-sufficiency (Linkogle 1998). Through the National Nutrition Program (PAN), the FSLN linked land reform to a wider strategy of ensuring food security and improving the quantity and quality of food available to all Nicaraguans. While small scale subsistence farming was seen as key to ensuring food security, large state farms were seen as the most efficient way to cultivate the cash crops required to generate the necessary hard currency. The capital was earmarked for to finance health and education projects such as the literacy crusade and to rebuild the country's infrastructure after the insurrection against Somoza.

An end to more than a decade of Sandinista rule and a transformation in food policies proceeded in 1990 when the FSLN lost national elections to a right-leaning candidate, Chamorro. More specifically, it initiated a move away from state involvement in meeting basic consumption needs (Linkogle 1998). With the winding down of PAN and almost all state involvement in the distribution and pricing of food, the dismantling of the land reform programs and the state banking system, the Chamorro government, partly through choice and partly because of US pressure, abandoned both the goal of food self-sufficiency and any attempt at a national food strategy.

National Policy Contexts: Food Security and Sovereignty in Nicaragua

Nicaragua is one of the poorest countries in Latin America. According to the integrated approach to poverty measurement, (Busso 2002), 80% of Nicaragua's population is associated with vulnerability by some kind of poverty.⁶ While 45% of the population is chronically poor, this rises to 65% in rural Nicaragua where my research site is located. Rural areas are defined as vulnerable zones and public health problems such as chronic malnutrition affects 17% of children nationwide (INEC 2004). Food security of the rural population relies on the sale of agricultural labor and production of coffee and basic grains, which constitute over 50% of food consumed by the poorest families (Secretaria de Acción Social de la Presidencia de la Republica 2008). The grains are seasonal and despite the existing production potential, harvests fluctuate

⁶ In Nicaragua, household poverty is based on the measurement of a 'dignified life'. This is calculated by considering these five areas: housing materials (floors, walls, ceilings), overcrowding, availability of drinking water and sanitation, number of persons employed and dependent on school attendance for children aged 7 to 14 (Busso 2002).

from year to year. The amount of grains produced depends on rainfall and market value with deficits being covered mainly with the importation of rice and soybeans. The seasonality and availability of production is a factor that directly affects food security.

Nicaragua has made progress in the last twenty years by developing food security policies and creating supporting institutions. To coordinate efforts in this area, organizations such as the National Commission on Food Safety and Nutrition (CONASAN) and the establishment in the Ministry of Agriculture and Forestry (MAG), the Information System for Monitoring Food Security (SISSAN), have been developed with support from the Food and Agricultural Organization of the United Nations (FAO).

In June 2007 the Nicaraguan Parliament approved a General Law on Food Sovereignty, Food Security and Nutrition (SSAN). The SSAN law facilitates the creation of a National Commission on Food Security and Sovereignty while also encouraging movement from local authorities with the creation of the Municipal Councils chaired by mayors, with the commitment to push this issue in the municipalities and allocating the necessary funds to do so.

A report from SIMAS, a research and sustainable development non-profit working throughout MesoAmerica, explains that the legal framework allows all citizens to pressure municipalities to require programs that ensure adequate food availability and equitable distribution. The law requires all municipalities to immediately create the Municipal Commissions, designate a portion of its budget for SSAN programs and organizations of civil society participation throughout this process (SIMAS 2010).

The policy aims to achieve an adequate supply of services through the agribusiness value chains (technical assistance, credit and incentives for production, post harvest and agro-industry, collection, processing, and storage centers, marketing support, education, training and communication) that also ensures sustainable use of natural resources. The services will be subject to procedures, rules and regulations that encourage the productivity of food crops, giving priority to staples (rice, beans, corn, sorghum, meat, dairy products) in a coordinated effort to invigorate the rural sector to small and medium producers.

Unfortunately, in spite of having a food security policy in Nicaragua, hunger, poverty and malnutrition have not been reduced significantly and sustainably because the nation lacks sufficient political will, resources and strategic coordination of governmental and nongovernmental actors (Bacon 2011). The Food Production Program or Zero Hunger is the national flagship program for food security and sovereignty policy in Nicaragua. There are several programs that seek to generate income and eradicate hunger in Nicaragua's impoverished populations but Zero Hunger is the most widely known since the government is channeling resources to insure that 75,000 peasant families will be producing food for household consumption and income generation in 2012. In addition, this program not only serves rural areas but benefits women in particular. Programs that emphasize rural families and women are seen as key to improving food and household incomes, which have been scarce in the last 10 years.

The availability of staple foods in Nicaragua is closely tied to the production of basic grains (rice, maize and beans), meat (beef, pork and chicken), dairy (milk, cheese), eggs and imports of industrial products (oil, flour). These food groups are the most consumed in the Nicaraguan population, noting the missing vegetable group, and reflects a food culture that has persisted for a protracted amount of time.

Furthermore, climate change, limited access to productive credit and other environmental factors has created periods of food shortages or "thin months." The thin months, ranging from May to September, and including the critical months of June through August, have been studied by various governmental and nongovernmental agencies (Bacon 2011). During this time of food scarcity, most families have trouble meeting their basic needs for food, many indicate a lack of money, and others report debilitating droughts. These months are also attributed to a lack of work and some producers mentioned that non-native seeds provided by support programs are not resilient to the climatic conditions of these communities. This phenomenon is clearly documented in the diagnostic from las Segovias region (Bacon 2011).

An Introduction to the Segovias Communities

In this section I introduce the socio-economic make-up of Nicaragua as a nation and then offer descriptions at the regional level with statistics drawn from a diagnostic study carried out by the larger food security/sovereignty project. The diagnostic study was a sample of 266 families where information was collected through 260 surveys, six focus groups, and eight in-depth case studies. The data was compiled into a report by ATSC and ADECOOP. Below I provide relevant demographic information that captures

economic issues, food and consumption habits, immigration, and access to resources as laid out in the diagnostic report. The community-level statistics and descriptions below were taken from the diagnostic report (Bacon 2011) unless otherwise noted.

This study aims to bring clarity to farmer's attitudes and behaviors toward homegardens in the Segovias region of northern Nicaragua. As discussed below, cooperatives are the central form of social organization in the countryside. Often spanning several communities, understanding them as the predominant form of social organization sheds light on the rural Nicaraguan experience. I also offer relevant demographic information and discuss food and consumption habits, how subsistence lifestyle is managed on the land, food storage, access to basic services, employment and immigration. The main economic activities are agriculture and livestock.

Coffee cooperatives span town boundaries and are the predominant form of social organization in the countryside. With almost 100% of families relying on coffee for survival, the base, or first, level coffee cooperatives are the locus for community activity. Base level cooperatives collect and sell coffee to second-level cooperatives, such as ADECOOP) that then export the beans internationally (see Figure 4 below).

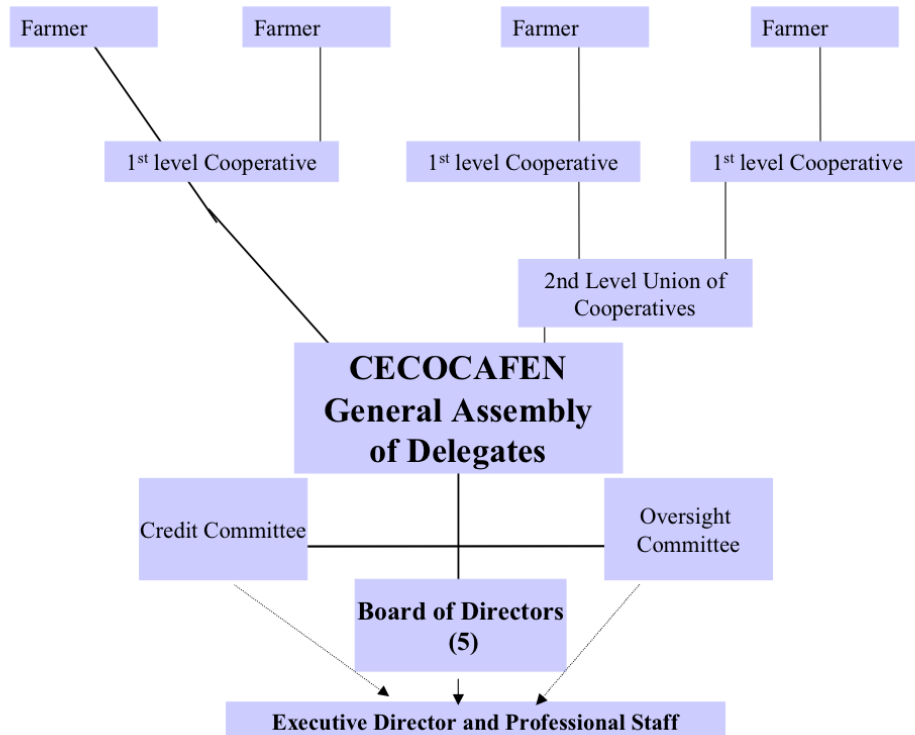


Figure 4: Example of first and second level cooperative structure. ‘CECOCAFEN’ is in the same position that ADECOOP would occupy for purpose of this study (Bacon 2006).

Resources are channeled from NGO and government services through first level cooperatives and into the communities. Cooperatives maintain an elected executive committee and practice democratic decision making with their members, who pay annual dues and are obligated to sell their coffee to their member cooperative. Both men and women are members and receive the benefits and resources of international development projects, such as the one I worked with.

The region of study, the Segovias, consists of 27 municipalities. The map (Figure 5) below shows first-level, or base level, cooperatives La Esperanza and El Progreso housing coffee farmers from two neighboring communities in the Somoto municipality.

Cooperatives Jose Benito and Vicente Talavera are located in the Estelí municipality and also had members from two neighboring communities.

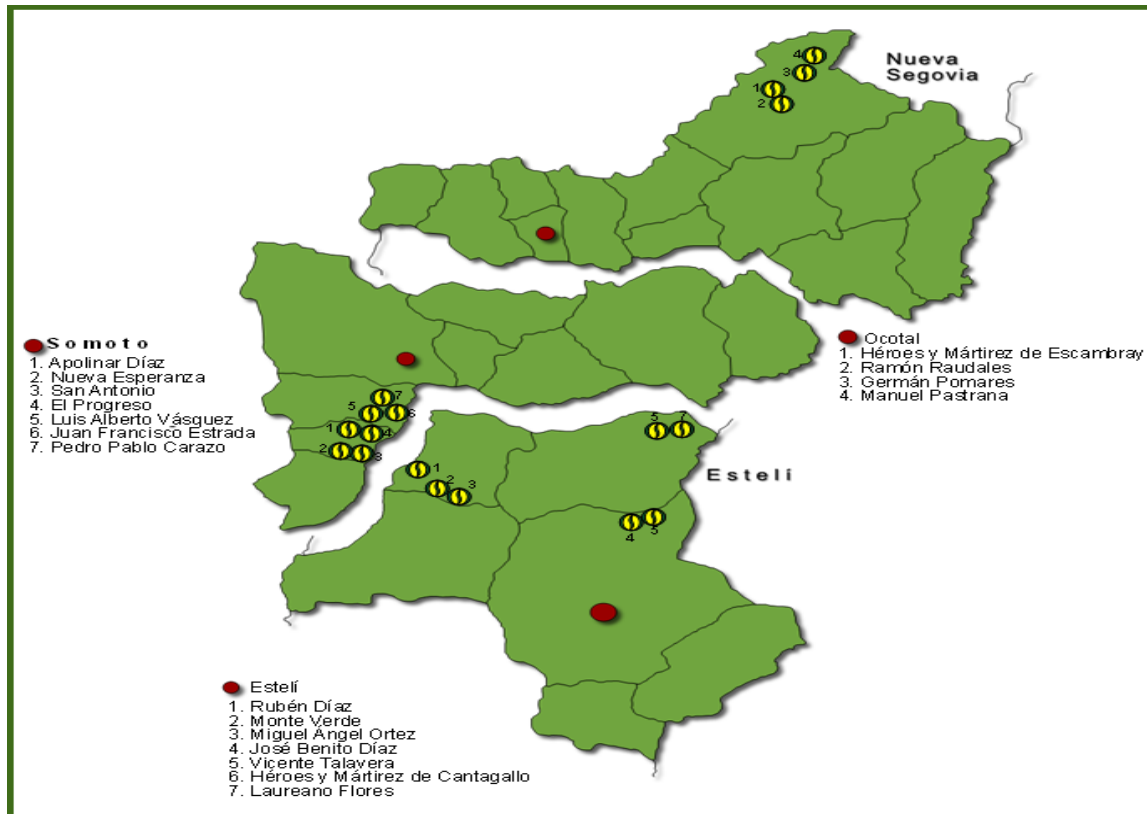


Figure 5: Map of 18 participating cooperatives in three different departments in northern Nicaragua. Source: (Bacon 2011)

The Segovian municipalities differ significantly in many aspects, such as population density, territorial size, topography, climate, production levels, economics and education levels. This means I can only make generalizations to the population with the given descriptive statistics below. As an aside, this also means that large development projects would not do justice using a standard model for attaining food security and sovereignty.

Descriptive Statistics

Table 1: Descriptive Statistics for the Segovias Region

| | |
|---|-----------|
| Average range of habitants per household | 3 – 7 |
| Percentage of households with potable water | 6 |
| Percentage of households with telephone service | 10 |
| National unemployment rate in rural and urban* | 2.6 and 7 |
| Percentage of families that receive assistance from: | |
| Friends or family | 34 |
| Government | 27 |
| NGO | 20 |
| Percent completed primary education | 50 |
| Highschool | 8 |
| University | 4 |

Source: (Bacon 2011)

Money remittances, food and seeds are the main forms of assistance to families. The government and NGOs provide the most seeds and food. Most families I talked with had either an immediate or more distant family member that had immigrated to the U.S while most children were in cities working or attending school. The countryside was rather depopulated of youth to manage the farms. The custom is that some people migrate or immigrate for a season to save money and then return home with savings. Other people go indefinitely and support families through remittances. Immigration destinations are to cities or abroad, most commonly to Costa Rica and the United States (Bacon 2011). Remittances constitute a "pay" on a more or less regular basis for those families who have a member on the outside. Remittances have a wide impact on the

country's microeconomics, impacting thousands of families who receive remittances, allowing them to maintain individual consumption in local markets.

