SOWING THE SEEDS OF TRANSFORMATION IN THE COLOMBIAN ANDES: FROM HUERTA (HOME GARDEN) TO HEART

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ABSTRACT OF THE DISSERTATION

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Dissertation Director: Robin Leichenko

The concept of deliberate transformation draws attention to actions aimed at addressing the drivers and vulnerabilities of climate change, while supporting equitable pathways towards sustainability. While the need for deliberate transformation is widely accepted, many questions remain about the conditions that foster and enable individual and collective engagement in the process. This study explores how deliberate transformation occurs through the adoption of agroecological practices by small-scale farmers, and the solidarity economies that emerge within Alternative Food Networks (AFNs) in the Bogotá-Region of Colombia (Colombian Andes). Relying on ethnographic methods, the study reveals how deliberate transformation manifests through everyday practices and interactions between farmers and their agroecological huertas (home gardens), as well as in the relationships and interaction spaces that emerge within Alternative Food Networks. The findings suggest that the huerta is "ground zero" for emerging agroecological food initiatives among small farmers in the Colombian Andes: it is the place where new openings, new learning, and new interactions begin for farmers, and it is also fertile ground for memories, re-connection, re-engagement with familial and ancestral cultivation practices. Above all, the huerta allows farmers to see their lives and actions from different perspectives, providing the key 'spark' for engagement with transformation. By exploring the origin stories of numerous *huertas* and of the actors behind them, this study illuminates the motivations, emotions, and practices that are inspiring individual and collective engagement with transformation toward a more dignified co-existence and improved life for Andean farmers. Also, the results of the study show, the potential of AFNs to lead the profound political and social changes that local food systems need.

This study demonstrates that everyday spaces of production, distribution and consumption, can reinvigorate micro-politics, as communities of affinity woven networks. As suggested by Silvia Rivera Cusicanqui (2018), micro-politics is below the radar of politics and works on small collectives and their actions, to allow spaces of freedom (or well-being in the case this study) to flourish. Rivera Cusicanqui talks about the importance of re-politicizing everyday life, whether in the kitchen or in the huerta. The latter, to generate spaces where the norms and values of coexistence, redistribution, and collective and individual action are settled (Rivera Cusicanqui, 2018). While there will always be the question of scale, it is nonetheless important to value the potential of "the small" and the plural, which enable actions and solutions that can collectively have a planetary dimension. As such, this study shows possible expressions of transformation towards sustainability from the daily production of agroecological food in the Bogotá-Region.

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Chapter 1. Urgent narratives for hope

We are living in a transformational space-time. Andean Aymara indigenous people refer to this particular kind of space-time Pachakutiq, when referring to a convergence of great change in the social, environmental, or political order (Rivera Cusicanqui, 2018). Today, we are going through one of said *Pachakutiq* convergences, which permeates the course of our days and lives. We are facing multiple crises that are transforming our world. Scholars, international politicians and members of civil society are calling for a debate on the systemic crisis of humanity, which is sometimes tinged with lethal signs and apocalyptic tones (Leff, 2020). Ecological collapse, climate change, socio-environmental conflicts and the downfall of civilization occupy political debates in the face of the sixth mass extinction (Kolbert, 2014). "Everything announces the hour of the Final Judgment, before that of Social Justice on this devastated Earth" (Leff, 2020, p. 2). David Korten (2015), when talking about crises, says that "when we get our story wrong, we get our future wrong" (Korten, 2015, p. 28). Then, how can we create a new story? Korten (2015) emphasizes the importance of creating stories that move society and the whole planet towards sustainability. Silvia Rivera-Cusicanqui (2018) agrees with this statement and states that we need to change our story in order to change our future, but she warns us against the need for a homogenized future, arguing that we need different stories of dignified and sustainable futures. I believe that in the midst of this scenario, a sense of urgency is required to tell life stories that bring us glimmers of hope. The stories and experiences around agroecology that make part of this study are real, concrete, and tangible examples of how farmers and communities in the Bogotá-Region in the Colombian Andes have been transforming the local food supply systems. One of the objectives of this study

is to recognize how these stories allude to ways of good living and manifest the need to generate favorable conditions so that every being in the Bogotá-Region can enjoy a healthy environment, fair treatment, and healthy human and ecological structures. These examples are also expressions of political exercises towards protecting life.

Environmental, social, and now epidemiological crises sometimes lead us to engage with apocalyptic language and belief, leaving little room for hope. That is why in this dissertation I explore other languages and beliefs that enable us to think in terms of the transformations that we need in this time of crisis. There is no unique path to transformation, since even as a concept and process, it is plural and diverse. Although transformative processes tend to be convoluted and messy, I believe that they hold the key to a more just and sustainable future. In this dissertation I tell the stories of some of those processes of transformation, that start within the agroecological huertas in the majestic mountains of the Andes and the fertile soils of the Bogotá-Region (See Figure 3.2, Figure **3.3, Figure 3.4).** The *huerta* is a plot of land where farmers grow and experiment with different crops such as vegetables and fruits. Traditionally, the *huerta* is near the house and its size varies within farms. It is often the place where agroecology is born, by allowing individuals and communities to imagine different and better possible futures. All these stories are in the making, tales of continuous and imperfect processes of transformation where their protagonists have to overcome multiple barriers and challenges.

Small-scale farmers in the Global South are expected to be among the most vulnerable food producers in the near future. As the effects of climate change become more real around the world, agriculture, food sovereignty and food autonomy, and farming communities are at particularly high risk from its impacts (Escobar et al., 2019). More than

bringing new vulnerabilities, rapid environmental changes will exacerbate problems that farmers are already facing. In the case of Colombia, farmers have had to deal with some effects of the economic globalization as the market volatility and trade liberalization, converging with other longstanding stressors as the concentration of private property, the commoditization of land, the expansion of industrial agriculture, armed conflict, and land degradation (Camargo, 2014, 2014; Feola et al., 2014; Rueda & Lambin, 2013). Colombia has prioritized extractivism as a developmental model that threatens the territories and peoples that have historically produced food and the forests that preserve the country's natural wealth. Indigenous, Afro-Colombian, and peasant territories are being razed to make way for the mining and oil industries (Ruiz-Soto, 2013). Also, agro-industrial crops are advancing (such as sugar cane, oil palm, transgenic cotton, flowers, to mention only a few), all of them with exporting purposes, including the significant advance of agrofuels (Fajardo-Montaña, 2002). Likewise, livestock continues to gain ground in the forests that protect biodiversity and guarantee the water cycle. This agricultural model is linked to economic policies implemented by the world's decision-making centers and has resulted in farmers' and food security's vulnerability (Fajardo-Montaña, 2014; Roa-Avendaño et al., 2010). For this reason, the Colombian countryside has undergone important transformations in the last five decades. On the one hand, the land property is concentrated. The regime that regulates it has changed profoundly, favored by the precariousness of the peasant population's titles and the monopoly that landowners have established on the best lands (Fajardo-Montaña, 2002). There is a regressive tendency of transitory crops with evidence of a strengthening of those with a long cycle, due to both the factors mentioned above and the fact that subsidies or state support are mainly oriented towards agroindustry,

to the detriment of the peasant economy (Roa-Avendaño et al., 2010). For this reason, in the different Colombian territories, diverse models of development and forms of inhabiting the countryside co-exist: (a) peasant forms to reproduce life, guarantee their existence, produce food (Sandoval-Rincón, 2010), (b) those capitalist forms for capital accumulation (Robledo, 2010).

In this context, the food issue is an opportunity, a strong reason to reconstitute the Colombian countryside. In this dissertation, I mainly explore agroecology as one of the ways to rescue the countryside transformed by conventional agriculture and the use of agrochemicals. Agroecology can also be the step to recover the link with the ancestors, reestablish the harmony with nature, and contribute to the affirmation of more solidarity and fairer forms of life (Sandoval-Rincón, 2010). It also seems to be an opportunity to undertake systematic (or deliberate) transformation (Giraldo, 2018; Leff, 2014; Leichenko & O'Brien, 2019). This dissertation explores alternative framings and beliefs than can enable the deliberate and positive transformations that are needed during a period of overlapping crises. I focus, particularly, on agroecological processes among small-scale farmers in the Bogotá-Region as expressions of transformation in Latin America.

Inspirational dialogues that imagine new ways of living are frequent in the stories of those immersed in agroecological food initiatives, since agroecology can be a way to reimagine our relationship with life and how we inhabit the world. Within agroecological processes new relationships and connections emerge between farmers, consumers, other actors, and non-humans, transforming the old relationships established in the conventional food systems. It is an attempt to find agri-food alternatives where the different actors have started to talk about transformation as the co-creation of dignified ways of coexistence.

Although the new ways of inhabiting the Earth through our relationship with food production, distribution and consumption are not linear and usually emerge in messy ways, they shed light on our potential to transform realities through the opportunities that lay within them.

Understanding how agroecology is experienced and situated in different contexts has allowed me to explore diverse processes of deliberative and empirical transformation, seeking to answer three main questions: a) What motivates farmers to undertake agroecology? b) What are the practical enabling factors and farmers' actions that support and facilitate agroecology, and to what extent agroecological practices foster transformation in the Bogotá-Region? And c) How do farmers' and other actors' motivations and practices around agroecology contribute to wider political change? By answering these questions, I aim to contribute to the discussion about the challenges and opportunities of the "how" of transformation.

1.1 Key arguments

The overarching argument of this study is that small-scale farmers who are engaged in agroecology and connected with alternative food networks have the potential for deliberate transformation, that allows them to better prepare to face climatic and environmental challenges. The capacity for transformational change exists in small-scale farmers, and the initial moves towards transformation occur through personal motivation oriented toward more dignified and better ways of living. Said overarching argument is grounded in four intertwined lesser arguments (**Table 1.1**), that take into account the three spheres of transformation (O'Brien, 2012; O'Brien & Sygna, 2013) (personal, practical and

political—explained in Chapter 2) and production, distribution and consumption in alternative food networks:

- 1) The motivation to have a better life is the first seed to start and persist cultivating agroecological transformation processes.
- 2) Motivations for adopting agroecology are materialized in practices whose ethical coordinates are based on care and connection with the other. The latter emerges from the relationship that farmers establish with humans and non-humans in the *huerta* through agroecological practices. Careful and connected practices allow them to begin to sprout actions of change, and to propagate them by connecting with other farmers through collective actions and in alternative food networks.
- 3) Collectivity and collective action among farmers are ways to propagate and harvest the transformative processes that each member has experienced in their own farm. In turn, collectivity is an opportunity to support each other and generate synergies to address the challenges that arise from agricultural work. Likewise, the community is a space of deliberation to begin to weave the political actions regarding their work as farmers. It is also where identities are built based on the community and its diverse forms of economic activity.
- 4) Alternative food networks become a vehicle for connecting agroecological production with responsible and solidarity-based consumption. Agroecological food networks become spaces for sharing responsible practices between farmers, distributors, and consumers. At the same time, within these networks, political processes strengthen and scale up, legitimizing the processes of agroecological production as an alternative for rural development and local transformation that sustains the natural environment of the Bogotá-Region. It

also shows how promoting conscious and responsible consumption builds up new sustainability citizenships (Dobson, 2011) within agri-food territories.