For transportation, community members get around and over the mountainous terrain on foot, bus or horseback. Automobiles are highly uncommon and even purchasing a motorcycle is out of reach for most farmers.

Agriculture and Livelihoods

Most families in the research site make their livelihoods through a combination of subsistence and export-driven agricultural practices. Almost all of the farms I visited had subsistence plots full of black or red beans, corn, and sometimes sorghum. It was rare to see a house without chickens roaming about and sometimes a cow was tied to a near-by fence post. In terms of land use, the average amount of land that families possess varies from five *manzanas* to larger plots covering 18 *manzanas*, or between 9 and 18 acres (Bacon 2011). Coffee farms in this region are mostly small-scale family run operations although sometimes outside help is hired during the harvest. About half of residents have a natural forested area, 33% have land converted to cow pasture, 10% have a space for the management of animal husbandry and 10% grow vegetables for home and market consumption (Bacon 2011).

There are 11 types of family-generated animal based foods available in the participating cooperatives: eggs, milk, cheese, chicken, pork, beef, squirrel, iguana, deer, butter and curd, but the consumption of these is not very common since these foods are more expensive and production is often very small. Corn, beans, rice, onions,

peppers and tortillas make up the day-to-day food preferences. Most of the foods listed here become scarce for the month of April. Almost all areas enjoy seasonal fruits like mango, guava, soursop, matasano, tamalaco, banana and pitahaya.

As shown in Table 2, about 60% of families depend on income to be able to provide food for the entire season. However in the sample communities, 53% have no formal employment and depend exclusively on their agricultural work and partnership with the second-level cooperative ADECOOP to export coffee.

Table 2: Percentage of families purchasing staple food for home consumption

| | |
|---|-----|
| buy more than half | 40% |
| buy all food | 21% |
| buy less than half of food | 39% |
| do not buy any food for home consumption | 5% |

Source: (Bacon 2011)

Since families rely on subsistence food production they also practice diverse storage techniques and food preservation. The main means of storage for these families are use of the bag, barrel and small silos (Bacon 2011). Storing food grains does not come without obstacles. Farmers experience severe challenges with beetles, mice, lack of knowledge of storage techniques, moisture, space, and lack of silos, all of which contribute to the loss of basic food staples (Bacon 2011).

Sampling Strategy

I started from this conceptually driven sample (Curtis et al 2000) since the team was interested in behavioral factors influencing household gardening success. Out of 19 participating cooperatives, I worked with the project management team to identify four first level cooperatives where I would then sample households for in-depth interviews. The four cooperatives were chosen as the research sites based on their proximity and accessibility (Marshall and Rossman 2011). I later worked with the selected base-level cooperatives to decide on specific households to interview (Peek and Fothergill 2009).

Also, practitioners involved in the larger project including program coordinators, directors, and agronomists from ATSC and ADECOOP are responsible for making decisions about project directions. For this reason, they too became a population from which I participated in and strategically observed. Through participant observation, the interactions of these farmers and practitioners offered rich insights into farmer behaviors and attitudes toward homegardens.

Since families live in rural areas, often miles apart over mountain ranges and are only accessible on foot, 20 interviews, five at each of the four cooperatives, was the most we could expect to gather given time constraints and accessibility. In practice as I carried out interviews new categories, themes or explanations stopped emerging from the data, or data saturation occurred (Marshall 1996).

Table 3: Sampling by Cooperative

| N° | Cooperative | Department | Coop Members | Sample | Women | *Men |
|----|------------------|-------------|--------------|--------|-------|------|
| 1 | El Progreso | Las Sabanas | 23 | 5 | 2 | 5 |
| 2 | José Benito Diaz | Esteli | 22 | 5 | 3 | 3 |
| 3 | La Esperanza | Las Sabanas | 26 | 5 | 2 | 3 |
| 4 | Vicente Talavera | Esteli | 52 | 5 | 1 | 5 |

Before entering the field, I had developed a complex matching sampling strategy with one of my academic advisers. However, upon arrival at the cooperative headquarters, I realized I would need to simplify the strategy and work with cooperative executive boards, or consejos, to choose the respondents. I met with each cooperative consejo, which is composed of the president, vice president, treasurer, leader of the financial oversight committee, and the community liaisons, or promotores, of the coffee cooperative. Promotores are trained liaisons that open lines of communication between community development project managers, agronomists, and the participating households. Promotores are considered crucial actors in a ‘pro-community’ development model. They are local community members who assist their community groups in reaching greater levels of organization and institutional stability, in more effectively representing and integrating their members’ interests and, in negotiating a more equal footing with other stakeholders (Cronkleton et al. 2008).

* Note that total exceed five since often at one house we would talk to both the husband and wife. So one sample could have wither one male or one female or both may have been present.

Each cooperative has a promoter that helped me arrange the logistics of the interview and accompanied me to each house. The promoter for each cooperative acted as a “gatekeeper,” or the individual who was able to provide me an “in” (Marshall and Rossman 2011) to the population at the communities where I conducted the interviews. It was only through his knowledge of the communities and residents that I was able to gain access to these communities and the individuals who agreed to participate in the study. Showing up with the local promoter was also a crucial step in developing rapport with respondents.

I made the decision to ask the consejo for support choosing respondents for two reasons: First, I wanted to actively engage them in the research project as part of a *process* as a participatory methodology (Park 1997). While my overall data collection methodologies with the base-level cooperatives were not fully participatory, I saw this as a mutually beneficial mechanism to get consejo buy-in/support for the process while opening space for their active participation in the process.

Secondly, the more time I spent in the community, the more I built rapport with the consejo and promotores. Given my past employment in an associated NGO, I easily passed as a colleague with the consejos. This interconnectedness between the gatekeepers and I contributed to our ability to achieve mutual understanding (Yeh and Inman 2007). This turned out to be an invaluable resource since their collective local understanding of the socio-economic situation in the community clearly outweighed the data collected in a survey and inputted in a database. I decided to take advantage of this local knowledge and at the same time, it felt much less intrusive to make the

sampling process participatory, in place of showing up and demanding to see the people on the list without first discussing the selection with the consejo. Showing up and asking to speak with cooperative members may have put me at odds with the local culture and key informants, such as the promotores, that I needed to support me through the research process. This is particularly significant in a tightly knit community where a poor reputation could forever precede my arrival at households, while a positive association would ensure an overall positive experience for the respondents and myself.

Given the applied nature of the research, I ended up recruiting using “key informant” and “spontaneous recruitment” strategies (Peek and Fothergill 2009).

Recruitment was spontaneous as the initial plan for participant selection was unreasonable and I needed to reevaluate the entire strategy to develop a new plan “on-the-fly” with the consejo. The consejo and promotores are institutional stakeholders and community members that were able to effectively select participants for the interviews. Without their support, recruiting for the study would have been extremely difficult for the rural, hard to reach population with which I was seeking to speak. In this way, they play the role of key informants assisting with recruitment.

In terms of finalizing a sampling strategy, I did not want to lose the conceptually-driven aspect, but I also needed to simplify the selection process of respondents so that it would be communicated to and carried out by the consejo. At the same time, I still needed to consider the universe of the population and obtain reasonable variation in characteristics to represent the local population, conditions, and phenomena of interest (Rubin and Rubin 2012). I intended to interview both the man and woman of the

household to see how gender influenced perceptions and behaviors in relation to homegardens. In practice my access to the female of the house varied on a spectrum from having separate interviews with the husband and then the wife, to the male needing to be present, and finally to some females not wanting to participate and husbands not condoning them to participate. There were other households with no husband, in these cases the female was the sole respondent. This was to be expected given the traditional gender roles in rural areas. I was therefore surprised and pleasantly inspired when I talked with women who were not nervous or fidgeting with a shaky voice but spoke clearly and with straightforward responses. Many women claimed to be the “jefa de la casa” or the head of the household. Since it was most common for the female to stay near the house, I was not as concerned with catching them at home.

For my sampling strategy, I still wanted to hold material/economic variables constant to the extent possible in order to better understand the behavioral and attitudinal factors that may help explain why farmers don't invest in homegardens. Each of the four consejos helped to identify a range of families, representing high and low socio-economic levels so that I would have an equal number of families that were economically “better off” and an equal number that were considered “more poor” for a total of 20 households between the four different cooperatives. Families were not told about their place on the spectrum. Furthermore, in terms of analytic generalizing from the interviews, if respondents are at each extreme of a continuum and I find that responses are similar, I would be confident that they would hold in general (Marshall and Rossman 2011). That is, if I found that the variety of socio-economic statuses share

similar responses to questions about homegardens, we could then identify four explanations that help explain why farmers may not adopt homegardens.

In sum, the best compromise on carrying out an impossible task of getting the 'perfect' variability in the population on all relevant variables was to include a sample with reasonable variation in the phenomenon, settings, and people (Dobbert 1982) that was chosen in collaboration with the consejo. Thus effectively contributing to rapport and good standing with the consejo and gatekeepers, a crucial component of effective research (Marshall and Rossman 2011).

Data Collection Methods

I used a combination of participant observation and in-depth interviews to gather the most relevant data to answer the stated research question. I also reviewed organizational and project documents before arriving in Nicaragua to better understand the setting and context of both the communities I would be interviewing and the larger project context of which they were part.

Review of Organizational Documents

For projects like this, extant texts provide an independent source of data from the researcher's collected first-hand materials (Reinharz et al. 1992). Although I did not carry out a formal document analysis, I still found a review of organizational documents useful when combined with in-depth interviews in order to discuss with their creators what they contain and how they were prepared (Rubin and Rubin 2012). I reviewed and analyzed a 90-page report describing the diagnostic data collected the year prior. The

diagnostic report showed that each region and community in Nicaragua is unique in terms of their customs, farming methods, and socio-economic status, making the regional descriptions found in the project diagnostic reports and organizational websites crucial for background information (Bacon 2011). Descriptive statistics were followed by implications for food security and sovereignty initiatives. The report also offered recommendations for future project direction. Beyond the local community and project context, I learned about the governance structure and project decision-making processes. These are particularly relevant to answer my research question by looking at how decision-making within the project impacts farmer behavior.

Next, I scoured the websites of both ASDIEC and ADECOOP to get an idea of official views, reported goals and accomplishments. A comparison between the written documents and my fieldnotes sparked insights about the relative congruence or lack of it between words and actions (Charmaz 2006). In my case, for example, I documented actions that showed how project leaders perceive the appropriate trajectory to achieving food sovereignty. I cross-referenced this observation by returning to the diagnostic report and verifying the outlined strategies were actually written into the official plan. This iterative process of referencing effectively strengthened my observations.

In addition, since I was arriving as an outside researcher to work with a team, I made a point to read the current and past articles and books published by the other researchers. By taking this step, I could understand the context of not only the community I was stepping into but also the sedimented experiences that created the world within which the *researchers* were making decisions. I intentionally found gaps in

their research and to my delight they were holes that called for a sociological perspective. This insight further engrained my commitment to carrying out research relevant to the larger project.

Since I analyzed documents before interviewing, I arrived informed and could collect more relevant, concrete data and move more succinctly toward gathering information to answer the research question. By reviewing the other researcher's publications, I was suited to work as part of the team.

Once I arrived on site, I met with project leaders to clarify and deepen the content I had read on the diagnostic report and organizational websites. I had access to newly developed project documents including a "best practices" food security handbook, case studies, and curriculum for related workshops. I used these to triangulate with the in-depth interviews and the data gathered through the more formal public information from the website and project diagnostic report (Neuman 2006).

Participant Observation

I conducted participant observation from June 2011 until August 2011. I observed in meetings, out in the countryside with farmers, at the NGO offices in the city, Estelí, and during the interviews themselves. I sat to write detailed fieldnotes each night for a time period between 45 minutes and several hours depending on the density and significance of the day's activities.

Rationale

I arrived with several weeks planned for participant observation in order to immerse myself in the setting and the daily lives of the population. Although I knew I would never fully experience reality in the same way as the group under study, through participant observation I became *socialized* by seeing first hand and in close proximity how “people grapple with uncertainty and ambiguity, how meanings emerge through talk and collective action, how understandings and interpretations change over time, and how these changes shape subsequent actions” thus heightening my sensitivity to their social lives as a process (Emerson et al. 2011:5).

Doing participant observation prior to interviewing sensitized me to key issues such as homegarden participation, practitioner-farmer power dynamics and the flow of the project itself. Observing also familiarized me to the environment and language and I had the advantage of meeting future respondents before asking them interview questions (Rubin and Rubin 2012). My interview data will have increased accuracy when accompanied by participant observation (Becker and Greer 1957). For example, it can fill the gaps created from communicating in my non-native language since differences in expression is nuanced and particular to the group. Through participant observation “we can check description against fact and become aware of systematic distortions made by the respondent that are less likely to be discovered by interviews alone” (Becker and Geer 1957:31). Participating in NGO-sponsored events as well as simply spending time in the communities helped me to both verify and better understand the experiences and information that were later communicated in the interviews.