Chapter 7. Chapter 4. Chapter 5. Chapter 6. Connecting the agroecological huerta to the table: weaving RESULTS CHAPTERS The agroecological huerta: sowing Sprouting actions of change through Propagating transformation: the seed of transformation agroecological practices collective action in agroecology transformation within food networks Alternative food networks become a vehicle for connecting agroecological Collectivity and collective action The motivation to have a better life is Motivations for adopting agroecology production with responsible and among farmers are ways to propagate the first seed to start and persist are materialized in practices whose solidarity-based consumption. MAIN ARGUMENT and harvest the transformative cultivating agroecological ethical coordinates are based on care Agroecological food networks become processes that each member has and connection with the other. transformation processes. spaces for sharing responsible experienced on their farm. practices between farmers, distributors PERSONAL SPHERE THREE SPHERES OF PRACTICAL SPHERE TRANSFORMATION POLITICAL SPHERE AGRI-FOOD CYCLES DISTRIBUTION WITHIN ALTERNATIVE FOOD HOME CONSUMPTION NETWORKS CONSUMPTION

Table 1.1. Results scheme

1.2 Background and motivations for the study

Although the epidemiological crisis was not a part of the framework of my research, I bring it up because it has highlighted the urgency for reimagining the hegemonic forms of development and the ways of inhabiting the planet. Today, different sectors of the different societies of our world must maintain and increase their efforts to face multiple crises, which will exacerbate long-standing social problems. Moreover, many of the lessons that can be drawn from this pandemic were already known by us, with the pandemic only making them more visible. One lesson is that we humans, among ourselves and with nature, are interdependent even when we are physically isolated. And a second one is that it is difficult to make decisions in the face of uncertainty. Still, it is better to prevent and generate the necessary changes to make our lives more resilient and adaptable.

This research project began with a particular interest in climate change and its impacts on food production. My interest in understanding how producers were experiencing climate changes started when I was working in a United Nations adaptation project in the mountainous region in the south of Colombia known as the Colombian Massif. The project's goal was to build collective strategies to support indigenous and peasants' communities to better adapt to rapid climate change. To identify relevant strategies, we had to go through the process of constructing a shared language that would enable us to engage with the indigenous people and peasants' understanding of climate change and adaptation. I remember them talking about the health of their territory, "we have health when we have harvests, food, access to water, social cohesion and autonomy in our production [...]", their main conception of adaptation was related to health, it was centered on the welfare of their entire territory, and therefore of their culture and their own lives. In short, if the territory is not healthy, only disaster can be expected when crisis such as climate change arrive, but if it is healthy it will be the best ally for communities to better respond to the challenges ahead.

For me it was vital to realize that we must emphasize the importance of the human dimensions of climate change, by analyzing perceptions and representations associated with climate, in order to understand and identify different ways to transform and adapt. Without implying that the ways in which peasants and indigenous people relate to their agroecosystems are the only alternatives, my research recognizes that these other ways may offer other knowledges and even other ontologies to live in a world permeated not only by economic but also climate uncertainty. Culturally, there are different ways to approach the relationship between knowledge and climate. In short, we can say that knowledge related

to climate addresses the following: a) conceptions from each culture about humans and non-humans; b) beings or entities that shape the non-human, c) sense of place, d) practices, e) ways of seeing and ways of knowing (Ulloa, 2013). For peasants the knowledge about climate is related to the agricultural calendars and the climatic cycles, on which they base their strategies for managing the immediate environment (Correa Casas, 2013; Murcia, 2013). For indigenous people, there are a variety of conceptions, but in general, the notion of reciprocity with the non-human is a key concept to understand how climate is related with all the elements of a territory (Henao & Farekatde Maribba, 2013).

Both peasants and indigenous, perceive adaptation as a way to re-imagine and reexist in their territories. Escobar (2008) explains how the concept of territory is articulated
with a "place-based framework linking history, culture, environment, and social life. This
conception resonates with academic frameworks in which nature and culture are seen as
interconnected in overlapping webs of humans and other beings, and communities are seen
as multiply located—they are simultaneously place-based and networked across places"
(Escobar, 2008, p. 62). Specifically, in the case of peasants and indigenous people we can
find that this interconnectedness between nature and culture is a characteristic of their
territory, because their survival feelings and knowledges depend on the immediate
environment. In that way, the territory is the aim of the peasants and indigenous
communities' struggle. Climate change will impact in different traditional territories, and
local knowledge will be pivotal to understanding how climate change is not only affecting
the environment, but also the relationships and reciprocities between the communities and
their cultures.

More than delving into perceptions of climate change, I wanted to go further into researching the perception of change and understanding how peasants in the Colombian Andes are responding to change and gaining active agency. I wanted to put aside the paralysis that comes with the apocalyptic discourse of climate change and embrace a more hopeful perspective by exploring some processes of transformation in the agroecological networks of Bogotá. I wanted to inquire about the motivations behind the processes of transformation, focusing mainly on agroecological processes that have been consolidating for some years. I was interested in understanding the motivations behind the agroecological movement and the practices that inspire individual and collective transformation toward a more dignified co-existence and improved lives of farmers in the Bogotá-Region. Here it was important to ask farmers, consumers, and food activists about their motivations and rationale to be a part of an agroecological movement, despite the challenges and difficulties of food production. I explored the how of transformation and the need to connect with the web of life that starts in the agroecological huertas, where the food production and stories of connection with the non-human begins.

1.3 Outline of dissertation and description of chapters

In the chapters to come, I first (Chapter Two) frame the study within literatures on agroecology, diverse food economies, and deliberate transformation. These three literatures give three different, but not necessarily exclusive, perspectives of transformation. They tend to dialogue, be interconnected and mutually reinforcing. By connecting these literatures, this dissertation aims to rethink the global food systems in a context of constant environmental and societal change. In Chapter Three, I present the study methodology and

an overview of the case study region. The remainder of the chapters are the main results obtained from the research.

Chapter Four explores farmers' motivations behind the decision to adopt agroecological practices. I show how personal (and collective) motivations can nurture the daily labor of growing food and the endeavor of thriving in a rural world full of environmental and social challenges. Motivation to have a better life is the first seed to start cultivating transformation processes from agroecology. Through *huertas*' and farmers' life stories, this chapter explores the motivations that can spark transformation, looking into the subjective and human dimensions of processes of change for farmers in the Bogotá-Region.

In Chapter Five, I address the practical sphere of transformation in terms of behavioral shifts through care practices among farmers that are involved in agroecological processes. This chapter looks in-depth at the materialization of the motivations for adopting agroecology (described in Chapter Four) through practices whose ethical coordinates are based on care and connection with other humans and non-humans. Care and connection practices allow farmers to begin to *sprout* actions of change and *propagate* them later by connecting with other farmers through collective action (Chapter Six), and with other actors through alternative food networks (Chapter Seven). The agroecological practices, in this chapter, focus on the everyday embodied work based on a new care paradigm that tends to ensure more sustainable farms.

In Chapter Six, I discuss how through collective action farmers propagate transformation processes that are based on care and on the connection that each member has experienced with their farm. This chapter shows how individual processes of

transformation grow stronger once farmers connect with other farmers through collectivity. Agroecological collectives are nourished from the personal motivations for adopting agroecology (described in Chapter Three), and also from on-farm practices and knowledge based on care and connection with other humans and non-humans (described in Chapter Four). Also, Chapter Six shows how the personal, practical, and political spheres of transformation are manifested within agroecological farmers' collectives.

As the last chapter of results, Chapter Seven presents the way farmers' networks and alliances have become more significant, making new connections, and scaling up their agroecological processes, practices, values, products through alternative food networks (AFN). It highlights how the AFN exemplify of other ways to understand the complex food flows between the countryside and the city, making explicit how peasant and farmers' agroecological initiatives, described in the previous chapters, have an essential role to play in the city's alternative food supply. Also, the configuration of these AFN allows us to understand how the city of Bogotá connects with its rural environment creating agri-food territories that differ from conventional ones. Finally, Chapter Eight summarizes the main arguments of the dissertation and identifies its theoretical contributions. This chapter returns to the research questions, bringing together insights from the result chapters and suggesting why agroecology offers recommendations for moving towards the possible transformation local agri-food systems and thereby the transformation of farmers' livelihoods.

Chapter 2. Agroecology as a path of transformative care

In this chapter I provide an overview of the literature that this study draws on. The climate, environmental, social and now epidemiological crises are forcing us to think about transformation. Particularly in terms of food, the report 'Food in the Anthropocene' (2019) pointed out that the food we eat, how we produce it, and the amount of food we waste have major impacts on environmental sustainability and human health. Regarding these concerns, the authors state that "a radical transformation of the global food system is urgently needed. Without action, the world risks failing to meet the UN Sustainable Development Goals (SDGs) and the Paris Agreement, and today's children will inherit a planet that has been severely degraded and where much of the population will increasingly suffer from malnutrition and preventable disease" (Willett et al., 2019, p. 5). This statement captures why efforts to find solutions that contribute to a real transformation should be a widespread, plural, multi-sectoral and multi-level actions. This study explores to what extent the adoption of agroecological processes by small-scale farmers in the Bogotá-Region (Colombian Andes) can be seen as an expression of the emergence of deliberate transformation in local food systems. Aligned with the calls for transformative solutions to move sustainable food systems from aspiration to reality, this study aims to shed light on both the enabling factors and the underlying conditions that allow alternativeagroecological food initiatives to thrive.

By answering the following three questions, this study provides elements to understand and think about transformation in food systems in the midst of climate and environmental crises: *a) Why do farmers adopt agroecology and what motivates them to undertake agroecological projects? b) What are the practical enabling factors and farmers'*

actions that support and facilitate agroecology, and to what extent agroecological practices foster transformation in the Bogotá-Region? And c) How do farmers' and other actors' motivations and practices around agroecology contribute to wider political change? To frame the analysis and discussion of these questions, I relied on literatures about deliberate and societal transformation, agroecology, and diverse food economies to provide a substantive framework for understanding processes of radical change in food systems in the context of climate, environmental and social crises. These literatures contributed with valuable perspectives that allowed me to frame the questions, the results, and the discussion of the dissertation.

In the next section of this chapter, I discuss the concept of agroecology from a comprehensive perspective that takes into account its epistemological, technical, political and social dimensions, and bringing together a narrative about agroecology as a connecting thread of the three fields of literature mentioned above. Next, I use the literatures of diverse economies and alternative food networks (AFN) to put together a framework that offers a way to overcome the limitation of the mainstream-alternative-binary of alternative and conventional food systems (Cameron & Gordon, 2010). Particularly, the frame of diverse economies allowed me to understand the different ways in which food is produced, distributed and consumed, generating a critical inquiry about the plural and multiple ways of being and acting in the world (Hill, 2015) around diverse food systems. Diverse economies and AFNs literatures provide also a conceptual frame to analyzing how food, places and people are interconnected, and how they interact through diverse economic circuits and networks (Renting et al., 2003; Whatmore et al., 2003). Finally, I draw on the notion of deliberate transformation which conveys something more substantial or

disruptive than incremental change, by focusing on the framework of the three spheres of deliberate transformation and emphasizing the subjective dimensions of transformation. In this last section, I wrap up the three strands of the literature by exploring the echoes and resonances between them.