Conducting Participant Observation

I attended project manager meetings with the NGO, ATSC, and the second-level cooperative ADECOOP. I went on site visits to the rural communities with the project coordinators, which allowed me the opportunity to experience first hand how practitioners interact with farmers. While in the farming communities, I spoke with farmers and visited some exemplary homegardens, bringing to life all the articles and books I had read on the topic. I informed my observational technique from Emerson et al's (2011) strategy and guidelines for 'participating in order to write'. I took notes of initial impressions upon arriving at a new location. In deciding on what and who to observe, I focused on a personal sense of what was significant or unexpected (25). In this way, I relied on my own experience and intuition to jot down what was important. In order to gain understanding of a groups' social world, participant observers systematically watch and employ careful listening to attend explicitly to what those in the setting experience and react to as significant or important (Emerson et al 2011). Importantly, asking myself 'how' focused "attention on the social and interactional process through which members construct, maintain, and alter their social worlds" (Emerson et al 2011:27). I included detailed descriptions of the settings where the interactions were taking place, including the setting during the interviews.

As preludes to my full written notes, I used jottings during to capture bits of talk and action, recurring incidents, local expressions and terms, and members' distinctions and accounts (Emerson et al 2011). I later referred to these notes when constructing my written fieldnotes. While taking these jottings I debated internally about how others

might view me or if I was separating myself by taking this time to make sure I recorded the most accurate information.

I wrote daily detailed fieldnotes to document my interactions with community members as well as communications and exchanges happening around me. After every single interview I wrote down initial impressions about the respondent; their body language, physical appearance, their home setting and initial insights about the interaction. Each night I sat down to write. I would write for anywhere from 45 minutes to three hours depending on the length of observation periods. The amount of time I observed varied from day-to-day. For example, one day I may spend six hours on the bus and only one hour of participant observation for which to later write fieldnotes. The next day I may have attended meetings, carried out two interviews and attended an event in which case I would write for several hours.

In-depth Interviews

From July 2011 through the conclusion of my data gathering in August 2011, I used one-on-one, in-depth interviews (Rubin and Rubin 2012) as the primary form of data collection. In total, I conducted 20 individual interviews with 16 men and 8 women in the municipalities of Esteli and Somoto located in northern Nicaragua. Each interview lasted between 45 minutes and two hours.

Rationale

A common tool for conducting qualitative research is the in-depth interview. In-depth interviews focus “on how people perceive their worlds and how they interpret their

experiences” (Rubin and Rubin 2012:3). The in-depth interview can be envisioned as “‘a construction site of knowledge’ where two (or more) individuals discuss a ‘theme of mutual interest’” (Marshall and Rossman 2011:142 citing Kvale & Brinkmann, 2009:2). Importantly, I wanted to understand how community members valued, or didn’t, the strategy to improve their livelihoods and what experiences lead them to act on homegardens in this way.

In-depth interviewing is one of the best ways to develop context and richness of data on this topic; by piecing together interviews of individual’s experiences, I wanted to make sense of complex social processes and changes through uncovering an understanding of multiple perspectives (Rubin and Rubin 2012:3), in my case about homegardens. I wanted to study homegardens not as a singular, isolated phenomenon but as a locus for learning about the larger social processes surrounding their adoption. As the purpose of this study is focused on subjective viewpoints that demonstrate participant perspectives on the value of homegardens, in-depth interviews are more than sufficient and represent my primary method of collecting data (Marshall and Rossman 2011).

Conducting the Interview

Study Protocol

All interviews were conducted in the respondent’s home or out in their fields. I followed an informal protocol at the beginning of the interviews: The promotor (discussed above) introduced me to the respondent and gave a brief explanation for the visit. I then presented a more detailed overview of the study, reviewed the informed

consent with the participant and reminded the interviewee that I would record the session but that his or her identity would be kept confidential.

The potential participants were made aware that they had no obligation to participate in the project, and that there were no consequences for refusing to participate. In addition, they were informed of any potential risks that could develop from their participation in the research project, and the participants were told that if they choose to participate, they could end the interview at anytime.

Consent to participate was obtained verbally before the interview began. Inclusion criteria consisted of: being over 18 years of age and a community resident in the study location. All male and female participants were drawn from the respective local populations and concerted effort was made to balance the number of male and female participants we interviewed from each community (See Appendix for IRB Protocol).

Interview Guide

I used an interview guide (see Appendix) to explore these general topics and help uncover the respondent's views while respecting the way he or she framed and structured their responses (Marshall and Rossman 2011). This allowed their perspectives on the interview topics to unfold as they perceived them and not as I would expect them to answer. I prepared a small number of interview questions in advance but they did not remain fixed, and follow-up questions were integrated as each interview moved along (Rubin and Rubin 2012). In addition, the interview was designed to be

topical, in that I was looking for rich and detailed responses that included descriptions, examples, and experiences to help answer my specific, focused research questions (Rubin and Rubin 2012).

I developed themes for my interview guide (see Appendix) based on the following socio-economic variables. I developed this list as sensitizing concepts through an extensive literature review on homegardens as a community development strategy.

Socio-economic and gender characteristics:

- History of gardens in the region
- Perceived value
- Gender
- Decision making
- Family involvement
- Distribution of labor by family member

I wanted to understand how people value homegardens economically, socially, and even politically. If I can understand the importance farmers place on this strategy, I can better explain their behaviors of adoption or not adopting in terms of homegardens.

My research question can only be answered through an understanding of perceptions and experiences, and thus the research design utilized a primarily qualitative approach including in-depth interviews. Interviews consisted of open-ended “grand tour, example, and experience” questions (Spradley 1979), which allowed participants to express their conceptualization of homegardens as a food sovereignty strategy, as well as their perceptions of value toward homegardens.

To get at people’s core values, I began with historical questions to trace how, why, and whom initiated homegarden development. These questions led into the ‘knowledge’ theme. Where was the information about homegardens coming from and

how was it transmitted to inform each farmer's experience? Did they learn how to maintain a vegetable garden as a child and were parents teaching their children the same set of skills?

Relevant to understanding the perceived value of gardens, I asked respondents to share their future vision for the garden and if they thought it would have long-term potential. I wanted to know: why are gardens important and how do people benefit and why do some people have them and others not?

During the interviews I also went into depth questioning attitudes toward gender and community participation. These topics are important to address to clarify people's priorities and ways of responding to community development projects. In the cultural context of a male-dominated, or machista, society I wanted to see if there were connections between participation in gardens and female empowerment. Since homegardens are most often managed and cared for by females, they are considered a women's space.

Gardens have the potential as a site for female empowerment and decision-making. Questions like: "How are decisions made in the garden and what does this say about control of resources? How is decision-making in the garden the same or different from general decision-making in the household? How are the mother and wife of the household involved in cooperative activities? If females have decision-making in the patio and not the household, what does this mean in terms of opportunities and challenges for future patio initiatives?" get at the issue of female empowerment.

My choice of interviewees yielded good results in many cases. Looking over my transcripts, I have depth, richness, and detailed descriptions for about 25% of the interviews. This *thick* description (Geertz 1973) will help me understand the described events that I never experienced, motives, opinions, and on-going social processes through a retrospective lens (Rubin and Rubin 2012). Through the thick descriptions, I can explore more complex, contradictory, and counterintuitive matters. This 25% offers a diversity of perspectives from the other, less detailed, interviewees and provide me with negative cases that shed more light on my research questions than the whole of the remaining 75% of interviewees.

Recording, Language, and Translation

I have been working in Central America and Mexico for more than eight years and have a firm grasp on the language. I used a recorder so that I could then download interviews as Mp3s onto my computer. I did not use a translator during the interviews and I did not translate the interview transcripts. I chose to do the analysis of the Spanish transcripts so that I would not lose the meaning of idiomatic phrases and to avoid the general loss of meaning that occurs during translation (Rubin and Rubin 2011). I did however hire an experienced Nicaraguan transcriber, Marlyn Vallecillo, to transcribe the digital recordings into written text. I understand that by involving another individual to transcribe the interviews there is a potential loss of accuracy (Rubin and Rubin 2012); however as a native speaker Marlyn will more effectively develop interview transcripts.

Data Analysis of Interviews and Fieldnotes

I discovered that printing out the transcripts and sitting with each one and hand coding worked best to stimulate analytical thought. Once I had the transcripts printed in hand, I read over each interview and each page of fieldnotes before writing a single code. This allowed me to get a sense of the conversation as a whole and maintain an open mind to let the data speak to me instead of immediately imposing analytical categories (Corbin and Strauss 2008). I continued to analyze my field notes and in-depth interviews following the combined analysis strategies outlined by Rubin and Rubin (2012) and Charmaz (2006). I coded excerpts that had relevant concepts, themes, events, examples, names, places, and dates (Rubin and Rubin 2011) through a comparative study of incidents, helping to identify emerging properties of a concept (Charmaz 2006). I related categories to sub categories and specified the properties and dimensions of a category to give coherence to the emerging analysis, thus effectively organizing a seemingly insurmountable quantity of data through Axil coding (Charmaz 2006). Later, I further enriched the codes by cross-referencing my memos (discussed below) and developed a formal codebook.

During the coding process, I wrote memos on my focused codes to build and clarify my categories through examining all the data it covers and by identifying the variations within it (Charmaz 2006). More often than not however, my memos were spontaneous thoughts and connections that offered analytical insight into my data that if I would not have captured in that moment, may have been lost. According to Charmaz, “a memo on a focused code: 1. defines the category, 2. explicates the properties of the

category, 3. specifies the conditions under which the category arises, is maintained and changes, 4. describes its consequences, and 5. shows how this category relates to other categories (92). Through the invaluable process of sorting and figuring out how memos fit together, I contributed to the skeleton of my analytical framework.

Once I finished coding and memoing across the interviews and fieldnotes, I found the excerpts marked with the same code and sorted them into a single data excel file. I then summarized the contents of each file and continued the iterative process of sorting and resorting the material with each file, comparing the excerpts between different sub-groups, and finally summarize the results of sorting (Rubin and Rubin 2012). I organized the codes, memos, and themes in their respective excel files. After weighing different versions of codes and themes, I integrated direct quotes from the interviews and thick descriptions from field observations to complete the picture and write the case study.

Situating Myself

My interest in the principal topics of this research: food sovereignty and participatory development processes stems from six years of working on program and alternative market development with farmer organizations in Central America and Mexico. As a white, formally educated female, my social position diverges substantially from the families I interviewed. Because of this position I am treated as an outsider in communities that are accustomed to receiving foreigners in a power dynamic that privileges me as the one with resources arriving with “expert” knowledge. The influence of racial privilege on the research process is apparent in the assumptions and narratives

I use as a researcher to make sense of my experiences in the field as well as in the relationship between the respondents and I (McCorkel and Myers 2003).

This reality is compounded by immigration patterns where many Nicaraguan families rely on remittances from the U.S to support their families. In this way, resources and money are seen as being channeled from the U.S and it's predominantly white population, including myself.

I am particularly interested in gender stratification after growing up in a household that practiced traditional gender roles exemplary of an unjust patriarchic system. Through my personal experience, I gathered that women are supposed to take care of the house, the children and husband – unconditionally. My mother's submissive nature intensified my father's authoritarian personality and the unequal decision-making power. These experiences have motivated me to seek more equitable gender roles in personal relationships as well as in larger society.

I strongly believe that international trade policies, governmental policies favoring elites, and well-intentioned NGOs have in some ways contributed to social, economic, and political inequalities for disadvantaged Nicaraguan farmers. While farmers are not passive agents, they make decisions, act, and importantly resist against opportunities available.

In terms of membership, from the moment I entered the field I attempted to be accepted as a member in the larger project. I quickly encountered tensions between roles as a participant and an observer. In my fieldnotes I discuss internal conflictions with my past experience as a fully-engaged activist and my new emerging role as a

engaged researcher. Adler and Adler (1987) consider the nature of field researchers' role, the extent to which researchers integrate into the settings they study, and the effect this has on the data gathered. They consider the "insider" affiliation phenomenon, spread on a continuum of varying amounts of participation from peripheral to a committed convert (8). They label these as different 'membership' statuses.

In the field I was an active member since I took on active roles in core group activities such as project team meetings, site visits, and interactions between key players. In doing so, I assumed a functional role in the settings while interacting with members as colleagues. At the same time, I maintained several escape routes to safeguard my commitment to an academic agenda (Adler and Adler 1987: 50-51) that would most accurately portray the reality and lived experiences of the local people. I am committed to continued involvement with the larger project, supplying reports and advising with the research team. In this way, my presence also shaped outcomes in the field setting.

It's important to access how my own theoretical perspective and personal identity shape my observations and analysis. Becker reminds us that we take sides as our personal and political commitments dictate, but need to "use our theoretical and technical resources to avoid the distortions that might introduce into our work, limit our conclusions carefully, recognize the hierarchy of credibility for what it is, and field as best we can the accusations and doubts that will surely be our fate" (1967: 247). As I mention in my fieldnotes, I come from an activist background and choose to study

international solidarity in Latin America. I'm also drawn to particular theoretical perspectives in-line with my applied agenda.

At the beginning I wrote down my initial reflections and feelings with the taking on of a new membership role. I have a history of participation in social movements where I was what could be called 'native' instead of 'going native'. I'm moving in the opposite direction since I consider myself first as an activist and second as an academic. To balance this Guillemin and Gillam (2004) suggest connecting reflexivity with ethics, quoting McGraw et al. (2000), "[Reflexivity is] a process whereby researchers place themselves and their practices under scrutiny, acknowledging the ethical dilemmas that permeate the research process and impinge on the creation of knowledge" (276).

I have found comforting words from Lareau (2003). She states that fieldwork requires a balancing act. I need to be authentic, but remain neutral and this required a suppression of the self (268). For example, I may resist expressing too many opinions or making financial decisions for the project since I no longer consider myself a 'native' to the development of this project. I refrain from overtly expressing political views that may dramatically alter the direction of the project since I'm not as integrated in day-to-day decisions where as in the past that was my primary goal.