2.1 Agroecology and family farming

In its comprehensive meaning and empirical materiality, agroecology encompasses multiple discourses, practices, values, and ways of seeing life and the world that can support processes of transformation in Latin America. Scholars, such as Altieri & Rosset (2018) and Vandermeer & Perfecto (2018), recognize that the practices and principles of agroecology lie in the knowledge and practices accumulated in peasant and indigenous agriculture around the world, although neither peasants nor indigenous people have historically used the term "agroecology". However, agroecology's origins, as used by academics, practitioners, and activists in social movements, come from different currents of thought, practices, traditions, moments in history, and different geographical regions. That is why agroecology, for both authors and practitioners, is a combination of science, practices, and political changes.

For Gliessman (2014, 2018), agroecology is a science, an empirical agricultural practice, and a political movement, that provides opportunities to improve the living conditions of farmers in the context of environmental and social changes. In terms of Vandermeer & Perfecto (2018), agroecology provides a new enthusiasm to agriculture, "rejecting the old triumphalist story of *industrial agriculture*" to embrace the idea that the science of ecology should be at the foundation of agriculture in a dialogue with other more

traditional forms of agriculture based on ecological principles (Vandermeer & Perfecto, 2018, p. 1). In practical terms, for farmers, agroecology can become a path to transform their ways of producing food, restoring and conserving nature, and to aim for a more integral and sustainable management of rural territories (Willett et al., 2019). And as a political movement, agroecology demands the dignity of the rural world. With this in mind, Imbert & Uhnák (2019) discuss how agroecology holds the potential to be a transformative force, and that by understanding it in specific contexts and situations, it may allow us to explore deliberative transformation empirically (Anderson et al., 2020; Pimbert, 2015; Pimbert & Uhnák, 2019).

The industrialization of agriculture has brought serious environmental and sociocultural problems, such as soil erosion, loss of biodiversity, depletion and degradation of
aquifers, and pollution from agrochemicals (CAN, 2011; Clapp, 2016; Holt-Giménez, Eric,
2018). Also, the patenting and genetic modification of seeds has reduced the resiliency of
farmers by restricting their rights to use and reuse seeds, while the need for agrochemicals
that has brought serious consequences to ecosystems and human health (Roa-Avendaño et
al., 2010). Additionally, agricultural producers around the world, large and small,
corporatized, agroecological and conventional, are facing adaptive challenges due to rapid
environmental changes (Altieri & Toledo, 2011; Cid-Aguayo, 2016; IPCC, 2014). In
response to the above mentioned, agroecology aims to apply ecological principles to the
practice of agriculture, to create sustainable agroecosystems, and foster a more socially
equitable and economically viable agriculture.

As a science, agroecology applies ecological concepts and principles to design and manage sustainable food systems (Gliessman, 2014). Also, it uses social analyses as

relevant explanatory variables, especially to study and design rural development programs (González de Molina & Caporal, 2013). However, this dissertation sees agroecology as an open and pluralistic science, where farmers' ingenuity enables local innovation to tackle and produce solutions to real problems. These innovations are often creative solutions to practical problems, and they combine different forms of knowledge (science and technology, practical knowledge and ancient knowledge, etc.), with local resources and assets (Altieri & Toledo, 2011; Giraldo, 2018; Ortiz et al., 2017). Therefore, I believe that when we are talking about agroecology it is impossible to separate science from practice, since they feed each other by co-creating practical knowledge and strategies. Therefore, agroecology is not only an applied knowledge, but it also exemplifies participatory research (Toledo, 2019). As Gliessman (2018) asserts:

"[Agroecology is] transdisciplinary in that it values all forms of knowledge and experience in food system change. It's participatory in that it requires the involvement of all stakeholders from the farm to the table and everyone in between. And it is action-oriented because it confronts the economic and political power structures of the current industrial food system with alternative social structures and policy action" (Gliessman, 2018, p. 599).

As a practice, agroecology, comprises academic and local knowledges, promoting productive diversification of farms that provide beneficial biological interactions and synergies among the components of the agroecosystem (Altieri & Toledo, 2011). Agroecological strategies are centered around improving the quality of the soil to produce stronger and healthier plants, while weakening pests (weeds, insects, diseases and nematodes), to promote beneficial organisms through the functional diversification of the agricultural ecosystem. This means, among many other things, that agroecology is based on polyculture that promotes the use of diverse organic seeds and organic inputs, while

rejecting the use of agrochemicals and genetically modified seeds. It is important to note agroecology is not simply a form of organic agriculture (Giraldo & Rosset, 2016; Rosset & Altieri, 2018). Rather, agroecology stands as a more committed practice, which not only results in an agricultural technique, but also has political and social dimensions that can be seen as responses to both conventional and organic agribusiness. In this context, the concepts of food sovereignty and food autonomy become relevant as they go beyond the scope of the concept of food security (see **Figure 2.1**)

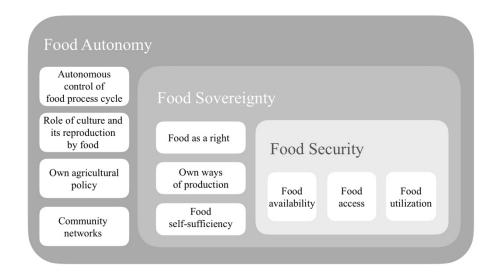


Figure 2.1. Interaction between food autonomy, sovereignty and security

This figure shows a comprehensive approach in which food security, sovereignty, and autonomy complement each other. This approach offers an understanding of the importance of ensuring, defend, and decide on the right to healthy food (Modified from Jiménez-Reinales (2019)).

Food sovereignty has been understood as the right that individuals and peoples have to feed themselves in dignity, it promotes local self-sufficiency and ecological food production as a strategy of resistance to the hegemonic economic system, by prioritizing the local food systems over the market, and giving producers the power to access and control the multiple factors of food production, developing alternative production options

that are based on social relations that are more just and solidarity (CAN, 2011; Roa-Avendaño et al., 2010). The Nyéléni Declaration (2015) affirms the centrality and primacy of 'peoples' –rather than that of governments, in framing policies and practices for the production of food, agriculture, the environment and human wellbeing:

"Food sovereignty is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems. It puts the aspirations and needs of those who produce, distribute and consume food at the heart of food systems and policies rather than the demands of markets and corporations. It defends the interests and inclusion of the next generation. It offers a strategy to resist and dismantle the current corporate trade and food regime, and directions for food, farming, pastoral and fisheries systems determined by local producers and users. Food sovereignty prioritizes local and national economies and markets and empowers peasant and family farmer-driven agriculture, artisanal-fishing, pastoralist-led grazing, and food production, distribution and consumption based on environmental, social and economic sustainability. Food sovereignty promotes transparent trade that guarantees just incomes to all peoples as well as the rights of consumers to control their food and nutrition. It ensures that the rights to use and manage lands, territories, waters, seeds, livestock and biodiversity are in the hands of those of us who produce food. Food sovereignty implies new social relations free of oppression and inequality between men and women, peoples, racial groups, social and economic classes and generations" (Nyéléni, 2015).

By now, the food sovereignty debate has moved beyond small-scale and family farming. Grassroot organizations such as *La Via Campesina* have globalized the struggle for food sovereignty, with other organizations, social movements, alternative food networks and groups of citizen-consumers adopting and further developing this framework (Pimbert, 2018). That is the case of the debate of food autonomy, a concept that is comprehended as a further way of understanding the relationship between communities and food, where people can control production and distribution of food outside the market. Food autonomy has emerged as a more practical manifestation of food sovereignty. However, the food autonomy debate is not yet global and is restricted to a few authors who

are close to the social organizations that promote it (Galeano-Corredor, 2010; Morales González, 2013). This is why academia has an obligation to discuss this concept more broadly and to provide a critical analysis of its development, relevance, and usefulness. Even though there is no consensus around food autonomy, some authors who are actively involved in strengthening the practical component of food sovereignty point out that it a) allows an integral control of the food cycle from seed production and reproduction, to land availability and water and territory management; b) promotes food and nutritional selfsufficiency in farming families and communities; and c) highlights the role of culture and its reproduction through local food processes (Millán-Guzmán & Granados-Ortiz, 2006). Therefore, food autonomy can be defined as the capacity of individuals, families, and communities to produce their own food, and reducing their dependence on external factors to feed themselves (Jiménez-Reinales, 2019). Thus, Morales González (2013) considers food autonomy as the right that every community, people or human collective, or members of a nation have to autonomously control their food systems according to their traditions, needs, and strategic perspectives, in harmony with other human groups, the environment and future generations (Morales González, 2013). Even though the definition of food autonomy can be close to that of food sovereignty, both authors Morales González (2013) and Jiménez Reinales (2019) state that food autonomy should insist more firmly on the right of the communities, peoples, or human groups belonging to a national conglomerate to preserve and defend their agri-food processes, including free access to the natural and productive assets and to the knowledge necessary to ensure their food supply. To this extent, there is not just one food autonomy, but many.

Also, both food sovereignty and food autonomy imply the defense of the knowledge, the practices, and the territories of food-producing peoples (Escobar et al., 2019). The agroecological pursuits of food sovereignty and food autonomy highlight lifeaffirming principles such as dignified co-existence, respect to every other being, diversity, and solidarity. Then, relying on Puig de la Bellacasa (2017), we could say that agroecology also becomes a way to think about care in "more than human worlds" (Puig de la Bellacasa, 2017), allowing its practitioners to enter into the terrain of care practices. The latter supports what Nancy (1991) describes as being together or being-in-common is "an originary or ontological sociality" (Nancy, 1991, p. 28). The latter shows how thinking about us, connected with others, leads us to care for and take responsibility for human and nonhuman others. Therefore, agroecological seem to be grounded on the practices an ethics of care. We can see the latter, when agroecological farmers assume the responsibility for feeding their families and, adopt the role of caregivers of rural communities consisting of people, animals, plants, ecosystems and territories. Here, it is important to rely on frameworks such as community economies and regenerative cultures that point out the importance of the encounters with others in the process of co-habiting and surviving together in this earth (Gibson-Graham, 2013; Wahl, 2016). Following these frameworks, we can say that 'caring' can be a central and defining aspect of the agroecological practice that has radical political potential, to the extent that from an ontological position, farmers can provide different ways to connect among themselves and with their surroundings. In that sense, and drawing on Puig de la Bellacasa (2017), we can consider that within agroecological ethics, care may be embedded in the "mundane doings of maintenance and repair that sustain everyday life [and] is a commitment to investigate the significance of neglected things, practices and experiences made invisible or marginalized by dominant, "successful" (technoscientific) mobilizations", as the industrial agriculture and the global food systems. In this sense, the everyday practices promoted in agroecology become a matter of care "not just for what they provide for humans but for ensuring the subsistence of soil communities [and the whole agroecosystem] more broadly" (Puig de la Bellacasa, 2017, p. 190).