Throughout the course of research, I employed a process of consistent self-reflection on my personal perspectives and role of an outsider. This type of reflection is near impossible to ignore given the contrast between my social location and those I worked with along with the magnitude of the issues on the table – or on the interview guide. I was nevertheless struck by the structures of power that separated me from the

farmers, such as color of skin and related colonial history, as well as recognizing that my association with the NGO and technical support even further separated me from farmer respondents. According to Warren (2001) the political representations of contemporary fieldwork, which often reproduce the colonial or bureaucratic power of the man and woman fieldworker, miss the interplay of power and vulnerability in the field within which these gendered relations are lived out. By highlighting the differences between my social space as a researcher and that of the farmers, I worked to address the differences in order to gain access to the farmer's points of view and values (Thorne 2001).

I found this particularly challenging since we were operating within different discourses. Although I speak Spanish, I was not proficient in the local dialect and idiomatic phrases familiar to the region. Although if I didn't understand something said, I certainly asked, this represented a cultural barrier that would not be overcome.

Further, I asked questions about income that tended to make respondents uncomfortable. I found a better question to be not directly how much annual income they expect but how many pounds of coffee they harvest and how much land they own. In this way, I would relate to respondents in the language they were accustomed and later consulted with the promotores to clarify the monetary value that I might better understand.

Finally, during the participant observation phase I considered the relationship I have as a researcher with participants. It was important to explore my positionality and ethical issues during this time (Marshall and Rossman 2011). Ethical practices suggest

that engagement with participants should be benign, non-manipulative, and mutually beneficial (Marshall and Rossman 2011).

Challenges and Limitations of Research

In future research projects whether in Central America, the U.S, or another country, I would like to find methodologies that contribute to more depth and understanding of people's subjective realities. That is, I want to understand the experiences that shape the way respondents make decisions and see the world, where knowledge is channeled. This could be, in part, addressed by including a life histories data collection method to better understand people's lived experiences that have shaped their universe. In my case, I found my stay too short to fully understand the intricacies necessary to offer the level of depth I desired in responding to my research question. With that said, I aimed to write field notes that effectively represent member-recognized meaning, that is, to understand the social processes through which members construct and act upon meanings to shape future interactions (Emerson et al 2011).

Emerson et al. explains that meanings can often be distorted by a priori assumptions and definitions about the significance and meaning of race, gender, and class. Instead, they state, place priority on how people themselves socially construct and deal with gender, ethnicity, and class within the dynamics of specific interactions, situations and social conditions (2011:161). Where possible, I write about how members are "doing" gender, ethnicity, and class. This could have been enhanced by writing more

real-time descriptions since they “document the processes through which members arrive at what they regard as definite understandings of meanings, facts, or sequences of events these descriptions preserve the qualities of uncertainty and indeterminacy that characterize much of social life” (Emerson et al. 2011:109, Becker and Geer 1957). The few instances where real-time descriptions were possible, I note a significant difference in the clarity, depth, and richness of these descriptions in comparison to the remainder of my fieldnotes.

Further, in cases like mine where farmers have become accustomed to managing power dynamics with NGOs and other external funding agencies, it becomes even more important for researchers to make time to experience day-to-day lives. This would include living with local families, meeting the communities and taking note of the local small-town gossip since these are the informal channels manage in constructing their subjective realities. Developing relationships with participants not only allows for contextual understanding but also means that the respondents are not simply filling my research receptacle with information that may never evolve into tangible “giving back”. Instead, with time and interactions the researcher may build a relationship with local people and continue to maintain this in tangible ways.

The disconnect I experienced between me as a researcher and the respondents was apparent in some of the interviews that lack thick descriptive responses. By having a more intimate grasp on the specific realities of the local community, I would not only foster valuable relationships, but it would also offer a more valid picture of people’s lived experiences.

With that said, the number of interviews that lacked the richness and depth offered unexpected insights into the reality of data collection in rural Nicaragua. After the first three interviews I found that respondents in this region have participated in a multitude of survey research projects. This means that they are accustomed to responding to researchers with short, direct responses as if filling a blank. In addition, most of the surveys are administered by local or international community development organizations as a method for gauging feasibility of projects or general information gathering to address needs of local families in the region. Along with the development projects, I learned, often come outside academic researchers, like myself. More often than not, farmers take hours away from working in order to respond to research requests. At one of the exit meetings with the consejo, cooperative members expressed frustration at the time and investment in research project like mine and emphasized that they never see the results of the research. This is all to say that overall respondents appeared burnt out and over researched. They, rightfully so, were more interested in answering the interview questions and getting on with their work, making probing for more depth a challenge.

Giving back

To address the traditionally extractatory research process, I reiterated with the consejos that this was part of the larger project and materials for homegardens would be worked out with the project managers, ADECOOP. In this way, my association with the food security/sovereignty project meant that they would get something back for their

time and I would also provide the data to the management team to assist in decision-making. In response to the consejo's discontent, I promised to send a final report not only to ADECOOP and ATSC (the entities that often play the intermediary and do not pass on research results to their rural counterparts) as planned but also to the cooperative consejos. The idea of getting the findings report back pleased the consejo.

I also responded to a request from the local NGO director to train a Nicaraguan intern in qualitative research methodologies. Since I have background in alternative education curriculum development as well as management, they also asked and received a written 'In-depth Interview Guide' in Spanish. The intern is now working with college student interns at the NGO, teaching interviewing basics by following the guide we collaboratively developed. Each intern and beginning researcher receives a copy of this guide at the workshop co-facilitated by the trained intern. I contributed to their research for sustainable development program development in this way.

CHAPTER 5

FINDINGS

COMPLICATING THE FOOD SOVEREIGNTY AGENDA: UNEARTHING THE CHALLENGES OF HOMEGARDEN DEVELOPMENT AS A FOOD SECURITY AND SOVEREIGNTY STRATEGY IN NORTHERN NICARAGUA

In Nicaragua, livelihoods have been shaped by decades of planned interventions from local governments and international NGOs. During these interventions, farm families and practitioners equally negotiate a balancing of outside influences with local culture and behaviors. Externally developed food security, sovereignty and Right to Food policies inform the outcomes of these planned interventions experienced on the ground. This section focuses on food sovereignty policy discourse and offers a glimpse into the challenges of implementing development policy in rural farming communities. I show a substantial disconnect between the vision conceptualized by La Via Campesina at the UN and the reality of how food sovereignty is being implemented as a development project instead of aligned with its social movement foundations.

In what follows I offer an analysis of homegardens as one component of an integrated food security and sovereignty development agenda. Homegardens are a microcosm that shed light on larger trends and practices in the development world. While they offer farmers tangible benefits many community members choose not to invest in their development and maintenance.

In this section I return to my primary research questions: to what extent are homegardens an effective strategy to reach food sovereignty? By food sovereignty I mean people's right to define their agricultural and food policies (World Food Summit

1996). And why might farmers in participating communities of northern Nicaragua resist changing their food production and consumption strategies?

Based on systematic triangulation between in-depth interviews, participant observation and project document review, I argue that homegardens as a strategy have the potential to be a strategy align with food sovereignty agendas but farmers resist changing current practices for three main reasons: first, farmers preference is veiled by development discourse after decades of participation in top-down projects. I examine discourse as observed in overlapping dimensions: the customary forms of communication and interactions between farmers and practitioners that perpetuate the top-down nature of development strategies. These interactions are lodged in the stubborn, structural bureaucratic methods that persist as remnants from post WWII modernizations. Evidence of these dimensions is laid out below; they are exhibited in farmer-practitioner interactions, uncompromising bureaucratic procedures, and the short-term funding and project cycles.

Importantly for food sovereignty, I argue that these dimensions contribute to suppressed farmer agents. Farmers actively engaged in working toward food sovereignty as a social movement agenda participate in overt agency; they are working in the policy arena, protesting, and engaged in progressive forms of education. In contrast, an NGO-led food sovereignty project allows for subtler action that may surface through decisions to not maintain NGO instigated strategies. More broadly, I argue that interactions with NGOs perpetuate a development discourse that must be overcome in order to move forward with a food sovereignty agenda.

Second, *repeasantization* and a return to subsistence as a form of control over ones food system are promoted through food security, sovereignty and RtAF policies. Importantly, repeasantization is essentialized as the answer to achieving food sovereignty (Desmarais 2009; McMichael 2010; Ploeg 2010). Homegardens suggest that this subsistence lifestyle is not currently widely practiced in the Segovias since it may not be practical given access to resources and the historical role coffee production has played in maintaining livelihoods.

Third, homegardens imply a change in food consumption habits, which are practically decided and culturally embedded. Consumption habits are influenced by symbolic and cultural factors as well as socio-economic status (Caplan 1997; Mintz 1995). Through changes to consumption habits, some farmers experience a loss of tradition/culture that can be attributed to international projects bringing practices perceived as insensitive to local ways of doing things. Other farmers recognize the benefits of eating healthier but are not accustomed to eating a diversity of vegetables.

In practical terms, farmers need to perceive a net benefit from the work they invest in changing food production and consumption practices. For example, in terms resource availability – do the households have the resources needed to implement the alternative practice of homegardens? Is there a general feeling of some need to change their current system? Thinking between the lines, what politics might be involved in decision-making? What if farmers in the Segovias conceptualize food sovereignty differently from La Via Campesina?

It is imperative to highlight the disconnect between the literature and policy and what is currently happening on the ground in order to improve processes and outcomes for sustainable development. Farmers and policy makers alike have spent plenty of time envisioning structural changes to the food system as exhibited in Right to Food and food security and sovereignty policies. This research points out the complications of carrying out the food sovereignty agenda on the ground. According to La Via Campesina, food security and Right to Food policies need to align with a food sovereignty agenda to be effective (La Via Campesina). In this vein, the chapter concludes with recommendations that begin to work toward food sovereignty by suggesting that both practitioners and farmers would benefit from finding methodologies to overcome the dominant development discourses. We must step outside the stubborn structural norms to find new ways of managing international development.

Development projects may begin with rethinking how the problem is initially defined. When development activities are carried out while asking ‘why don’t farmers just change?’ farmers are targeted and blamed for their lack of food security, neglecting larger social processes over which farmers have little power. I continue this discussion in the recommendations section at the end of this chapter.

Development discourse: development models contradict a food sovereignty agenda

I found that the dominant discourses of development veil farmer preference and the challenge the effectiveness of food sovereignty development strategies such as homegardens. In what follows I analyze interviews, participant observation and data from document reviews to show how interactions between farmers and practitioners

perpetuate this phenomenon. I also identify dominant discourses of development in the processes and procedures of the project as remnants from 'development as modernization' projects that will need to be redefined on the trajectory to food sovereignty.

During interviews no respondents mentioned or alluded to the food sovereignty vision that it is clearly laid out in the project documents. Instead, each farmer asked for some sort of aid, usually in the form of seed, in order to start the gardens. At the end of each interview all but a few respondents maintained the expectations of gifted materials.

A female respondent with graying hair and a soft but cracking voice comments at the end of the interview:

"Well...I need you to help me with one little thing, vegetables so I can increase the size of my garden."

A slender male respondent with a face more bones than skin to cover them, was standing in front of a wooden post which held his tied up pig. Chickens were roaming around pecking at the dirt as he asked for seeds and fencing to start a garden:

"... of course if you give us a little bit of help we will accept it, the homegarden is a small thing..."

The experience underscored how farmers are accustomed to working with researchers and development practitioners. At the conclusion of each interview 100% of respondents asked for resources such as seeds, fencing, and water storage. While other practitioners considered this expectation 'the norm', it highlights the role of practitioners as providers of resources and aid but not facilitators of process aligned with a food sovereignty agenda. Practices aligned with a food sovereignty agenda would

entail farmers having command over their resources. More concretely, farmers might purchase or salvage fencing materials and have a seed saving system of their own. In contrast, existing interactions where farms expect aid are reminiscent of post-war food security projects where food availability was deemed the problem and food aid the solution. Economists (Sen 1981; 1987) and development scholars (Ericksen 2008; HLPE 2012) have since debunked this Malthusian notion. Food sovereignty envisions a redefining of precisely these sorts of social relations where practitioners' role is not to give aid but work to redefine the development processes. Expectations and norms of aid perpetuated through practitioner – farmer relationship represents one of the most challenging obstacles for a food sovereignty agenda to overcome.

Through participant observation and document review I found that the food security and sovereignty project leaders use participatory methods such as surveys, case studies and community meetings to gather information on project recipients. Such strategies are common practice and one of the most efficient methods for gathering large amounts of information for a large sample.

However, these strategies do not necessarily translate into gauging farmer preference. Practitioners and researchers receive survey data or information on farmers who want to appear as good investments or 'high potential' for development resources (Eversole 2011). Instead of speaking up to share preferences that may be rejected by development project practitioners, some farmers and their cooperatives have become accustomed to managing these interactions by conforming to development agendas (Eversole 2011). Through participant observation I observed that farmers sometimes

de-emphasize their preferences in order to appear to conform to the expectations of the development agenda. This in part helps to explain the lack of adoption of homegardens. I suggest that farmers may simply choose a different strategy of expressing their preferences. Instead of overt participation and vocal opposition, or agency, they exercise passive resistance. This strategy enables farmers to obtain very necessary resources from development projects while not necessarily adopting the strategies put forth by the larger project. So even if participatory methods such as surveys or community meeting strategies are used in good faith by the food security and sovereignty project leaders, they do not automatically reveal farmers' true preferences. In this way, the stubborn structural development discourse is perpetuated in responses to information gathering and subsequently may lead to failures in the implementation of food security/sovereignty strategies.