A growing literature, largely from Latin America, provides further insight into the political perspective of agroecology. As a political movement, particularly in Latin America, agroecology holds great potential to promote broad-based, and sustainable agrarian and social change. It talks back to the postulates of the 'green revolution' and to the classical ideas of economic development that insist on the accelerated and monopolistic production of food (Puig de la Bellacasa, 2017). Also, it challenges neoliberal modernization policies based on agribusiness and agroexports, while opening new political roads for small-scale farmers in Latin American. In words of Toledo and Altieri (2011; 2019), agroecology, from a political perspective, aims to: a) produce knowledge and strengthen practices to move towards food autonomy and food sovereignty, through a dialogue between academy, communities and social organizations; b) overcome inequality and socio-environmental injustice through a dynamic of collective work, centered on sustainable production and alternative economies; and c) consolidate more inclusive and resilient societies through permanent spaces for community building and solidarity, and for community-based dialogues between farmers, consumers, and other actors interested in the construction of social networks based on affection, mutual aid, solidarity, networks of learning and unlearning, agri-food networks that recover and exchange seeds, and

knowledge. In view of the above, agroecology, can be seen as a movement that encourages critical thinking, responding not only to social inequality, but also to environmental disturbances (Altieri & Toledo, 2011). Also, agroecology offers new possibilities to imagine social transformation by acknowledging that "agricultural sustainability cannot be achieved only by technological innovation of environmental and agronomical nature, but by much-needed institutional change in power relations, that is, by taking into account social, cultural, agricultural, and political factors" (Toledo, 2019, p. 87). La Vía Campesina reinforces the latter in a report from the International Forum of Agroecology in 2015:

"[Agroecology practiced by small scale producers] generates local knowledge, promotes social justice, nurtures identity and culture and strengthens the economic viability of rural areas [...], [it] is political; it requires us to challenge and transform structures of power in society. We need to put the control of seeds, biodiversity, land and territories, waters, knowledge, culture and the commons in the hands of the peoples who feed the world" (Nyéléni, 2015).

When thinking about the rural population I have worked with in my research, and specifically about their means of production, it seems important to highlight the connection between agroecology and family agriculture. As a concept, family agriculture was coined by rural sociology as the way in which rural families work, produce and organize themselves, within a particular social and economic context (Schneider, 2016), gathering together peasant and rural families in general with diverse conditions and characteristics. In this sense, family agriculture puts in the same category families that are close to the traditional markets and willing to use the technological packages promoted by the Green Revolution with others that produce what they eat in their territories with little articulation with the commercialization circuits, and with families that use both traditional (derived from the culture and thinking of rural communities) and conventional technologies (derived

from technological packages) and that are linked in an adaptive way to markets depending on the context in which they live. Also, this concept includes landless families, fishermen, ethnic groups, neo-rurals, urban farmers, and other groups (Acevedo-Osorio & Jiménez-Reinales, 2019). We can say that the producers that I have worked with in my dissertation fall into the category¹ defined by Salcedo (2014) et al. as family agriculture in transition, which describes farmers that employ different techniques to preserve their natural resources, and improve their agricultural and productive potential for own consumption and trading, which although sufficient for the reproduction of the family unit, are not sufficient to generate surpluses and their access to credit and markets is still limited.

Broadly accepted as a way to strengthen family agriculture (Acevedo-Osorio, 2016), and given that it can be identified with the causes of family farmers, agroecology is considered by various peasant movements around the world as a motto for struggle and resistance (La Vía Campesina, 2018). At the same time, farmers, NGOs, governments, academic institutions (Altieri & Toledo, 2011) and even the UN, are promulgating agroecology as a realistic alternative for facing the global food crisis (UN, 2010), urging governments to create public policies to prioritize and disseminate it. Although it is not the only strategy at our disposal, agroecology recognizes the potential of family farming to help meet the challenges of sustainability in agriculture, especially in its ability to provide sufficient, healthy and culturally appropriate food. Therefore, taking into account this concept of family agriculture, the people who participated in this study, whether they were peasants or neo-rurals, their work relied on family labor and based their agroecological

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¹ Typologies of family farming can include subsistence family farming, family farming in transition and consolidated family farming (Maletta, 2011). The purpose of developing typologies is to specify the requirements of each segment, so as to design differentiated policies and programs, as well as methods of positive discrimination aimed at specific groups, such as the most vulnerable.

economic activity on collective family labor. Additionally, it should be recalled the issue of multifunctionality in which their lifestyle is structured.

From the perspective of multifunctionality, the analysis of rural societies recognizes that when agriculture is based on sustainable production, it fulfills multiple needs such as maintaining agrobiodiversity and the landscape, and that it performs social functions beyond its productive ones, such as maintaining the balance in ecosystems and territories (Segrelles, 2007), for which the farmer does not obtain tradable outcomes (Bedoya-Patiño & Cárdenas-Grajales, 2016). Therefore, agroecology and the multifunctionality of agriculture are based on the systemic, complex, and interdisciplinary nature of agriculture. In terms of Acevedo-Osorio (2016), agroecology promotes multifunctional agricultural practices and closed biological cycles, generates synergistic relationships between the components of an ecosystem, increases the productivity of the system, and rescues sustainable and culturally acceptable ways of labor in rural communities (Acevedo-Osorio, 2016).

Finally, an understanding of agroecology that considers the multifunctionality of family agriculture, provides elements to explain that the transformation of both agriculture and the rural world, is not only taking place in the productive sphere, but also in the ecosystemic, socio-cultural and political ones. The latter connects us with the concepts of deliberate transformation (O'Brien, 2012) and adaptation as transformation (Pelling, 2010), which emphasize the importance of transformation for addressing global environmental changes (Feola, 2015; O'Brien, 2012; O'Brien & Sygna, 2013; Pelling, 2010).

2.2 Diverse food economies and alternative food networks

New trends in agroecology have identified the necessity to study the agri-food system as a whole. For example, it is crucial to analyze and understand the link between production and consumption in diverse circuits of commercialization, or to understand the ethical and moral coordinates that can guide actions in the new food economies to bring economic manifestations of more sustainable livelihoods such as the solidarity economies that are emerging in the Bogotá-Region.

In this sense, the literature on diverse economies enables us to think about how economic practices can multiply the number of possible ways of being and acting in this world (Hill, 2015). It offers an approach for exploring the processes of change and the economic possibilities that are emerging from the new relationships between farmers and the different food exchange circuits in the Capital-Region. Said relationships for example, may transform production and consumption by manifesting in new economic possibilities, such as an increase in the demand for and supply of foods produced with economically, socially, and environmentally desirable characteristics. This literature shows how the economy can become an "ethical act of transformation" (Gibson et al., 2015), where trading practices, such as barter and other non-monetary exchanges, go beyond the conventional logic of the market.

One of the main challenges faced by agroecological practices, is to open spaces for coordination and exchange between producers and consumers such as farmers markets, local fair-trade systems, participatory guarantee systems, and solidarity purchase groups (Sandoval-Rincón, 2010). In this sense, the literature on diverse economies provides valuable insights and tools to analyze other ways of enacting economies that can emerge

from agroecology. Aiming to have a broader perspective on different food initiatives and to position them as viable alternatives to the conventional food system, the study relies on the diverse economies framework because of its invitation to "reading for difference" (Gibson-Graham, 2006, p. xxxi). Gibson-Graham (2006) provides clues, skills and tools to develop an alternative project to rethinking economy. She proposes to leave capitalocentrism aside and to view the economy from a perspective of difference. Economies are not totally capitalist or anti-capitalist, and it is in the gray areas where lies the potential to become something else. That is why this dissertation draws on the diverse economies framework to represent the food landscape of agroecology in the Bogotá-Region, as a compendium of diverse economic practices (including paid, unpaid and alternatively paid labor; market, non-market and alternative market transactions; and capitalist, non-capitalist and alternative capitalist enterprises (e.g., farms)) (Cameron & Gordon, 2010).

Diverse economies literature also opens the discussion of societal transformation. By "reading for difference" (Gibson-Graham, 2006), the literature sheds light on how diverse practices can and collectives become powerful constituents of ethical and political action, oriented towards environmental sustainability. Within this framework, agroecological farmers and collectives bring new connections, interconnections, and possibilities to generate creative and diverse strategies to face global environmental change and imminent economic crises, through practices that promote an ethical interdependence with nature and nonhumans (Latour, 1993)². In the production of food, and later in its

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² Bruno Latour (1993), in his book "We Have Never Been Modern", states that modernity has created "two entirely distinct ontological zones: that of human beings on the one hand; that of nonhumans on the other"(Latour, 1993, pp. 10–11). For this author, this distinction creates partitions within the natural world, and a way to make possible the "liaisons between humans and nonhumans" (Latour, 2013, p. 64) is to

distribution and consumption, materiality is a dynamic, agential, and continuous process that emerges from the relationships between humans and non-humans. AFN vindicate and make tangible the underlying motivations and the meanings that link individuals with the materiality of practicing agriculture in a different way (Hill, 2015; Puig de la Bellacasa, 2015; Sharp et al., 2015) and taking back the markets (Gibson-Graham et al., 2013).

Moreover, the diverse economies framework provides analytical elements to understand and trace the micropolitical processes of active personal and collective transformation (Gibson-Graham, 2006), in relation to "our own implication in the existence of others" or the "praxis of coexistence" (Gibson-Graham, 2006, p. 88). This framework draws attention to the interdependencies that arise when making economic decisions. Agroecology as a practice allows the interactions between humans and non-humans (plants, animals, soil, environmental conditions, etc.) within the systems of food production and food consumption (Dalgaard et al., 2003). In this sense agroecology is a practice that can affect the economic decision-making processes of farmers, and their relations with other non-humans (all the elements of the agroecosystem), which may generate political and ethical questions.

Drawing on diverse economies, this study can read the landscape of AFNs putting emphasis on difference, by providing the possibility to rethink and understand how farmers can create and perform other ways of living based on economic experimentation—such as

reassemble the social (Latour, 2005). The latter means to transform the notion of "the social" and society "into a general principle of free associations [...] that are more extensive and surprising in each case" (Latour, 2013, p. 64) and increases the intermixing of humans and nonhumans (Latour, 2013, p. 9). In the case of this dissertation within the agroecological experiences and local food systems there an array of interdependencies between farmers, consumers, other actors involved in agroecology, environments, and non-human entities (e.g., food, microbes, soil, insects, plants, seeds, etc.). Thus, in this study it was important to have a more-than-human approach, with the goal of what Gibson-Graham (2008) articulate as the goal "to enlarge the space of agency of all sorts of actors [...] non-human as well as human" (Gibson-Graham, 2008, p. 626).

agroecological collectives, solidarity purchase groups and agroecological markets, that satisfy not only the private needs, but the needs of the people and environments that are involved throughout the food chain. A diverse economies framework also gives this study the elements to look at a variety of economic encounters that recreate environmentally and socially responsive economies, in a world that is facing the challenges brought forth by global environmental changes and economic crises (Gibson-Graham et al., 2013; Holloway et al., 2007, p. 10; Roelvink, 2015). Also, the practice of seeing and speaking differently can encourage this research to make visible the hidden and alternative economic activities that are starting to connect with "the language of economic difference" (Gibson-Graham, 2006, p. xxiv). The latter will allow us to understand AFN in the Capital-Region beyond the discursive field of mainstream economy, generating the understanding of a "politics of the possible" (Harris, 2009).

Additionally, alternative food networks (AFN) literature provides insights into how production processes, consumption culture, and regional ecology are closely bound together. By putting this literature in dialogue with the diverse economies literature, this study understands that food supply circuits hold the key to imagining the transition to a more just, inclusive and conscientious food system. This literature also helps to better understand and think about a politics of the possible (Harris, 2009) that is based on values of reciprocity, shared responsibility and trust throughout the food supply circuits and associated networks. The AFN literature can be an entry point for studying and illustrating how transformation resides not only in particular practices or assets—such as food production—but also within networks and institutions—such as food networks, that allow access to resources (Furman et al., 2013). We will explore this theme in Chapter 6. It opens

up conceptual and methodological frameworks for the analysis of: (a) the spatial, social and environmental dimensions of food production, distribution and consumption, (b) the food supply circuits that can indicate ways in which food moves between different arenas of exchange, via different actors, technologies and organizations of movement, and (c) the motivations to participate in particular food networks, projects or initiatives as consumers or producers (See **Table 2.1** for a more extended description of the analytical categories). These analytical fields give us more elements for understanding and illustrating particular arrangements that allow projects to thrive. They also show how diverse food initiatives offer active possibilities for transforming "food production— consumption relationships in accordance with their particular ways of imagining better food networks." (Holloway et al., 2007, p. 10).

Table 2.1 Analytical fields for describing food projects

Analysis category	Description
Site of production and collective practice	The place or places where the food is grown and/or processed. It is also the place where farmers connect with other farmers and also the area of influence of their practices and actions. The type of land tenure of the members of the collective. Spatial scale and location are also important features of the site of production.
Food production methods	Food production practices: practices and techniques of food production, associated also with discourses and principles of production.
Economic interactions	This category has three levels, one indicates in which food moves between different arenas of exchange, via different technologies and organizations of movement. The second refers to the site in which exchange occurs. The third one refers to what the exchange is actually of, both materially and non-materially. Also, it emphasizes the social aspects of the producer-consumer interactions.
Motivations for participation	This category describes the reasons farmers have for participating in the food collectives. It also describes how the motivations change a long time and how these are negotiated within and between farmers.
Constitution of individual and group identities	This category attempts to account for the ways in which collective, first depend on or assume particular subject positions or identities, and second, actually produce or reproduce particular subjectivities.

Source: Kneafsey et al. 2008; Holloway et al. 2007

These food economic spaces and practices are the result of different relationships (Holloway et al., 2007) such as producer-consumer, producer-organizations, producer-environment, or producer-climate. In this sense, it is important to transcend the one-way relationship that has been established between food production and food consumption, since food moves through different exchange spaces, technologies, places and organizations (Holloway et al., 2007). It is through the meaning and materiality of these exchange spaces that this study traces their influences on farmers' places and livelihoods.

A critical aspect of studying AFN is to understand what the motivations and types of engagement of the people are, who participate in AFN in the Bogotá-Region. Here, we understand engagement in food networks as a 'personal state' of connection with different issues that comprise cognitive, affective and behavioral aspects (Lorenzoni et al., 2007). We can also associate this 'personal state' with the personal sphere of transformation. This dissertation discusses the why of the engagement and participation of producers, AFN promoters, and consumers with agroecology and AFN, and the how of the mentioned engagement and participation. In other words, this dissertation intends to show what producers, consumers, AFN promoters and other actors are motivated by, care about, and are able to take action to co-exist and re-exist through agroecology and AFN.

Ultimately, as a final note of this section, the cultivation of an ethics of care within the diverse food economies and the AFN is at the core of the political project of the diverse economies research and literature. This literature is the object of criticisms regarding its failure to account for power relations and lack of radical political positions (Gabriel & Sarmiento, 2020). Gabriel and Sarmiento (2020) drawing on Mathie et al. (2017) argue that such "criticisms are focused on one type of power—'power over' others—at the analytical

expense of other modalities of power" (Gabriel & Sarmiento, 2020, p. 415). The authors explain other forms of power: (a) 'power to' (the active form of power that focuses on what it can do rather than what it can prevent others from doing or make others do); (b) 'power with' (the potential that is activated when people join forces); and (c) 'power within' (individual and collective senses of what people are capable of) (Gabriel & Sarmiento, 2020; Mathie et al., 2017). Thus, farmers and other actors involved in agroecology, as they cultivate new ways of enacting power, they may disrupt the status quo, finding the power within and the power with contributing towards "new expressions of 'power to' (Gabriel & Sarmiento, 2020, p. 416). Additionally, this cultivation of power with and within can revalue farmers and other actors as agents of change and generators of different food economics, impacting the status quo. Thus, thinking about the plurality of economic practices that can emerge in agroecology disrupt some situations that persist and exist thanks to power structures that marginalize people (Araujo, 2018). That is why the 'power to' in some cases help to resist against the 'power over' (Gabriel & Sarmiento, 2020).

2.3 Deliberate transformation

Transformation, as a concept, is plural and diverse, and while transformative processes are imperfect and even messy at times, they are also seen as key to finding a more just and sustainable future (Blythe et al., 2017, 2018; Castree et al., 2018; Hulme, 2015; Inderberg et al., 2015). In the last decade several scientific and policy endeavors have responded to the call of transformation (Bennett et al., 2019), conceiving transformation not just as a possibility, but also as an imperative for imagining and creating just and dignified forms of co-existence (Jiménez-Reinales & Cepeda-Valencia, 2020). For

this dissertation, the role of the subjective dimensions of transformation are of particular interest, especially when taking into account that the personal level of transformation provides the building blocks for societal transformation (Temper et al., 2018). By focusing on the subjective dimensions of transformation, this dissertation adopts a framework that defines the three 'spheres' of transformation as practical, political, and personal (Gosnell et al., 2019; O'Brien & Sygna, 2013; Sharma, 2007). It is an integrative approach that discusses the need for significant changes in form, structure and/or meaning making (Leichenko & O'Brien, 2019; O'Brien & Sygna, 2013). The heuristic model of the three spheres of transformation emphasizes "the role of individual and collective agency in promoting a sustainable, equitable, and thriving world," (Leichenko & O'Brien, 2019) and it highlights that the personal sphere has a powerful influence that can transcend the other two spheres. Thus, personal transformations "shape the ways that the systems and structures (i.e., the political sphere) are viewed, and influence what types of solutions (e.g., the practical sphere) are considered 'possible'" (O'Brien & Sygna, 2013, p. 5).

The three spheres of transformation model (see **Figure 2.2** and **Table 2.2**) shows the practical sphere in the center, surrounded by the political sphere and then by the personal sphere, showing the multidimensional nature of transformation. Transformation is a continuous and diverse process that occurs at the interaction of the three spheres (Gosnell et al., 2019; O'Brien & Sygna, 2013). Leichenko and O'Brien (2019) state that there are "multiple entry points for engaging with deliberate transformations towards an equitable, sustainable, and thriving world" (Leichenko & O'Brien, 2019, p. 180).



Figure 2.2. The three spheres of transformation in agroecology, modified by author Source: O'Brien and Sygna (2013)

The practical sphere is where most of the sustainable and adaptation strategies have so far tended to take place. We can call it the "outcome sphere" since it represents the practical and technical solutions. The political sphere is where the institutional, legal, economic and political frameworks arise, facilitating or enabling responses to promote sustainability. The realm of politics is pivotal to forging new institutions, a renewed market logic, and new ways of social coexistence that focus on sustainability. By creating conditions of possibility for new ontological openings, the personal sphere levers transformation. The personal sphere is where legitimate transformation occurs since it is where paradigms, worldviews, ethics and values change, bringing significant consequences to systems, structures and behaviors. While **Figure 2.2** represents how the three spheres are separated, it is important to highlight that they all are "embedded and interacting"

(O'Brien & Sygna, 2013, p. 4). The fact that the practical sphere is embedded in the political sphere, and both the practical and the political spheres are embedded in the personal sphere, means that the personal sphere can shape transformation in the other two spheres. Through Chapters Four, Five, Six and Seven I will identify the dimensions of transformation in agroecology, recognizing that the source of transformative influence can be political, practical, or personal, but that real transformation occurs when the three spheres are aligned intricately.

Actions and activities in the practical sphere tend to "changes in management practices, the introduction of new technologies, and socio- technical and cultural innovations. It also includes changes in strategies, practices and behaviors" (O'Brien & Sygna, 2013, p. 5). This sphere encompasses investments in research and development, improved management, transfer of technology, policy incentives to support behavioral change, and socio-technical and cultural innovations, all of the above require of profound changes in strategies, practices and behaviors (Leichenko & O'Brien, 2019; O'Brien & Sygna, 2013). Drawing on Meadows (2009), O'Brien and Sygna (2013) argue that the practical sphere by itself is the "least effective leverage" for systemic change, in the sense that most of the responses that emerge in this sphere are influenced by transformations in the larger political, economic, and cultural systems and structures that are associated with the political sphere. Although the practical sphere may be the least effective leverage, the agroecological and consumption practices, and the social innovation associated with them, are the entry point to recognize that the practical and the personal spheres are interconnected. In particular, reconnecting with more-than-humans such as the soil, microorganisms, water, light, seeds, and other elements, allows farmers to see nature from

a different perspective, and to produce food in a way that diverts from conventional agricultural practices. Farmers for example, are establishing new relationships with the non-human and human worlds, that are transforming their understanding and value frameworks. For their part, consumers have started embracing values and principles that resonate with nature and the life cycles characteristic of agroecosystems. Therefore, it seems that the practical sphere of agroecology has a great potential to influence behavior, by moving its actors to embrace new worldviews that recognize the ancient ways and sustainable principles of food production. Also, it moves consumers to connect with the farmer's new understandings and values, through the consumption of agroecological products.

Within the three spheres framework, the feasibility of the practical sphere is often related to "appropriate investments in research and development, improved management, transfer of technology, or policy incentives to support behavioral change" (Leichenko & O'Brien, 2019, p. 180). However, O'Brien and Sygna (2013) manifest that practical transformation needs to be supported by structural and systemic change. The political sphere of transformation includes social and cultural norms, as well as institutions and governance systems that shape behaviors, actions, and investments. "It is in the political sphere where the 'rules of the game' are negotiated and decided, where goals and outcomes are prioritized, and where conflicts and movements emerge to directly or indirectly influence systems. [...] Transformations in the political sphere refer to more than changes in formal politics, although these may be important in some contexts." (Leichenko & O'Brien, 2019, p. 181) In the global south, the political sphere of agroecology focuses on the interaction of the micropolitics that can occur through individual and collective actions

in the everyday practices, but also on the macropolitics that emerges within social movements such us *La Via Campesina*, which focus on the central effort to seek transformational change in the global agri-food systems (Nyéléni, 2015) and has had some impacts at macropolitical level. Agroecology is the counterpart of the global food system with its struggles, resistances, and hidden strategies of power that are invisible to the capitalist development model (Gibson-Graham, 1997; Giraldo, 2018; Scott, 1992). Agroecology is of great interest to understand transformation from the political sphere. A political dimension of agroecology is taking place in the grassroots efforts to confront distributive injustice, environmental depredation, food unhealthiness, hunger and malnutrition, migration of farmers to cities (Giraldo, 2018, 2016). The agroecological movement also calls regarding the growing proletarianization of rural peoples by the current order of the market and agricultural system (Giraldo, 2018; Rosset & Martínez-Torres, 2012).³

The emergence of micro-political processes that go beyond formal politics can be witnessed in day-to-day agroecological practices. Micropolitics are expressed through a *communal autopoiesis* or *sympoiesis*⁴, grounded in the interaction between the multiple

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³ As the Vía Campesina said: "Agroecology is the answer to how to transform and repair our material reality in a food system and rural world that has been devastated by industrial food production and its so-called Green and Blue Revolutions. We see agroecology as a key form of resistance to an economic system that puts profit before life. The corporate model over-produces food that poisons us, destroys soil fertility, is responsible for the deforestation of rural areas, the contamination of water and the acidification of oceans and killing of fisheries. Essential natural resources have been commodified, and rising production costs are driving us off the land. Farmers' seeds are being stolen and sold back to us at exorbitant prices, bred as varieties that depend on costly, contaminating agrochemicals. The industrial food system is a key driver of the multiple crises of climate, food, environmental, public health and others. Free trade and corporate investment agreements, investor-state dispute settlement agreements, and false solutions such as carbon markets, and the growing financialization of land and food, etc., all further aggravate these crises. Agroecology within a food sovereignty framework offers us a collective path forward from these crises." (Nyéléni, 2015)

⁴ Autopoiesis, a concept coined by Humberto Maturana (1992), explains that organisms govern themselves. Silvia Rivera-Cusicanqui (2018) states that this concept used in the social sphere is a process in which the members of a community live together through the coordination of desires, feelings, doings, and ways of

species and entities that inhabit the agroecological landscape. Thus, micropolitics become the political space outside traditional political structures and systems. Micropolitics influence farmers' livelihoods through concrete and daily actions without teleological projections or aspirations for the transformation of society as a whole. In the words of Rivera-Cusicanqui, micropolitics is, in the end, a policy of subsistence (Rivera Cusicanqui, 2018) and for the sustainability of life that seeks alternatives to achieve a better and dignified life. Therefore, agroecology can be a political response for different groups of peoples that allow them to organize themselves to challenge unsustainable forms of production and the conventional global food economy. Also, these collectives defend their territories by creating human and non-human fabrics that are fundamental for the daily life of farmers' ways of being and doing.