Additionally, community members perceived as 'receptive to change' will receive most of the resources being offered (Long and Ploeg 1989). While those that divert the predestined resources to other, possibly more contextually useful investments are considered delinquents, thus serving to reinforce the original goals and normative values of the project (Long and Ploeg 1989) and perpetuate a subdued farmer agency. Farmers in rural Nicaragua have become accustomed to planned intervention and the need to entertain the use of development discourses, creating distinctions between needs and concrete strategies like homegardens. In place of allowing for personal decision-making, or autonomy, dominant discourses of development muddle farmer agency and voice (Apthrope and Gasper 1996).

Disconnects between needs and strategies are further explained by examining the structure of project cycles, specifically at the phase of problem definition. For example, who is defining the problem that the project aims to address and how are farmer interests being represented on the project management team? Starting with problem definition, it is a customary blueprint model – and most often necessary - for NGOs to develop visions and goals for projects in order to secure funding prior to soliciting input from first level cooperatives, the targeted recipients of project resources. In the case of this food security and sovereignty project, a funding proposal was researched, written and approved before receiving community-level perspectives. A review of past development projects emphasizes the culture of the planners as an essential factor in the success of development projects (Kottak 1990). In contrast to a blueprint model, typical of the culture of planners, a “learning-process” model (Korten 1980) would open a space in which planners and locals work together to develop approaches that are based on locally recognized needs and well-integrated with existing social structures. Although this would entail already over-worked, busy farmer participation in yet another project, I argue that in the long run farmers will waste less time and resources by implementing food security and sovereignty strategies that they themselves envisioned. As it is, resources and time are often wasted when farmers do not deem strategies as viable or situational appropriate. This model is supported by long-term relationships some practitioners and organizations have within a community. Once the first project is undertaken, relationships are built and context specific lessons are learned. Subsequent projects ideally build upon these and seek to involve community members in the project

development from the inception stage. This model is challenged since it requires some continuity in the NGO staffing.

Bureaucratic procedures such as project reports, budgets, and linear timelines do not allow for dynamic and cyclical community processes (Acre and Long 2000; Mohan 2002) and may further contribute to difficulties in implementation. Nicaraguan practitioners often complained of spending weeks developing extensive reports for funders, affecting the amount of time and energy they might realistically spend on their interactions with farmers participating in community processes. While *técnicos* are trained agronomists and are officially the on-the-ground counterparts representing farmers on community development projects, their interactions with farmers were cited as often brief and abrupt. Instead, the *técnico* role is often dominated by paperwork and project coordination while still being expected to be an agronomist. A number of farmers complained of practitioners 'driving by on their motorcycles and throwing down a package' and speeding off two minutes later while one of those two minutes they were on their cell phones with headquarters coordinating their next task. During an interview with a male farmer he commented, "*técnicos* come here with their book education and point fingers without understanding the context, you have to work this land for many years before understanding..." These are certainly not the only type of interactions between practitioners and farmers but are common enough to create a social and physical distance that contributes to outside practitioners scrambling to accommodate local needs. I point to the demands of linear, bureaucratic project norms to help understand why this happens.

But there are no “bad guys” here; practitioners are also often pressured to meet the timeline requirements of funders while at the same time meeting local community development needs (Bebbington 1997). They are equally concerned with maintaining their jobs and providing for their families; I would expect nothing less than compliance with normative development discourse in order to do so. Importantly, administrative procedures and processes are necessary to insure accountability of project efforts and funds.

Further, it is implicitly assumed by project managers, and development agencies in general, that absolutely every family would be interested in maintaining a homegarden. Families depend on diverse sources of income/subsistence that 'work' for their particular households. Families have different preferences and assuming that all co-op members would be interested in a blanket project such as homegardens assumes a homogenous group, highlighting the homogenizing character of bureaucratic projects.

But the NGO involved in the food security/sovereignty project is an institution working with short-term funding of three years. Every six months a progress report is due to the funding agency and should show results and products that fit neatly into the predetermined goals in line with funder interest. This becomes problematic since slow, flexible, and culturally specific processes that could be happening in communities do not translate into fast turnaround the tangible products demanded by administrative institutions (Mohan 2002). By trying to fit non-linear community development processes neatly into short deadline ridden, product-focused schema, more rapid decisions must be made by project managers in lieu of consulting with community members. This is not

to imply that every small-scale decision need be voted upon at a democratic *asamblea*, but a balance between bureaucratic processes and community needs would benefit successful outcomes. For example, practitioners delivered the seeds for homegardens to the cooperatives during the months of my visit. Farmers were instructed by their cooperatives to plant the gifted seeds as soon as possible. While the seeds were well received and appreciated by the farmers, two different farmers mentioned that this was not the best season to plant and they had concerns about the gifted seeds being *mejoradas*, or genetically modified.⁷ This is particularly relevant since seeds are quite expensive in Nicaragua and cited by farmers as one of the predominant financial inhibitors to homegarden implementation. One elderly farmer commented:

“I could not plant a garden this year since the seeds are too expensive...the seeds from the last organization were *mejorado* and do not produce another time ... if you can give us seeds that are strong and so we can save the seed for the next planting...”

This is a tangible example of administrative procedures and processes not only inhibit long-term homegarden success but also food sovereignty. This contrasts with a food sovereignty agenda that attempts to place farmers in control of decision-making in their food systems. If the seeds are *mejorada*, instead of saving seed and having control over one's resources, farmers would need to purchase seeds again the following planting season.

In response to development discourses, it is essential to situate peasants and practitioners, their livelihoods, and their processes of production of the structure and dynamics of wider bureaucratic formations. Decades of failed development projects call

⁷ To clarify, by *mejorada* I mean genetically modified (in contrast to plant breeding) where an organism is exposed to radiation or chemicals to create a stable change in the plant's characteristics.

for new methodologies and project designs that account for the diversity of needs and perceptions in specific spaces and times (Acre and Long 2000) something that will be challenging for bureaucratic institutions. Long and Ploeg argue for the need to analyze the way in which the different ‘cultural repertoires’ (notions of value, discourses, organizational ideas, symbols and ritual procedures) that guide the practices and discourses of farmers lead to different responses to relatively similar structural contexts (2010). I continue this conversation in the recommendations section at the end of this chapter.

Farmer’s perceptions and current practices: international trade markets, subsistence agriculture, and a combination of both:

The challenges of working with NGOs and perpetuating development discourse represents one overarching element of the development puzzle that inhibits farmers from maintaining homegardens and having space to work toward food sovereignty. Farmers’ choices, actions, and livelihood strategies are more much complex and we need to look beyond NGO interventions for a more complete picture. In what follows, I share farmers’ perspectives on why and how they make livelihood choices. Through an analysis of interview responses and project diagnostic data, I shed light on the question of ‘why don’t farmers just change’ and adopt homegardens? This is intended to show why farmers may resist changing their production habits.

Within a food sovereignty agenda, the localization of food systems is often pointed to as a way to avoid unjust, corporate driven market relations. By internalizing production and consumption habits with homegardens, scholars argue that producers

have more control over their farming choices and can lead a more dignified life in contrast to the socio-economic inequalities perpetuated through neo-liberal trade systems. Peasant studies terms this phenomenon re-peasantization (Desmarais 2009; McMichael 2010; Ploeg 2010; Schneider and Niederle 2010). Characterized as a re-emergence of the peasantry, farmers actively search for autonomy and freedom from the obligations imposed by banks, traders, and agroindustries in order to organize their property and their labor process according to their *own* possibilities and needs. Homegardens are served up as the trajectory to repeasantization and fit into the vision for food sovereignty.

When I asked farmers about how they see the benefits and challenges of homegardens, most all respondents explained that by maintaining homegardens they would not have to spend money on vegetables at the store. Health benefits of eating vegetables from homegardens were also widely recognized. The son of a female farmer, in his 30's, explained that it makes more sense to plant vegetables instead of buying them at the market:

"...the most necessary are onions, chilitoma in order to not have to go to the store to buy chilitoma... it turns out better to plant them [ourselves]..."

Another male farmer noted the expense of buying vegetables at the store instead of relying on self-managed homegardens:

"...right now the economic part...it's not easy to get 30, 40 cordobas to buy [food], and it's easier and better...if they give us the how to do it ourselves..."

Most respondents understood the health benefits and had taken a class from the NGO promoting consumption of more vegetables. One male member of the *consejo* said in reference to homegardens:

“...they are safe foods and good health since they don’t contain chemicals, only organic things [whole foods]. For what reason [to consume vegetables]? So that you feed the body well and continue to store energy to work...”

Yet, when asked about the challenges and what would keep farmers from planting, the same response came out in most cases: seeds are very expensive, fencing is needed to keep animals from eating the plants, there is unreliable access to water in the dry season, and there may not be either sufficient or appropriate land for growing near the house.

An elderly man of short stature and dark skin, wearing a sturdy cowboy hat and accompanied by his wife explained that to plant vegetables they would need a water source:

“I haven’t planted vegetables, I don’t have water, there needs to be water...”

Another male farmer in the same cooperative asked specifically for water storage and irrigation systems:

“but also I need a pila, [pump or faucet] I need a pila certica to store water during the months without rain...to have an irrigation system, to have a bomba for the times that I’m short...”

A male member of the *consejo* answered:

“no, near the house we don’t have [a homegarden] because the chickens and other animals inhabit that area...we would need a fence.”

One of the many requests for seeds came from an elderly woman as she showed her small garden to us:

“You aren’t seeing it pretty [the homegarden] because as I told you we don’t have seeds...”

In effect, if seeds and materials such as fencing are free, then it would make economic sense, but farmers are not investing in homegardens on their own since the cost of materials do not outweigh the vegetables, fruits, and herbs harvested. It should be noted that seed banks were in the process of being developed as part of the larger food security and sovereignty project at the time of this research but were not yet functioning. Interestingly, removal from the market as a political action was not alluded to and homegardens by themselves are not economically practical for most respondents.

However, in some cases the market can support a food sovereignty agenda by subsidizing subsistence farming practices. Small-scale farmers have long supplemented their agricultural production with income from wage labor and the production and marketing of nonagricultural commodities (Deere 1990; Kay 2001; Bernstein 2009). 95% of respondents grow subsistence crops like corn and beans while at the same time depending on the sale of coffee to the international market to buy seeds. The sale of coffee and excess staple crops sold to local markets subsidizes the planting of corn, beans, and sorghum used for home consumption.

Farmers explained that in order to make a homegarden profitable they would need to sell some of the harvest to the large markets in the city to cover the lofty costs

of seed and other inputs. However, market price for vegetables is low and the cost of transport is high. An elderly female farmer remarked:

"...maybe going to Leon or Managua, the thing is that I really haven't thought much about it [homegardens] since... to pay a vehicle means nearly all the benefits of the harvest stays with the transporter and so maybe you go there to the city to sell cheap, then you are left with just enough to pay for transport, you don't even keep the price of labor ... or the expensive inputs "

"...this [vegetable] is hard to sell, so its not planted very often...if there is not much demand, you don't plant it..."

In other cases, farmers prefer to plant more coffee, producing for the market and using the income from coffee to purchase vegetables rather than growing veggies for subsistence in homegardens. One cooperative president grows coffee only as a form of production agriculture and to sell on the local market. From his vantage point, it makes more economic sense to grow more coffee and buy food with the generated income.

One male cooperative president explained:

"...so we look ... that the vegetables don't affect the coffee management because we are working with organics... the family has other thoughts, well I had the thought to always work in coffee [not in vegetables]..."

he continued by remarking:

"...now we are involved only in the coffee beans since during the average summer... in order to eat we have to attend to the coffee because it provides us with the most income."

It may be that gardens are perceived as not providing sufficient tangible benefits to invest their already scarce resources. Maintaining homegardens is not a small task.

One male farmer in his 50's, also a cooperative president, explained the reality of amount of time and management needed to maintain homegardens properly:

"But we have to care for the soil ... to manage it well, forming the contour by making terraces, planting minimally tilled [soil] because even if we have good seeds and we don't manage the soil well, its of no use to us ... there are a number of things to do... "

This respondent went on for several minutes talking about all the management practices and requirements to have a productive garden. In practical ways, farmers would need to re-prioritize not only their labor but also their economic investments to accommodate for homegarden maintenance and materials.

Before making these sorts of livelihood changes, a farmer might ask him or herself what benefit will come out of the work invested in the changing of food production and consumption practices? Is there a general feeling of some need to change their current system? Coffee for example is relied upon for cash income.

While sitting outside on his patio, a male respondent explained that his family relies on the coffee as their main strategy for coping with the thin months and to combat food insecurity in general:

To insure we have food during the scarce months "... corn and beans are purchased when the price is low ... so when we sell coffee, we use that same money to buy basic grains if there if we don't have our own harvest, if we have a harvest, well then, we don't spend money. So you buy when prices are low and with what we cultivate here, well in some areas with water you can move forward with a homegarden... "

Farmers may perceive a need for diversification of the production pattern in situations of uncertainty such as with climate change and market price fluctuations (Dreze, Sen, and Hussain 1995). This calls our attention to the dual reliance on not solely a subsistence means of production but also taking advantage of local, national, and international markets to insure food security and sovereignty. In this way,

participation in the market economy does not appear to be associated with the dissolution of the peasantry (Isakson 2009).

But communities are not a homogenous group and some farmers don't like the idea of relying on money for survival, they would prefer to maintain only subsistence gardens. They see homegardens as a strategy for reduced reliance on the market and more economically attractive. A male farmer in his 40's remarked:

"... everyone is depending only on money to eat, we are using money, we are not using the soil that we are [on], we had the potential but we are depending only on money ... when you have no food, go to the store to buy..."

An elderly female farmer in her 60's explains:

" ...I always have to buy it, we saw that we were always depending only on money to buy only onion, tomato, peppers, anything ..."