When we talk about a macropolitical context of agroecology (Calle-Collado et al., 2013), we talk about the external factors or structures that hinder or enable transformation within the conventional agriculture and agroindustry. Authors (such as Calle-Collado et al. (2013), Gliessman (2010), Sevilla (2006; 2015), Van der Ploeg et al. (2000)) talk about the way agroecological transitions and transformations can scale up, relying on the more micro-political dimensions that occur at the personal and collective level but trying to elevate agroecological networks of collaboration to the constitution of social institutions or to the pressure and management of public policies that are genuinely participatory and

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being. In *communal autopoiesis*, learning is constant and occurs as a process of transformation in the coexistence with others. This learning takes place through actions that seek the conservation and expansion of the well-being of all members of a community or network. On the other hand, Haraway (2016) use the term of *sympoiesis* for explaining the importance of reciprocal relationality between multiple species. She invites us to understand *sympoiesis* as a way to engaged in the "activism of resurgence", in which transformative learning is key to become more "response-able", more imaginative, and mores capable of living and dying well in a multispecies symbiosis on a planet in crisis (Haraway, 2016, p. 98).

open to the processes of emerging agroecology (Calle-Collado et al., 2013; Gliessman, 2010; Sevilla-Guzman, 2006; Sevilla-Guzmán, 2015; Van der Ploeg et al., 2000).

Finally, the personal sphere is where changes in meaning-making take place. It represents individual and shared beliefs, values, worldviews, and paradigms that shape attitudes, actions, perceived options and preferred strategies for transformation. These subjective dimensions can explain why specific actions in the practical and political spheres are prioritized while others are dismissed or ignored (Leichenko & O'Brien, 2019). By encompassing and overarching, the personal sphere shapes transformation in both the practical and political spheres that are embedded in itself. As we mentioned before, this sphere provides a solid foundation for group and societal transformation. In agroecology the personal sphere of transformation is enhanced by collective action, which makes it possible to develop transformative capacities that are based on principles of empathy, solidarity, and care, and in ways of collective identity and knowledge. This will be discussed in depth in Chapter Six. Within the model of the three spheres, authors state that the personal sphere has the greatest potential to create transformation and it is the one that provides greater change traction. The latter can be connected with what Leff (2007) says about the environmental and social crisis, is a crisis of thought and understanding of ontology and epistemology by which Western civilization has defined the being, entities and things; as well as the scientific rationality and technology that has dominated nature and economized the modern world (Leff, 2007, p. 2). By focusing on the personal sphere of transformation we can find new ways of thinking, living and experiencing this world. There is a vital need for new paradigms to deal with the turbulences of this era, and to emerge into new realities. In other words, agroecological experiences may provide tools to

understand the symbolic and material conditions of possible civilizational transitions, which can be profoundly rich in revealing new meanings about *living* and *remaining* in this world (Giraldo, 2018).

On the other hand, transformation is not universal and homogenous. Transformation is localized and situated and thinking about the how of transformation from the global south allows us to pluralize the dialogue and conversation around transformative processes towards the sustainability of life. In terms of Blythe et al. (2018) "transformation towards sustainability remains a field that has yet to be charted, rich with possibilities for development, and we argue that the politicization and pluralization of transformation research and practice remains a critical frontier" (Blythe et al., 2018, p. 1218). By using farmers' personal stories as a source of primary data, this study also contributes to a pluralization of the discourse of transformation to include voices and perspectives rooted in different ontologies and ways of knowing (Blythe 2018). De La Cadena and Blaser (2018) illustrate this need for a plurality of views by raising the possibility that the response to social and environmental crises will be limited to "a world where only one world fits" (De La Cadena & Blaser, 2018, p. 3). This "one world" —the result of particular historical practices and rooted in a dualistic ontological division between human and non-human, culture and nature— claims for itself the right to be "the world" and attempts to impose itself on all those worldviews that do not think of themselves as universal. In contrast to this "one world" ontology, the authors suggest that the wisdom and political action of many peoples and movements—indigenous, afro-descendants, peasants—invite us to construct "a world in which many worlds can fit", following the Zapatista declaration (De La Cadena & Blaser, 2018, pp. 1–3). This pluriverse, constituted by a multiplicity of worlds that are mutually intertwined, suggests that many forms of transformation are possible.

In sharing stories of their agroecological huertas (home gardens), the farmers in this study provide critical insights into how transformation manifests in a local context. Escobar (2014) argues that the ecological and social crisis has led different visionaries to propose a profound ecological and cultural transition towards new socio-natural orders. These new orders are oriented towards worlds where humans and non-humans co-exist in mutually enriching ways, transcending capitalist modernity where the human world has been built at the expense of the non-human world (Escobar, 2014, p. 15). He points out that the production of knowledge, and the empirical part of said knowledge, about transition and transformation are emerging from different spheres and places. That said, this dissertation aims to transcend the concept of transformation as a metaphor, to help identify in what ways and to what extent transformation is situated and localized (Feola, 2015). For this purpose, the three spheres model provides an understanding of transformation from a multidimensional viewpoint. The model deposits a lot of power in the personal sphere, focusing on the knowledge, codes of ethical and spiritual conduct concerning the environment, human values, and vision of the future, among others situated in particular contexts. And it is the power of the personal sphere which ignites the practical and political actions of transformation oriented towards a more sustainable and regenerative life. Finally, we can say that agroecology "does not endorse monocultures but diversity of expressions, is collective, and requires personal transformation [that transcend to collective transformation], particularly in restoring the value of life." (Gudynas, 2019, p. 295).

2.4 Connecting the pieces

In closing, the shared thread of all the pieces of literature is the understanding of the "sustainability of life" as the axis for imagining other possible worlds (Vega Ugalde, 2017). The "sustainability of life" becomes a central category for thinking about the transformation of social relations with nature, the reorganization of the economic and political system, and the construction of a new civilizing horizon. The latter is aligned with the objective of this dissertation of understanding the expressions of transformation that emerge in processes of agroecology and solidarity economy, and how these processes can shed light on the traction and friction aspects of defining and co-creating solutions for a better living in the midst of crises.

Chapters Four, Five, Six and Seven draw on the three literatures above mentioned, bringing them together through the exploration of the different dimensions of the three spheres model of transformation. First, in Chapters Four and Five, I explore how the personal and practical spheres of transformations interact thanks to the strong and autonomous personal motivations that lay behind the adoption of agroecology, and the quotidian agroecological practices that shape transformation across the personal lives of small-scale farmers. In Chapter Six I discuss how individual processes of transformation grow stronger once farmers connect with other farmers through collectivity, and how the personal and practical action of being together becomes a political potential for transformation. Then, in Chapter Seven, I delve into agroecological and alternative food networks, exploring to what extent these networks are connected to the political sphere of transformation. Before Chapters Four, Five, Six and Seven, Chapter Three will address the methodology and the study area in which this research about transformation takes place.

Table 2.2. The three spheres and their characteristics

	Practical	Political	Personal
Definition	"The practical sphere represents both behaviors and technical solutions" – the 'outcome' sphere"	Political sphere is the sphere "economic, political, legal, social and cultural systems and structures"	Personal sphere "represents changes in meaning making, which includes the individual and shared beliefs, values, worldviews, and paradigms that shape attitudes, actions, and perceived options."
What does it encompass?	"Appropriate investments in research and development, improved management, transfer of technology, or policy incentives to support behavioral change", "sociotechnical and cultural innovations." It also includes changes in strategies, practices and behaviors."	Where the "rules of the game" are set; "where social movements, collective action campaigns, lobbying, electoral politics, and revolutions respond to them, and where threatened interests resist or quash pressures to change"	"These 'subjective' dimensions influence preferred strategies or approaches to transformation, including perceptions of individual and collective agency." [] "influences rules, norms, and behaviors, as well as what systems and structures are considered to be fixed or unchangeable."
Role in Transformation	By itself is the "least effective leverage" for systems change. "More often, the responses that emerge in this sphere are influenced by transformations in the larger political, economic, and cultural systems and structures associated with the political sphere."	Represents the "enabling/disenabling conditions"; defines the constraints and possibilities for transformation	Changes here generate different ways of "seeing" and influence the parameters of the possible in the practical sphere
Transformations within agroecology in each sphere	Adoption of agricultural practices that aim changes in the way farmers relate with food production and consumers to food consumption. These practices are influenced by worldviews, motivations, values that tend toward building more dignified lives.	Collective actions in agroecology as a form potential basis for political projects within local agri-food systems. Critical approaches to development as usual.	Autonomous motivations to adopt agroecology have a significant impact on the processes of change, as well ethic coordinates based on care and solidarity.

Source: O' Brien and Sygna (2013, 4-6) and Gosnell et al. (2019)

Chapter 3. Doing geography in Huertas of the Bogotá-Region

This study was carried out thorough conversations with different actors of the rural world of the Bogotá-Region and others engaged in agroecological food networks (AFN). It draws on ethnographic methods, including in-depth interviews and participatory observation. Thanks to the different stories, reflections, and narratives of actors about agroecological practices and their experience with AFNs, this study examined the interrelationship between farmers, their huertas, their agroecosystems, and the frequent and sometimes challenging changes in their lives. Also, the conversations with other actors connected with broader agroecological networks were vital to understand the dialogue that takes place between the different universes of the rural and the urban. The first part of this chapter describes the methodology of the study, which allowed me to learn about the experiences of peasants and other of the actors engaged in alternative and transformative processes in the agri-food system in the Bogotá-Region. The methods employed were chosen to achieve an interpretative approach to address the three main questions of the research: a) What motivates farmers to undertake transformation through agroecology? b) What are the practical enabling factors and farmers' actions that support and facilitate agroecology, and to what extent agroecological practices foster transformation in the Bogotá-Region? And c) How do farmers' and other actors' motivations and practices around agroecology contribute to wider political change?

In the second part of the chapter, I discuss the analysis methods. Since I used qualitative research methods and techniques, such as interviews and participant observation, I got data in the form of interview transcripts and diaries. Thus, I used

ATLAS.ti (Mac Version 8.4.5), a Computer Assisted Qualitative Data Analysis Software (CAQDAS), allowing me to analyze the collected fieldwork material by coding it.

Following, the third and fourth parts discusses the key research ethics decisions and my own positionality in the research. The fifth part of the chapter describes the rural landscapes and inhabitants of this study. It is essential to point out that this research contributes to the understanding of socio-cultural and agroecological practices. They occur in particular rural landscapes, mainly through the *huertas*, which are not just a physical space, but also a place with a specific identity, culture, vision, and dreams of each rural family. In that sense, it is fundamental to understand the diverse dynamics in which these *huertas* are inscribed. And for this purpose, I present an overview of the area of study.

3.1 Methodology and research questions

I addressed the research questions relying on ethnographic methods. During my fieldwork, conducted throughout the second semester of 2016 and the first semester of 2018, I spent much of my time trying to listen, sometimes with a recorder in hand and sometimes just with my notebook, to how farmers are engaged everyday into the work in the *huerta*, and to their stories about the motivations behind this long-term commitment to the agroecological practice of growing food. I visited and walked through farmers' *huertas* and farms. I participated in several gatherings such as ordinary meetings where farmers reunite as members of associations or collectives. I attended special events such as festivals, local markets, *trueques* (barterings) of knowledge and seeds, and *mingas* (collaborative work sessions). Participatory observation was my main research method, and my field journal was my most important tool for connecting with and depicting my

research experience through the visits to farms. Through interviews and conversations with farmers, I was able to identify the initial motivations that gave life to their *huertas* and other motivations that strengthened their commitment to workday-after-day in the *huerta*. I also interviewed managers of agroecological food networks (AFN), as well some of their consumers and members, conducted an online questionnaire for consumers, and attended meetings and cultural events organized by the AFN. I joined AFNs in their quotidian activities such as the purchase organization and preparation, planning sessions, and distribution activities. AFNs' open to public social media and networking, such as Facebook Fan pages, Instagram and websites, were also helpful to identify narratives and stories about food and all the values associated with them. I followed these social networking sites with the purpose of analyzing discourses⁵ on agroecology, solidarity economy, food activism in people's own words.

Given the importance of involving different actors from different dimensions of alternative food networks and their constant interaction with different flows and exchange spaces (Holloway et al., 2007), ethnographic methods provided an excellent opportunity to elicit the voices of farmers, consumers, AFN's promoters, NGO's members, local government officers, academic experts (see **Table 3.1** and **Table 3.2**). I was aware that AFN in Bogotá are growing and there were various entry points to fieldwork. Particularly, I had two entry points: (a) I worked as a volunteer in a Civil Society Organization (CSO), which focuses on strengthening the organizational processes of peasants, indigenous, Afro-

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⁵ Discourse is what happens when language is used (Simpson & Mayr, 2010; Van Dijk, 1997a) and is not limited to the verbal or written since discourse also involves the level of thinking and understanding (Van Dijk, 1997b), as well as other signal systems such as images. Besides, here I want to emphasize the social character of the discourse since this occurs in a way articulated to its context. It is an important part of the configuration and change in the social.

Colombians and people from popular sectors, with the purpose of enhancing their capacity for transformation in the economic, political, social, cultural and environmental dimensions, under the principles of recognition and respect for ethnic, cultural and gender diversity. I worked with them during a period of six months (fall semester 2016), helping them to connect people from alternative food markets, other food initiatives and the farmers the NGO were working with. Through this work I was able to meet farmers as well as people involved in food activism and/or agroecological initiatives. (b) Second, as a consumer and later as a member of one of the AFNs which I studied for this dissertation, I was able to meet consumers, farmers and members of one of the agroecological markets networks of the Bogotá-Region. Through my involvement in these efforts, I approached research participants use a "snowball" sampling technique whereby known individuals (farmers, market promoters, consumers) would recommend other key informants with the expertise and knowledge on the particular topics of the research (Leichenko et al., 2015). In the following paragraphs, I describe how the different data collection methods allowed me to address the research questions.

Table 3.1. Core Data generated for the study

Core data	Interviews	Participatory Observation	On-line surveys	Focus group with consumers
Farmers with collective affiliation	27	I visited a total of 25	-	
Farmers with non-collective affiliation, but associated to one of the agroecological networks	5	farms, but I did more than one visit with real participatory observation in 4 farms	ı	
Agroecological Food Networks promoters- coordinators	5	Visits to two of the coordination places of the agroecological food networks (participation in meetings, preparation of food baskets, SPG visits) 10 Visits to fairs 10 Visits to farmers markets	-	
Consumers	4	-	25	1 meeting with 6 consumers 1 meeting with 7 consumers
Local government officer	1			
Experts Total	4 42	-	25	

Note: This research was guided by an IRB at Rutgers.

3.1.1 What motivates farmers to undertake transformation through agroecology?

To explore farmer motivations to undertake agroecology, I conducted semistructured and elaborated open-ended interviews with a total of 32 farmers of three different municipalities (see **Figure 3.5**, **Figure 3.6**, **Figure 3.7** and see **Table 3.1**). These interviews helped to reveal farmer's perceptions and feelings around uncertainty and the constant and multidimensional changes in their livelihoods. The first set of questions were related to farmers' perceptions of climatic, environmental, and economic change. These perceptions of multiple stressors help to reveal to what extent participants perceive changes as a threat or as an opportunity to their lives, livelihoods, properties (such as farms), and other assets they value. Throughout the interviews, I traced the interior and subjective dimensions of farmers concerning climate, environmental and economic change. This initial part of the interview had the aim to understand farmers' perception of change through time, and that is why perception and temporality were pivotal. The second part of the interview sought to contrast the perceptions of the past with the present, associating them with farmers' future projections. The guiding questions for this part where: How did they get involved in agroecology? What are the motivations, feelings, values behind the adoption of agroecology? How do they reimagine their lives and well-being adopting agroecology?

Participating in everyday activities of farms, farmers' markets, and farmers' collective meetings, was also helpful to explore quotidian conversations of farmers', identifying attitudes, feelings, beliefs, experiences and reactions related to their personal lives but also to their food production and collective action activities. This first overarching question is answered in Chapter Four and it focus on the farmers' motivations to adopt agroecological practices in their farms, illustrating the personal sphere of transformation.

3.1.2 What are the practical enabling factors and farmers' actions that support and facilitate agroecology?

The second research question examined the practical enabling factors and farmers' actions that support and facilitate agroecology as a transformative path? This question

was addressed in third part of the *interviews* to farmers, which focused on asking them about the adopted strategies to improve their own and their environment's well-being. The interviews allowed me to seek for perceptions about farmers' current practices and engagements with actions and strategies that are helping them to move towards a more sustainable production of food. Also, the interviews explored the internal and external motivations related to agroecological strategies, and reasons for engagement in practices that reorient the way of doing agriculture and economic transactions. In that regard, the two guiding questions for this third section of the interviews were: *How farmers, and other actors involved in agroecology, engage with their skills and competencies to contribute to the wellbeing and transformation of themselves and their surrounding (human and non-human) communities? How can they create an environment of transformation in the midst of social and environmental contingencies and challenges?*

To answer these questions, I also engaged in participant observation on farms, farmers collectives' meetings, festivals and fairs in combination with interviews and long conversations with farmers that allowed me to observe and understand their everyday decisions regarding patterns of work, typical problems and typical solutions looking for a repertoire of agroecological and economic strategies (Atkinson & Hammersley, 2007). Also, it was vital to comprehend the microdynamics of everyday interactions (Eikeland & Nicolini, 2011); that is why informal conversations were key to discuss with farmers and farmers collectives in order to enrich my observations. My research diary was a vital ethnographic technique which helped me to put in dialogue my observations of the daily activities of the *huerta* (and of the farm in general) and farmers collectives' practices with my conversations with farmers.

This second question is answered, particularly in Chapter Five and Chapter Six. Chapter Five addresses farmers' practices based on new ethical coordinates and practices based on care and interconnection, encouraging the co-existence of farmers and agroecosystems, and a continuous learning space based on recognizing the interdependencies of the human and non-human worlds. Chapter Six delves into the collective actions of farmers and how farmers build community as a practice of being, learning, growing, and transforming together through the shared experience of agroecology. These two chapters approach the practical sphere of transformation. Chapter Six also analyses the interaction of the practical sphere and the political sphere of transformation.

3.1.3 How do farmers' motivations and practices around agroecology contribute to wider political change?

The third research question explored how farmers' motivations and practices around agroecology contribute to wider political change. The question brought up other related questions such as: How, by way of material and discursive practices, do we individually and collectively give expression to a more sustainable and just experience of the world? How do transformations at one scale impact others across scales? The aim of these questions was to inquire about political potential of agroecology, by tracing it through the interactions between farmers and consumers, farmers and AFN, farmers and NGOs.

Through interviews I traced the producer-consumer interaction with the purpose of understanding (a) the members' motivations to participate in alternative food networks; (b) the material and symbolic, formal and informal meeting points of consumers, producers

and other actors (AFN promoters, NGOs, local government officers) in food networks; and (c) the governance arrangements in which each member of the AFN is embedded (Holloway et al., 2007). I asked about actors' experiences throughout their participation in agroecological food initiatives, and also about the possible influences of AFN on the spatial and social formations of the farmers and farms that grow food for the Bogotá-Region, and about the influence they can exert to build more just and sustainable local food systems.

I participated in farmers' markets and other meaningful spaces where food is exchanged. I also participated in NGO's and farmers collectives' meetings. Through participant observation I identified the different exchange dynamics and economic transactions, the motivations for participation, the constructions of specific identities, and synergistic interactions (between environmental and socio-cultural values, production and exchange dynamics, networks that promote alternatives to the conventional food system). I also conducted an online survey and two focus group with consumers, in which I inquired about the experiences and perceptions of buying agroecological products, the motivations for buying agroecological products, the attributes that consumers value when buying products in organic, ecological or alternative markets, their buying frequency, and their perceptions about climate, environmental and economic changes. The data from interviews, surveys and participant observation, was complemented by information collected on AFNs' social networks, such as Facebook, Instagram and websites (See **Table 3.2**).

Chapter Seven addresses this question, looking into the micropolitics of the daily practices of AFN and the continuous material and symbolic flows that shape a political project to reimagine the local agri-food systems, to make agroecology a cross-scalar

project. Chapter Six also contributes to answer this question inquiring into the political potential of collective action.

Table 3.2. Documents and other data of the study

Sources	Description
Reports	Local food reports commissioned by different NGOs actors
Websites	Homepages of agroecological food networks (https://la-canasta.org/, https://agrosolidariabogota.org, https://www.sembrandoconfianza.com)
Press Media	Articles published in newspapers (national & local)
Facebook	Following 7 closed food collective groups and agroecological food networks
Instagram	Following 3 closed agroecological food networks accounts

Table 3.3. Agroecological Food Networks that participated in this study

Agroecological food Networks								
Agrosolidaria Bogotá (ASB)	Sembrando Confianza (SB)	Mercado Campesino de Guasca	La Canasta					
Solidarity Purchase Group, managed by an association of prosumers	Solidarity Purchase Group, managed by a NGO	Farmers' market, Fair Style, managed by the municipality government with farmers' participation	Solidarity Purchase Group, managed by a group of consumers					

3.2 Data Analysis

I got from the fieldwork research "text-based materials" (Cope, 2005b, p. 445): diaries, fieldnotes, transcripts of interviews, focus group sessions and open-question surveys. Therefore, each of the interviews was recorded and then transcribed immediately after its completion, in order to assign a coding that would lead to the subsequent analysis, through the focusing of data that allows the extraction of conclusions through the use of the software ATLAS.ti (Mac Version 8.4.5). For this, I considered two stages of coding:

1. In the first stage of coding, I used *in vivo codes* (Cope, 2005a, 2005b), descriptive codes that reflect the themes, issues, patterns that are obvious on the

- surface or are stated directly by the interviewees or the people I worked with.
- 2. In a second stage I developed analytic codes (Cope, 2005a, 2005b) that allowed me to enter in a more explanatory stage. The construction of these codes came from the research questions, literature and emergent categories from fieldwork. This stage was very useful to generate the chapter themes, findings and conclusions.