Although some respondents prefer a subsistence lifestyle, few in the Segovias region carry this out in practice. Only 5% of farmers in the region buy no food from the store for home consumption (Bacon 2011). Families that rely on subsistence must build their daily lives around intensive labor practices and skills that often take years to pay-off. Seed saving, storage techniques and food preservation are easily challenged by rodents, lack of silos and other materials needed to store in a tropical, moist environment (Bacon 2011). It was widely noted during interviews that access to water, cost of materials and expensive seed were inhibiting factors to homegarden development. In these ways, farmers maintain a dual reliance in part on subsistence means of production while also taking advantage of local, national, and international markets.

When considering a food sovereignty agenda, subsistence farming is often mistaken as synonymous with being food sovereign. For example, project diagnostic report states that 5% of families don't purchase food off-farm and for this reason are the only families considered to be food sovereign (Bacon 2011). This neglects the other principal characteristics of food sovereignty, namely that people have the right to determine the degree to which they would like to achieve food self-sufficiency and the ability to define terms of trade that are consistent with the sustainable use of natural resources and the health of local economies; and that people not only have the right to sufficient calories, but also the ability to fulfill their nutritional needs with foods and practices that are culturally meaningful (Windfuhr and Johnson 2005). While La Via Campesina supports localization of food systems as a strategy for reaching food sovereignty, peasant study scholars essentialize subsistence as a political act of re-peasantization.

The complete removal from the market as a necessary requisite of a food sovereign agenda is a misinterpretation of the vision and subsistence need not be rigidly defined as zero market engagement. The vision states "people have the right to determine the degree to which they would like to achieve food self-sufficiency and the ability to define terms of trade". Self-chosen self-sufficiency would be a requisite for a food sovereignty agenda. This confusion opens the gate to well-intentioned development projects that want to 'help' farmers be self-sufficient, contradicting a food sovereignty by transforming it into a development an NGO-led project. What if farmers decide they are not interested in maintaining homegardens as part of their food

sovereignty vision? Could they still be considered food sovereign? This contradiction is something worth considering for homegardens as well as the seed banks and community storage and distribution centers implemented as project strategies.

Altering Food Habits and Custom with Homegardens

Another explanation for why farmers may not readily start planting homegardens is local consumption habits. 85% of respondents recognized that diversifying their diets is a tangible health benefit of homegardens. However, while consumption of a variety of vegetables may have been perceived as “good,” it was not widely practiced.

Households in the Segovias region are generally not accustomed to eating a diversity of vegetables, yet vegetables are precisely the product harvested from the gardens. This presents another insight into the research question: Why may farmers in northern Nicaragua resist changing their food production and consumption strategies? To address this question, I unpack how eating habits are influenced by both symbolic and cultural experiences as well as socio-economic position. Food preferences, then, have deep roots in local customs, making them challenging to alter. In relation to a food sovereignty agenda, it's also relevant to consider if food options fulfill nutritional needs with foods and practices that are culturally meaningful.

To begin, it is hard to understand Nicaragua without first recognizing its unique cultural and political history. The civil war between the FSLN (Sandinista Liberation Front) revolutionary forces and the military dictatorship touched every single person, impacting all aspects of society including local food habits. The revolutionary government's goal of agricultural self-sufficiency and its shortfall in foreign exchange,

prompted a strategy aimed at shifting popular diets towards locally-produced seeds and grains (Linkogle 1998). Often this strategy was framed within the context of a return to an authentically Nicaraguan diet.

In the 1980's, government-sponsored maize festivals, for example, identified the popular toasted maize and cacao beverage, *pinol* as emblematic of national identity. Nicaraguans often referred to themselves as *pinoleros*, or pinol drinkers. The revolutionary government built upon this linking of food and identity in their attempts to foster agricultural self-sufficiency.

The influence of revolutionary identity on food preference persists today. In the Segovias, one male respondent active in the cooperative consejo explained that he was a leader during the revolution. He wore a red and black striped shirt and sat in front of the same colored FSLN flag while explaining his discontent with foreign brought foods:

"in Nicaragua they talk about Chinese sauce, the Japanese sauce, you see, the sauce has to be Nicaraguan...let's say the pork with yucca or shall we say the enchiladas, right, that is distinctly Nicaraguan or I want a vigoron... I want a vaho made of meat with vegetables but that is distinctly Nicaraguan... "

Another male respondent shared sentiments from his past connection with foods and culture:

"Our culture *hombre* outside a culture of coexistence where we came to dance to music with origins we understood, it's roots, corn has a way of dance, pinol, we are 100% *pinoleros*"

In this way, the type of food preferred has historical and cultural roots and contributes to the reproduction of dynamic social groups. In encouraging people to eat traditional Nicaragua foods, the revolutionary government was attempting to reconfigure and politicize consumption choices by explicitly highlighting the authentic, Nicaraguan

character of some foods like maize and the foreignness of other foods like wheat (Linkogle 1998). Traditional foods were presented as a means of resisting US imperialism and of confirming a distinctive Nicaraguan identity. It is an example of how 'foods can easily become highly charged symbols of ethnicity because they speak deeply to us about who we are' (Weismantel 1988:9).

One day while in the field, I actively participated in a Farmer-to-Farmer (PCaC)⁸ workshop. At the workshop, I observed that breakout groups organized themselves into *maizeros*, *frijoleros*, and *cafetaleros* (meaning corn, bean, and coffee farmers). As four or five people congregated into their groups they joked and laughed, calling each other by the group name, “mucho gusto maizero” or frijolero, and settled into the activity. The group cohesion I observed exemplified a connection between individual farmers that centered on identification with traditional Nicaraguan foodstuffs.

In this region of Nicaragua, local food preference is shaped by customs that influence what is and isn't considered food. Food preference is more than ideas about what food is edible and desirable; it's linked to a larger lifestyle. It's not just about food—food is connected to how people relate to each other, how they engage in livelihood strategies, how they see their aspirations for the future. The implementation of homegardens challenges these norms.

Farmers identify with certain crops, they are related to a lifestyle and the way days are spent. The local knowledge on seed saving, pest management, plant life

⁸ PCaC is a farmer movement, or social process methodology developed in the 1970's in Mexico. The process employs a popular education methodology where farmers share with their peers innovative new solutions to problems that are common among many farmers. This method offers some direction in how to overcome development discourse by depending on local realities and ingenuity (Holt-Gimenez 2006).

cycles pertains to particular crops, which are often prepared in their homes and what their children learn to plant, harvest and consume.

Throughout the interviews I unearthed the hidden assumption that investing in homegardens implies people would change their diets to increase vegetable consumption. I spoke with one female respondent, an active leader in a local women's group in her 50's. She and her family maintained a *tienda* in the front of their house, located at the confluence of two dirt roads. She explained that they are not accustomed to eating certain vegetables:

"I think that maybe we are not very adapted to eating broccoli, we don't know the nutrients it contains so we don't give much importance to it as a vegetable. We don't eat zanahoria or cabbage... its a custom that we do not have, so if it barley sales [at the market], we plant only a little because we plant to sell, right, if there is not a lot of demand then you can't plant a lot so I think for this reason you don't see it [broccoli] much in the markets ... "

Farmers understand that there are some benefits of eating healthier but it is not in their habits and customs to do so. Corn, beans, rice, onions, peppers and tortillas make up the day-to-day food preferences. Some farmers I spoke with did not have experience growing a diversity of vegetables, a male farmer explained:

"...the thing is that I haven't experimented, at least the homegardens, it would be the first time, but I see it is the variation in diet..."

As I spoke with the male respondent, I learned that he was married without children and lived on the side of a mountain in a small wooden casita. As I walked up to the door the roaming chickens fled around the back and the small pigs followed. We walked up higher on the mountain to his cornfield and sat there on the edge near a stream talking. He was shorter than me, about 5' 5" and had his belt cinched tight

around a skinny waist, also smaller than mine. He talked about the revolution and growing up with parents that did not own their own land but participated in some form of sharecropping system. He mentioned “we were too poor to own land” and so they would grow whatever the owner wanted and then handover a portion of the crop to the landowner. He went on to say:

“...throughout the revolution... and up to now for me it’s like a new culture because I have never, never maintained a homegarden...”

But cultural and symbolic justifications for food choice do not stand alone in determining consumption habits. Material, or socio-economic functions necessarily help us think about practical concerns in daily diet decision-making. As demonstrated in the methods chapter, rural communities in Nicaragua tend to have not only high poverty and unemployment rates but also often lack access to basic services such as healthcare and potable water. So, deciding what to eat is also a practical, subjective decision influenced by the socio-economic position of a person or group.

As Bourdieu points out, education and distance from necessity frames attitudes toward food preference. Distance from the necessities of life allows for more economically secure Nicaraguans to experience a world that is less bounded by urgency to meet basic survival needs, such as food, water, and shelter. The goal of eating more vegetables as a diet diversification strategy in the larger food security and sovereignty project may not resonate with farmers more distant from meeting their basic economic necessities on a daily basis. Inherent in these identifiers of food choice are the pragmatic decisions influenced by daily food access and availability opportunities.

In this way, the capacity to conceive of form, or diet diversification, rather than function, having enough to eat, is dependent upon “a generalized capacity to neutralize ordinary urgencies and to bracket off practical ends, a durable inclination and aptitude for practice without a practical function” (Bourdieu 1979;1984:54). While diet diversification may be scientifically proven to reduce health problems, it is not a necessity for survival.

The disconnect between the increased vegetable consumption and local customs is felt by cooperative members. During an interview, a male respondent remarked:

"Today there really does not exist what existed before, at least we lived a more communicative life, a more communal way of life because today we are far from, of, of, say, a reality where we are using foreign things, outside philosophies... "

He went on...

"We should know our marimba, we ought to know our Nicaraguan music, the Güegüense [post-colonial folklore], well, a ton of things about our culture..."

The project team recognizes the divergent farmer diets as a challenge to the implementation of homegardens. They have facilitated workshops on homegardens and diet diversity as recounted by two different male participants:

We learned "... how to plant and most of all, as, like, like, how do you say, how to push ourselves, they see the necessity to take advantage of homegardens, how to raise awareness, that I myself see that its important because I've spent ten córdobas on carrots at the market when you have to make a meal...then having the potential in the land and also the support because we have never had these seeds..."

"... The training is more about...the made us see the importance, so coming from it you start thinking that its true, we see that we have things that sometimes we waste, for example, oranges, taro and so this was useful... some recipes, good practices to use in the field, how to do these things, soil conservation ... "

Even though the larger project design recognizes the local eating customs (Bacon 2011), the implementation of homegardens as a development strategy remains intertwined with the development discourse of the larger project. It not only relies on knowledge imported from the more “developed” countries but also requires the end product oriented, linear project trajectory that rarely allows for the messy process of community steered decision-making. The interaction where knowledge is transferred from NGO practitioners to farmers represents the generation and transmission of meaning from one group to another and is “perhaps the point where meaning and power touch most clearly” (Lind and Barham 2004; 1986: 158). In this way, power and meaning are always connected, “power... is never external to signification” (Lind and Barham 2004; Mintz 1995: 12).

Local understanding of what is considered food: beans, rice, corn, etc, is being shifted through an unequal power relationship with the NGO and second-level cooperatives promoting home garden implementation. In this sense, project leaders are attempting to bring more diverse vegetable consumption into what farmers as a social group consider edible. Farmers may assert control and decision-making over their eating habits in response to having diminutive power over symbolic meaning creation, a side effect of the diet change inherent with homegarden development.

However, a more diverse diet could easily be considered part of a community development agenda. Material and symbolic meanings that influence consumption habits are not stagnant but change in time and space. (Mintz1996). Food choice exists in a highly changeable and contextual world, though within certain limits imposed by

culture, including power relations, social institutions and hegemonic discourse (Lupton 1996). While we may locate group preference in social space based on their levels of capital as Boudieu (1984) and Caplan (1997) conceptualize, this does not entail a forever-impermeable construction.

How would we address a change toward a more healthy diet, increased nutrition and eating habits that are scientifically proven to prolong life? Especially in the context of a food sovereignty agenda that seeks a more dignified life for farmers. I argue that it is not only the way in which strategies such as homegardens are implemented but also the perspectives from which practitioners inform their actions.

For example, asking ‘why don’t farmers just change?’ points the finger at individual farmers without paying credence to larger social processes and uncontrollable structural influences. A model based on this question fails to address the key determinants in food access and security: employment and wages, food prices, land tenure, and market structures (Wheeler 1986). It does not appreciate how farming decisions, marketing strategies, income- generating activities and structures of authority interrelate and are demonstrated in consumptive decisions. The assumption here is that if farmers only knew what to do, they would be able to deploy existing resources (time, labor, fuel, case, food) to feed their families better (Wheeler 1986: 135). Farmers are then blamed for the end result of processes over which they have little control.

It is important to consider under what circumstances people accept new food for reasons not necessarily of their own choosing as well as how people create new consumption situations endowed with new meaning they have engineered (Mintz

1996:17). In this case, the right ecological and political conditions may create an opening for a new food or nutritional pattern as well as a reason for abandoning the old. For example, in terms of homegardens, farmers may deem diet diversity and not spending money on vegetables at the market plausible motivations for altering their production and consumption habits.

Recommendations: Moving *adelante*

Successfully developing homegardens depends on taking concrete actions against dominant discourses of development. We need to understand what level of participation in the international market is compatible with farmer conceptualization of food sovereignty and find methods for effectively improving farmers' diets so they have the opportunity to live a more dignified life. I argue that if homegardens were carried out in concert with a food sovereignty agenda, they would be more widely adopted by Segovian communities.

Below I propose short and long term strategies for meeting the project goal of food sovereignty. I use an analytical backdrop that includes an analysis at multiple scales, the actors at each scale and the relationships between scales (Brown and Purcell 2012) under the umbrella of a counter development philosophy (Galjart 1981; Ace and Long 2000). Counter development is the implementation of strategic actions counter to dominant development thinking and trends (Ace and Long 2000).

I recommend working toward dismantling development discourse but without proposing the popular post-development 'solution' of starting a social movement. I also

debunk the idea that ‘localization’, or transferring all the power and decision-making to the local level, will solve decades of problematic top-down development.

As complementary to the work and strategies already being implemented by the project management team and in the spirit of counter development, I suggest that farmers be engaged in a process to envision the trajectory of food sovereignty. This includes participation in problem definition in lieu of projects showing up with pre-determined goals decided by NGOs and funders. Convening Segovian farmers to conceptualize their vision and the path for achieving a more dignified life would be a crucial community process. Next, homegardens are not a new phenomenon to the region in the research sample. Past development projects have attempted with varying successes to work with some of the sample communities on the development of homegardens. Before entering and beginning the project, I recommend including prior research of past homegarden projects in the community as one of the preliminary steps in project execution.

Next, if food sovereignty is taken on by farming communities as a long-term course of action, it may make sense to link up with other global farmers. Finally, as an overarching methodology, the project may wish to build in more farmer-to-farmer exchanges as an emancipatory method that facilitates sharing of farming practices and healthier eating habits between community members.

A framework for moving forward: Situating social movements and localization as strategies for dismantling development discourse

As discussed in previous chapters, development discourse can be observed in the customary forms of communication and interaction between farmers and

practitioners that perpetuate the top-down nature of intervention strategies. Farmer - practitioner interactions are also lodged into the larger bureaucratic structures and methods that contribute, in part, to suppressed farmer agents. Instead of changing habits and adapting to NGO implemented development strategies such as homegardens, farmers resist externally directed interventions that may be donor driven. At the same time, practitioners often reference the value behind sustainable development projects as 'empowerment' of local populations. There are no real shifts in power from interventions when the original principles of food sovereignty are subordinated to the exigencies of aid agencies and their numeric measures of performance.

For farmer organizations to fully reach their potential and contribute to meaningful development, the aid system needs to be turned on its head. Instead of farmers and their organizations remaining at the bottom of the aid string, a movement should take place such that "socially embedded and trusted methods and rules of mutual support amongst people who are poor become a normative guide and measure for donor practice" (Wilkinson-Maposa 2009). I discuss this more below.

In some cases, social movement activities offer a promising approach to dismantle structural development discourses by opening space for agency and autonomy (Escobar 1992; McMichael and Healey 2005; Desmarias 2007). In particular, food movements can play a radical role in creating change by driving the social transformations needed to ensure broader systemic changes (Holt-Gimenez and Shattuck 2011). Scholars and activists in support of La Via Campesina argue that

peasant movements are at the forefront of change to the dominant development paradigm. But from this post-development standpoint, NGOs are spirited away in parallel with the demise of developmentalism. Dismantling of NGOs and their discontents are seen as the only solution to the Western- Northern hegemony implicit in development projects. From this standpoint, social movements are seen as the only way to break free of development discourse and achieve food sovereignty. This makes for an interesting and challenging case considering that while food sovereignty arose from a social movement agenda, the very development discourse forces that it hoped to deconstruct now harness it's vision.

In the case in northern Nicaragua, it's clear that NGOs and development projects *aren't* going anywhere, anytime soon. There is little evidence of current or burgeoning overt social movement activity in the Segovias and we continue to have both NGOs and their discontents. Including NGOs in a social movement agenda will require some very innovative tactics. I encourage what anthropologists reference as counter development strategies (Galjart 1995; Acre and Long 2000). A focus on counter-development helps to avoid viewing development simply as geographical and administrative processes of incorporation. In counter development, the main role of external donors should not be that of managing the uncertainties of development projects but that of supporting the exercise of political pressure on local governments (Galjart 1995). Counter development is thus a balancing act between introduced bureaucratic procedures and local practices. Counter development strategies could equally be cited as the bases of collaborations with social movements but I would like to take a different, less 'sexy' direction.

The challenges of working with NGOs: important decisions not made within the community context, and the weight of development discourse on the sustainability of development projects, it seems natural to solve these problems by putting the decision-making around homegardens in the hands of local families. It could be argued that organization, policies, and action at the local scale are inherently more likely to have desired effects (Chambers 1994; Otero 2004). By empowering local organizations and actors, decision-making and participation at the community level have the potential for nipping dominant development discourses in the be-hind.

However, plenty of research has shown the lofty list of pitfalls, often referred to as the 'local trap', associated with such a misconception (Bebbington, 1995, 1996; Mohan and Stokke 2000; Herring 2001; Myers 2002). One problem is to essentialize and romanticize the local as the answer to development discourse. Romanticizing the local underplays both local inequalities and power relations as well as national and transnational economic and political forces (Mohan and Stokke 2000). Other studies show the absence of long-lasting structural change since government is not held accountable. Case studies frequently present instances in which greater local control did not lead to greater sustainability or justice (Schroeder 1999a,b; Hall 2000; Hecht 1994). So how can we support counter development tendencies for this food security and sovereignty project without falling into the local trap?

NGOs are well positioned to participate in a way that engages with the underlying processes of development. I would suggest NGOs not just involve farmers in the political process through facilitation of *assembleas* and surveys but employ counter

development strategies to transform and democratize the process of planned intervention itself. Social movements strive for structural changes on a national and international scale but the NGO capacity is currently only receptive to more minor tweaks at the community and institutional scale. I argue that the paradox of the NGO – social movement project is a unique circumstance that can be turned around as an *opportunity* for NGOs, practitioners, and farmers to work in mutually beneficial relationships. That is, if all are willing to participate in collaboratively defined, regional conceptualizations of food sovereignty.

Imperative to this move is humbly acknowledging up front the uncertain outcomes of our actions (Gibson-Graham 2010) a particularly challenging request when funders have already approved budgets and objectives prior to community involvement. Drawing from a post-development approach “starts from a standpoint of not knowing with respect to how to move forward, allowing both normative and practical visions to emerge from the local or regional context” (Gibson-Graham 2010).

Below I offer some concrete ways to start this trajectory through a counter-development process of change within the development agendas themselves.

1) Farmer cooperative involvement with food sovereignty envisioning and problem definition in a way that allows for shared accountability

Facilitating a process of problem definition would be a great compliment to the already participatory action plans, or *planes de acción*, developed through *assembleas* at each of the 19 cooperatives. During the action plan meetings, cooperative members

gathered to brainstorm project strategies, such as the homegarden, that they would be interested in implementing in the move toward addressing the 'thin months'. The notions of participation in problem analysis and solution finding combined with a people-centered approach goes beyond people's 'participation' and seeks to develop 'capacity to exert authority over their own lives and futures' and promotes a 'strongly developed civil society ... in which the power of the state, of capital and of transnational capital and transnational "aid" organizations, is held in balance by a plethora of competent, independent and self-reflective community-based and non-governmental organizations' (CDRA 1999; Kaplan 1996; Yachkaschi 2009).

If the project looks to move toward food sovereignty, farmers and practitioners have diverse skill sets that are invaluable if joined through an inclusive envisioning and problem definition process. Through this strategy, power can be shared in a way that allows both local and practitioner knowledge to compliment each other in lieu of arriving in communities with pre-determined goals for projects that may be unknown to recipients. Effective development calls for the 'ownership' of processes of change by those who will embody them in the future. However, the power asymmetry of donor–recipient relationships has negative implications for a capacity-development intervention because it often leads to a lack of ownership (Yachkaschi 2009).

Often participatory processes such as this are not realistic for small budget funding cycles. Of course NGOs and international researchers are working within the dominant funder-driven, bureaucratic-ridden world that inevitably demands an end product, time line and general linear methodology that clashes with more circular

conceptions of time and space in the *campo*. But any funder that purports to want to work with farmers toward food sovereignty would need to allow for practices of autonomy to take place and it may be the NGO's role to pressure them, or educate funders on how this would work. This may happen in a meeting with all scales of participation and after the food sovereignty envisioning session.

This may translate into longer funding cycles, perhaps less quantity of dollars over a longer period of time, stretching out and decentralizing funding. In terms of funding organisms that would support food sovereignty agendas, organizations such as Grassroots International currently support alternative social change processes, such as La Via Campesina and The Landless Workers Movement (MST) in Brazil. These peasant organizations are carrying out long-term processes of social change at both the policy and local levels. Practitioners and NGOs may wish to further research their funding mechanisms to understand how they manage alternatives to the dominant development paradigm.

It's worth addressing the commonly held assumption that NGOs should be working with the state to strengthen national mechanisms to address food policy. In recent research, scholars are directing NGOs to hold governments accountable as well as being sourced as governmental contractors to purportedly more effectively provide services to the people (Bebbington and Farrington 1992; 1993; Ewig 1999; Mitlin 2007). In many cases this is certainly a direction development organizations might take to encourage longer-lasting structural changes. For many NGOs and development agenda, however, this is a farfetched request. Many research NGOs, namely those that

might align with more radical/transformational agendas do not have the resources or audience to work at the high levels of government. This limits access to governments to large scale, foreign government run, and less transformational aid organizations.

2.) Prior research of past projects in the region

Homegardens are not new to the areas in the research sample, past development projects have attempted with varying successes to work with the community on the development of homegardens. Indeed, during the interviews respondents pointed out the need to improve on past homegarden projects. Before entering and beginning the project, I recommend including prior research of these past projects as one of the preliminary steps in project sequence. This will combat against repeating similar mistakes and offer a valuable 'lay of the land'. It will also work in favor of gaining legitimacy with local participants. After decades of failed and mismanaged development projects, community members are more likely to invest in well researched and improved homegarden strategies. In the end this will save both resources, time, and reduce disillusionment from project recipients.

3.) Farmer-to-Farmer methodologies, or Programa Campesina a Campesina (PCaC), as a social process method for farmers to share their expertise on developing and maintaining homegardens

The food security and sovereignty project currently works with *promotores* as an integral position in the carrying out of plans. PCaC has also been involved on the periphery and I encourage finding strategies for more involvement of PCaC networks

and methodologies. This could benefit the sharing of homegarden development and maintenance practices as well as dissemination of healthy eating habits.

PCaC uses a popular education methodology where participants share new solutions or rediscovered older traditional solutions to common problems (Holt-Gimenez 2006). This may help in addressing development discourse since farmers are more likely to believe and emulate a fellow farmer who is successfully using a given alternative on their own farm than they are to take the word of an agronomist of possibly urban origin. Additionally, Nicaragua has a unique history that may not be conducive to the igniting of social movement that requires radical, overt displays of agency. Many farmers still talk about the revolution that continues in the memories of lost family members and impoverished livelihoods. PCaC may be a more acceptable social methodology.

PCaC is a participatory method aiming to address local peasant needs and respect the regional culture and environmental conditions. This takes place by recognizing, taking advantage of, and socializing the rich pool of family and community agricultural knowledge which is linked to their specific historical conditions and identities (Rossett et al 2011). On the ground this method translates to farmer-led workshops where farmers learn from each other on their farms, once seeing a method from a fellow farmer, farmers may be more likely to emulate the practice.

In terms of the food security and sovereignty project, working with PCaC may be a more effective way to harness farmer's experiences with homegardens to share with others that are not as familiar with the practices.

4.) International and global: linking up with the global food sovereignty movement?

Finally, if food sovereignty is to be a vision for the project, and after convening Segovian farmers to conceptualize their vision and the path for achieving a more dignified life, participants may want to link up with other farmers with similar ideas. Not in the sense of “joining the movement” and hitting the streets in protest, per se. Instead, I suggest an international conference or gathering where other farmers are similarly defining their own food sovereignty vision. While NGOs may play a role in facilitating this event, they would not be presenting or be the focus. The cooperatives might benefit from the option of joining with other farmers on a similar path. This is not to say that it is the best move for the cooperatives but it’s worth deciding if it’s something they might benefit from in the long-term.

Conclusion

Farmers have valid and practical reasons for their livelihood decisions yet dominant development discourse may keep their preferences from being seen or heard. Decades of coexistence with the politics and history of international development projects directed by outsiders represents an important historical context that must be addressed for a successful food sovereignty strategy.

Current practices in the sample population rely on a combination of subsistence and market participation. In contrast to the widely referenced characterization of re-peasantization, a food sovereignty agenda does not see complete subsistence as a requisite but instead states that people should be able to choose their level of integration into international trade markets. What if farmers decide they are not

interested in maintaining homegardens as part of their food sovereignty vision? Could they still be considered food sovereign? This contradiction inherent in the food sovereignty vision challenges regionally defined agendas against food sovereignty as development strategies but needs to be addressed for successful implementation of homegardens.

Farmer consumption habits have been shaped historically and symbolically by national identities and lifestyles. Traditional food staples such as corn, beans, and coffee resonate strongly with local practices and ways of knowing in contrast to a diversity of vegetables, which is not considered distinctly Nicaraguan. Practitioners attempt to move farmers to a more healthy and diverse diet but are confronted with deep-rooted customs that is viewed as slipping away through international interventions.

Customs and culture do not stand alone in shaping eating preferences. Farmers may be more concerned with material and practical concerns such as simply having enough to eat. The luxury of eating a diversified diet may prove more nutritionally rich but is not necessary for survival.

These challenges to the adoption of homegardens are also challenges to a food sovereignty agenda. In policy and theory, homegardens are aligned with food sovereignty principles as long as they are part of regional definitions of food sovereignty. It remains unclear if farmers in the Segovias are interested in such a dismantling of their current food system, whether it means withdrawing from the market or a change in food consumption habits.

CHAPTER 6

CONCLUSION

We find ourselves at an interesting moment in time for making change in the food system. Governance at the international policy level shows promising movement for structural changes in the methods we use for defining and measuring food security. Historically a modernist project, food security initiatives often disregarded local ways of knowing and promoted economic development through a combination of mono-cropping as well as pesticide use and export-centric development since. In this model, development organizations identified quantity and availability as the problem. The modernist project has been replaced, at least in policy, by a more holistic vision of food security that includes an integration of both socio-economic and biophysical systems and does not disregard the web of social, economic, political, and ecological conditions that impact people's capability to achieve food security (Pottier 1999; Erickson et al 2010; HLPE 2012). Researchers' and communities widespread discontent with modernist food security initiatives has finally lead to new conceptualizations that include human rights and justice as integral aspects of a humanized trade system. Food sovereignty and the Right to Food have notably been taken on by the UN and the largest international farmer's movement the world has seen, La Via Campesina. Movements toward a new food system are taking shape and we are lucky to be involved at this innovative moment.

Right to Food policies offer a promising aggregation of, on the one hand, a more widely accepted normative agenda and on the other voices from social movement

interests. The Civil Society Mechanism (CSM) is an institutional mechanism that integrates voices such as the Via Campesina into international food policy. However, the RtAF policies face challenges of implementation and enforcement. The FAO is a complex institution that also continues to support neoliberal policies, leaving the actualization of RtAF policies in question. Nevertheless, RtAF is the most current and perceived as one of the most radical food policies to come out of the UN to date.

More translation of policy into practice is needed that effectively carries out without perpetuating development discourse. This study challenges policy makers to move beyond recommendations and suggestions into a process of figuring out how to integrate pedagogy into the food security, sovereignty, and RtAF agendas. This would include drawing on culturally diverse theories about how we think about the realization of agroecology and adaptation strategies for resource management. For example, various reports mentioned throughout this thesis have outlined action steps for capacity building. What non-oppressive pedagogy may be appropriate for working in culturally different contexts? How can we think about concrete solutions while considering the realities of implementation? Creating solutions while considering the realities of implementation has been a role for the CSM in the Right to Food discussions (Duncan and Barling 2012); it will be interesting to see if CSM translates into more effective on the ground change.

During the writing of this thesis, social movements were celebrating what they consider a “historic achievement”: the Food and Agriculture Organization of the United Nations, or FAO, agreed to begin discussions about food sovereignty, rather than food

security, the latter of which currently dominates the organization's agenda (Nicastro 2012). The change came as a result of the participation of social movements in the FAO's Thirty-Second Regional Conference for Latin America and the Caribbean, held in Buenos Aires in March 2012.

The movements demanded a "guarantee of the inclusion of civil society's position in multi-sectoral consultations, especially within a global strategic framework that includes food sovereignty as the most important demand of social movements and as a guiding principle of this framework" (Nicastro 2012). No mention was made of the recently discussed RtAF policies.

The focus of this study has been on food sovereignty discourse since the larger project aims to work toward this agenda with the Nicaraguan Segovian communities. This is an opportune time to evaluate strategies such as homegardens in light of food sovereignty now that the first few years of the project have passed. Mistakes to learn from have been made and successes have been measured. Since a systematic, formal conceptualization of food sovereignty developed from the community level does not exist, I have drawn on principles developed at the policy level by La Via Campesina.

Local and subsistence food production through homegardens offers one way to have more control over one's food system. Homegardens not only have the potential to increase access and availability to diverse foods; they might also provide important supplementary incomes alongside stable socio-economic products and benefits to the families that maintain them (Ninez 1987). But these benefits will vary by region. Some farmers interviewed for this study saw homegardens as not viable without gifted seeds

and more lucrative markets. Seeds are quite unaffordable in Nicaragua and the cost of transportation to the market coupled with the low price paid for vegetables means that any extra income is uncertain. It may be that farmers perceive gardens as not providing sufficient tangible benefits to invest their already scarce resources.

When considering a food sovereignty agenda, subsistence farming is often mistaken as synonymous with being food sovereign. Peasant studies literature often over politicizes and essentializes the actually very complex and holistic concept of re-peasantization (Van der Ploeg 2010). This becomes problematic when it shows up in international and NGO policies as the solution to having more control and agency in a food system. Homegardens are not necessarily synonymous with political engagement with the food system, particularly when implemented by development organizations. It may paint an inaccurate picture of rural livelihoods and produce development strategies that are not aligned with local preferences.

The third and final challenge to homegarden implementation is the implied change in food consumption habits. Both the symbolic and material values make consumption habit change through homegardens difficult. Food preference is more than ideas about what food is edible and desirable; it's linked to a larger lifestyle. It's not just about food—food is connected to how people relate to each other, how they engage in livelihood strategies, how they see their aspirations for the future. The implementation of homegardens challenges these norms.

In sum, ideal type homegardens have strong potential to be aligned with a food sovereignty agenda. When coupled with seed banks and community storage and

distribution centers, homegardens offer cooperatives/communities a method for determining their role and integration in local and global food systems. Localized food production offers people a concrete opportunity to have more control over food production and consumption, a more autonomous lifestyle where decisions can be made at the household and regional scale. Practitioners accompany a process of food sovereignty by facilitating participatory processes such as *assembleas* to build strategies around farmer preferences. Also, a diverse diet and healthy bodies contribute to a more dignified life. So, in some ways homegardens are part of a food sovereignty movement that calls for a redefinition of social relations and how we relate to food and the global agricultural market.

However, there is still a lot of work to be done. It is unclear if local and international NGOs will have the capacity to address the larger scale structural issues that food sovereignty aims to redefine. Since homegardens are part of a multi-pronged strategy to increase food security and sovereignty in the Segovias, it is possible the project will proceed on a sovereignty trajectory at the regional level. It's encouraging to consider that NGOs are working in conjunction with a multi-scalar movement. Even if the Segovia region is not officially member of farmer organizations such as La Via Campesina, international farmer organizations are nevertheless active at the policy level.

But as I have shown in this thesis, dominant discourses of development linger and need to be overcome if homegardens are to be considered a strategy aligned with food sovereignty. The challenges of NGOs carrying out a social movement agenda have

been clearly laid out through an analysis of development discourse and its implication on project strategies and interactions between practitioners and farmers. The structurally embedded characteristics of development discourse show that farmer preference is veiled by the very normative procedures that a food sovereignty agenda paradoxically aim to deconstruct. Once we start exhibiting continuous overt farmer agency, we will know that some structural changes are taking place, or that dominant discourses of development are being laid to rest.

I argue that this is a contradiction but also a unique circumstance that can be turned around as an opportunity for NGOs, practitioners, and farmers to work in mutually beneficial relationships. If all are willing to participate in collaboratively defining their regional conceptualizations of food sovereignty, the agenda can work as a tool to move forward with effective process-oriented community development. This could bring about change not only in farming communities but also within the NGOs themselves.

This may, however, be seen as out of line with social movement perspectives (McMichael and Healey 2005) which argue that peasant movements are at the forefront of change to the dominant development paradigm. This is where regional definitions of food sovereignty will guide the trajectory in northern Nicaragua.

For food sovereignty to begin to take form, strategies must work not only with farmer organizations but also within NGOs to deconstruct the discourses of modernist development that continue to linger. If overt social movement tactics are not taking shape in the region, perhaps the strategies I suggest will propel change from within the

institutions already present instead of promoting protest that may potentially lead to violence, a reality Nicaraguans are very familiar and perhaps resistant to repeat.

I have suggested some concrete strategies for the larger food security and sovereignty project: Farmer cooperative involvement with food sovereignty envisioning and problem definition, undertaking prior research of past projects in the region as part of project strategies, working with the farmer-to-farmer program (PCaC) and finally, the opportunity to participate in conferences and exchanges with other farmer groups. While these may not seem like larger changes to confront the structural challenges in the food system, they represent plausible action steps for NGOs with small budgets and minute influence on the state. In the previous chapter I showed that for NGOs to attempt a social movement agenda will require some very innovative tactics. I encourage use of counter-development strategies (Galjart 1995; Acre and Long 2000) such as those that account for diverse contexts and contested realities. They are implemented through the transformation in development policy and practice, diverse forms of livelihood and experience, differentiated institutional and power domains, or local and regional spaces of production, distribution and consumption (Acre and Long 2000). Counter development actions suggest that NGOs take on a role that transforms and democratizes the process of development and its discourses.

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APPENDIX 1: INTERVIEW SCHEDULE

Guía para entrevista

Nombre del Entrevistado/a:

Introducción:

- Definir claramente los objetivos y temas del estudio y la entrevista: seguimiento al diagnóstico, ver el patio
- Pregunta principal: **¿Por qué los hogares en dos cooperativas similares en el mismo municipio reportó una cantidad diferente de meses escaseces?**
- Quiero recordarle el propósito de este cuestionario (tesis académica/ seguimiento proyecto seguridad alimentaria)
- También le recuerdo que no hay preguntas correctas o erróneas
- **revisar carta de ética con entrevistada/o y pedir permiso para grabar la conversación**
- Gracias por ofrecer su tiempo para responder a estas preguntas

Introducciones:

- 1.) ¿Me puede decir cuánto tiempo ha vivido en la comunidad y en esta tierra?
¿Cómo ha sido el clima este año?
¿Cómo le parece la cosecha este año?
- 2.) Como y cuando llegó Ud. en esta comunidad?
- 3.) Y sus padres, recuerdan que hacían sus padres anteriormente cuando era pequeña? Donde vivían?

Huertos del patio

- ¿Usted cuenta con un patio donde aprovechen alimentos para consumo?

Si - ¿Me lo pueda enseñar?

No – ¿donde siembran los granos básicos y/o hortalizas? Pagina 4

3.) Asunto: entender como decidieron iniciar el huerto del patio y su historia personal de aprendizaje en cuanto a su manejo
¿Cómo decidieron comenzar el huerto del patio?

Seguimiento:

- ¿Cómo aprendió a manejar su huerto casero? (¿Cuándo, quien y por que?)
- ¿Usted o alguno de la familia ha aprendido sobre el manejo del huerto de otras personas u organizaciones?(familiares, vecinos, ONG, etc...)
- ¿Cómo deciden que plantas, arboles, etc van a sembrar?
- ¿De dónde obtiene las semillas para los cultivos?
- ¿Le brindaron apoyo las organizaciones o familiares? (vecinos, ONG, etc...)
- ¿Ha sido útil su ayuda?

- 4.) ¿Cuales son los productos/beneficios principales de su huerto casero, y su destino de uso?
- ¿Cuanto es para consumo propio y cuanto se vende?
 - ¿Adonde se vende?
 - ¿Almacenan parte de la cosecha del patio?
 - ¿Más o menos cuanto le genera el huerto de patio por año?

- 5.) ¿Quienes dedican tiempo al cuidado del huerto y qué tipo de trabajo hacen ?

Futuro del huerto

Asunto: Entender sus planes y esperanzas para su huerto. Que tipos de valores vean en los productos y el espacio dedicado al huerto... puede ser que tenga valores aparte del valor económico y de alimentación.

- 6.) Como ve el futuro del huerto?

- Seguimiento: ¿En su experiencia, cuales son los productos/beneficios principales de su huerto casero para Usted y su familia?
- ¿Integra la familia en el trabajo del patio?
 - ¿Cree que es viable en el largo plazo?
 - ¿Que planes tiene para el huerto de patio?
 - ¿Que le gustaría cambiar o mejorar en su huerto de patio en el futuro?

7.) ¿Qué valor tiene el huerto para Usted y su familia?

1=mínimo 2=bajo 3=medio 4=alto

A. Medida de Interés en el uso y manejo del huerto 1 2 3 4

B. Medida de la Necesidad en el uso y manejo del huerto
1 2 3 4

C. Medida de Manejo general del huerto casero 1 2 3 4

****Preguntas para los que no tienen patio**

Asunto:

- averiguar si han tenido proyecto enfocada en los huertos en el pasado
- antecedentes de la siembra de hortalizas en la familia y comunidad
- tratar de ver las razones culturales que no comen hortalizas
- si deseara sembrar hortalizas, por que y como pensara que lo pueda lograr?
 - o Como es su visión para el huerto? Que sembrarían?
- Que es la historia del aprendizaje en cuanto a su conocimiento de manjar su finca/huerto?
 - o Como aprendieron sembrar y mantener su finca (y las hortalizas). Apoyo técnico, familiares, organizaciones... ¿??

8.) ¿Se acuerda cuando sus padres cosecharon alimentos del patio? ¿por que ya no lo hace usted?
¿que necesitan para hacerlo?

Empoderamiento

- Participación en la comunidad:

- entender como opina del trabajo colectivo y participación en la toma de decisiones

9.) ¿Participa usted en la toma de decisiones de su Comunidad? ¿Cómo?
¿Cómo participa la familia en la cooperativa?

¿Pertenece a alguna comisión en la cooperativa?
¿Cómo se involucra la mujer en las actividades de cooperativa?

10.) ¿Además de ser socio de PRODECOOP a que otras organizaciones, programas, instituciones o grupos pertenecen?
Tratar de entender su opinión del trabajo colectivo

11.) ¿Podría usted describir el trabajo de la mujer dentro y fuera de la familia?
¿Quien cultiva los alimentos, quien hace las compras, quien prepara y quien almacena los alimentos?

12.) Cual es su visión personal o meta en su futuro?

13.) Cuales son sus esperanzas para el futuro de su familia?

14.) Ingreso económico mensual y si tiene un ingreso extra?

15.) cuales son los meses mas difíciles para la familia? Por que o cual es la causa?

16.) ¿Qué se debería de hacer para solucionar el problema de la escasez de alimentos en las épocas mas criticas?

¿No sé si tiene alguna pregunta, usted tiene alguna pregunta para nosotros, alguna duda, inquietud? quiero agradecerle por su tiempo y por habernos contestado todas las preguntas que hicimos