3.3 Ethical Considerations

I conducted this research following the ethical principles of the Institutional Review Board at Rutgers University (see Appendix A). This research did not generate any harm or risk for the participants. However, under the principles of the Institutional Review Board at Rutgers University, I employed the following precautions to protect the rights of key participants in this study. First, I provided each participant with an informed consent form. I informed the interviewees that the interviews would be recorded; also, I explained to each participant the topics of the study, its format, risks and benefits. Each participant had a moment to read and review the consent form (see Appendix B, C).

Second, I also used an oral consent (see Appendix D, E) during participant observation sessions. As the principal researcher I read the oral consent form and waited for the subject to orally agree with the content of the consent form. Third, no minors participated in this study. Fourth, all participants were Spanish speakers; therefore, as a native Spanish speaker I did all the interviews. Fifth, the data gathered in this study are confidential with respect to participants' personal identity, and I keep the information confidential.

3.4 Positionality

Being a volunteer in the civil society organization that works with peasants and food networks and being a consumer to one of the AFN gave me the opportunity and allowed me to gain trust within farmers and other actors. In other circumstances, given my positionality as a researcher and as a city woman, it would have been more difficult to make initial contact with the farmers. That is why the support of the organizations that helped me with the farmers' contacts was key. Also, volunteering within these two organizations allowed me to have some synergies between my research and the processes that were being advanced in the agroecological networks' construction. Furthermore, I continue to participate in the construction of networks between producers, consumers, and market promoters, as is the case with the National Network of Agri-food Supply in Colombia (RENAAC in Spanish).

Throughout the research, despite being aware of my positionality as a researcher and as a city and privileged woman, I tried to generate spaces of trust where free dialogue would prevail during the interviews and visits. The idea was not to have rigid question formats but rather to develop an open conversation where research participants would talk freely with me, jumping in to tell long stories of farm history, local history, and agroecological challenges (See **Figure 3.1**). I sincerely enjoyed the conversations, and I was certainly interested in knowing all about the agroecological projects; this allowed me to sit in the role of a good listener with the study participants and build good friendships with some of them. As an inhabitant of Bogotá, it was easy to visit the farms and farmers during research, but also to maintain some relationships through the consumption of their

products. Also, regarding my role as volunteer in the RENAAC and closed contact with some AFNs I'm maintaining contact with some farmers.

Additionally, since I am from the Bogotá, and therefore the Bogotá-Region, this research was an opportunity for me to engage with my region and to connect with it through food, people and networks. Throughout this research I was able to re-imagine my territory, discovering the stories of and connecting with different actors that believe in other ways of inhabiting the Bogotá-Region. Another motivation for doing this research was my desire of self-transformation. Connecting with my territory, farmers, food, and people from my region, and also with the agroecological movement, has been an important window of opportunity to start my own personal transformation. The process of doing a PhD has proven to be a transformative experience itself, that has pushed me into a path to better know myself, where investing myself emotionally, intellectually, and economically, has allowed me to sort out personal challenges in transformative ways.



Figure 3.1 Researcher talking with farmer about Andean Tubers

3.5 Area of study

Bogotá-Region has no fixed boundaries; instead, it is a regional project defined by multiple scales (Ramírez Castañeda, 2012). The latter means that the regional configuration of Bogota-Region is given by the multiple interrelations that occur in different spatial-temporal layouts. Therefore, the region can be analyzed from the social, political, economic, and ecological perspectives. Rincón Avellaneda (2012) explains that this happens mainly by establishing relations of different nature and intensity between the city of Bogotá and the territories surrounding it. This regional project arises intending to organize the territory; Bogotá-Region has been thought of from various objectives that seek to improve the dynamics of relations between urban and rural territories surrounding Bogotá in terms of the provision of public services, public infrastructure, environmental management, food supply, among others. Particularly in this region, it is sought to understand the relationship between the big city and its region, where political and administrative limits are overcome (Rincón Avellaneda, 2012)

There are two key issues to think about Bogotá-Region in this study. First, it has to do with the environmental issue that can hardly be addressed in municipal settings, particularly this study focuses on the conservation corridor of the Chingaza-Sumapaz-Guerrero Paramos. And secondly with the subject of the food supply.

Bogotá, the capital city of Colombia, is located on a high plateau in the Eastern Cordillera, known as the Sabana de Bogotá. At the end of the Pleistocene, this savannah was an extensive lake surrounded by mountains, which began to dry up approximately 20,000 years ago before the present. The city is located at 2,640 meters above sea level (Van der Hammen & González, 1963).

The páramos that have a close relationship with Bogotá are those in the Chingaza-Sumapaz-Guerrero conservation corridor. Considering that the páramo ecosystem begins at approximately 3,100 meters above sea level and that the subpáramo extends between 2,800 meters and 3,100 meters above sea level, this ecosystem's impact on the city is notorious (Guhl Nimtz, 2015). Paramos' biodiversity and their richness in water generation are valuable indicators of the need to promote conservation. Mostly, in Bogotá, given that the city has a high population density, close to 8,000,000 inhabitants and, adding to this the metropolitan area, close to 11,000,000. The city's water supply comes from this corridor of páramos, the Chingaza páramo being the one that contributes the most water to Bogotá, and a lesser extent to the city of Villavicencio, in the east of the Cordillera. However, both the Sumapaz and Guerrero páramos contribute water to the metropolitan area and the agricultural soils of the Sabana (savannah) of Bogotá. Therefore, the relationship is sensitive, not only in the supply of water for human consumption but also in agricultural production.

Approximately 51% of the food supply of Bogotá comes from Cundinamarca, generating a heavy ecological footprint on the food-producing lands. Almost 90% of the farmers in this department are smallholders, owning, or cultivating less than 20 hectares of land (Rodríguez, 2006, 2019). These smallholders are challenged by multiple stressors that are increasing, and also its intensity: urban development, access to land, climatic variability, land-use changes, agricultural policies.

In this region, the food supply comes from three supply rings. The first one, integrated by the 19 neighboring municipalities that supply 33% of Bogota's food supply, produces the city's milk, vegetables, fruits, and potatoes. The second ring is the rest of the

Cundinamarca municipalities of Cundinamarca, along with Meta, Boyacá, and Tolima, responsible for another 44% of the food supply, standing out in potatoes, rice, papaya, some vegetables, panela, yucca, citrus fruits, chicken and meat. The remaining 23% comes from the other parts of the country and imports, a situation that is worsening since the free trade agreements (Forero-Álvarez et al., 2006; Roa-Avendaño et al., 2010).

In 2004, researchers (Forero-Álvarez et al., 2006), who helped develop the supply system plan of Bogotá, estimated that in 2002 the 2 million 8 hundred tons entered the city, 1 million 5 hundred tons were sold through the central and conventional market, called Corabastos. Thus, Corabastos manages more than 50% of the food of Bogotá (Rodríguez, 2006). The importance here is that three-quarter parts of this food come from traditional sectors (such as the peasant economies). Just the remain 25% of the food comes from big farmers. In these studies of the supply system plan of Bogotá, researchers estimated that nearly 2 million rural producers are involved annually in supplying Bogotá (Forero-Álvarez et al., 2006; Rodríguez, 2006). This production comes to the capital from different peasant territories.

Thus, Bogotá City (**Figure 3.2**) is surrounded by a rural world where small-scale farmers' families⁶ coexist with a variety of ecosystems, such as *páramos*, high Andean forests and wetlands, as well as lagoons, rivers and streams that surround it and cross it. Within this diversity of rural landscapes there are social, cultural and natural fabrics, which

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⁶ In this study I worked with a number of individuals who would be identified as "campesinos", translated here as peasants, small-scale farmers or small-scale producers. I worked also with those who identify as "neo-campesinos" or new-rurals (urban dwellers that moved to the countryside looking forward a new life based on agriculture). When we explicitly use the term "peasants" we are talking about peasant families who have campesino origins, and when we talk about "farmers", this includes both peasants and new-rurals. Both of these types of small-scale farmers play an important role in the food sovereignty of Colombia. In that sense I decided to draw on the category of family agriculture family in transition (see Chapter Two), which includes both peasants and new-rurals families, among others.

arise from the constant interaction between the *campo* (countryside) and the city. Some of the most visible evidence of these interactions can be seen through the networks and trajectories in which food moves from the countryside to the city. These interactions can be affected by multiple factors that can affect the city's food system along with its associated region.



Figure 3.2 View of the mountains (Cerros Orientales) that surround the city of Bogotá
Source: Instagram post of @yoamobogota
https://www.instagram.com/yoamobogota/



Figure 3.3 Chingaza Páramo, Guasca (Source: Author)

These small-scale farmers' families grow and harvest food, but also, they live, protect and transform the rural landscapes with different economic and cultural practices, worldviews and decisions. These farmers have a direct contact with the ecosystems, making Bogotá a unique and privileged city-region. Their life systems are based on the use of biodiversity and water that abounds in this region. Farmers are also facing an array of pressures such as rising food demand, green revolution technologies, mining, urban development, environmental degradation, and climate variability. Likewise, the definition of the paramos as protected areas for strategic ecosystems and the adoption of agricultural policies affect farmers' livelihoods. Small-scale farmers have had to coexist with these pressures and policy measures, and have had the challenge to persist, maintain, and also re-create their life systems and their culture. This capacity to persist is a sign of their resilience; they have consolidated their culture and survival, based on their knowledge of their ecosystems, and biodiversity, navigating through the political and institutional fluctuations that they experience in their regions.

This study focuses on three sites in the Bogotá-Region, more precisely, in two municipalities of the Department of Cundinamarca (Guasca and Subachoque) and one of the rural localities of Bogotá City (Locality 20 – Sumapaz)⁷ (See Figure 3.5, Figure 3.6, Figure 3.7). All the participants in this study come from one of these locations. These three sites are located in the area (or adjacent area) of the Páramos Chingaza-Sumapaz-Guerrero conservation corridor, located in the high Andean zone of the Eastern Cordillera in Colombia's central-eastern region, is characterized by their natural richness, has a strategic importance because of the ecosystem services it provides to Bogotá, especially in terms of

⁷ Bogotá city, Colombia's capital, is divided geographically into 20 localities. Among the eight localities that have a percentage of rural area, Sumapaz is the only purely rural locality.

water supply. This region is also a scene of high environmental complexity where the agrifood territories overlap with those of extractive industries and urban development (Sguerra et al., 2011; Ungar & Osejo, 2015). Besides, there is also strong evidence of climate change indicators in the region, climate models predict an increase in rainfall variability, and as a consequence, an increase in the frequency and duration of periods of water scarcity (IDEAM et al., 2014a, 2014b). Following I discuss about the criteria for the selection of cases and then I describe briefly the natural and sociocultural context of each site of study.

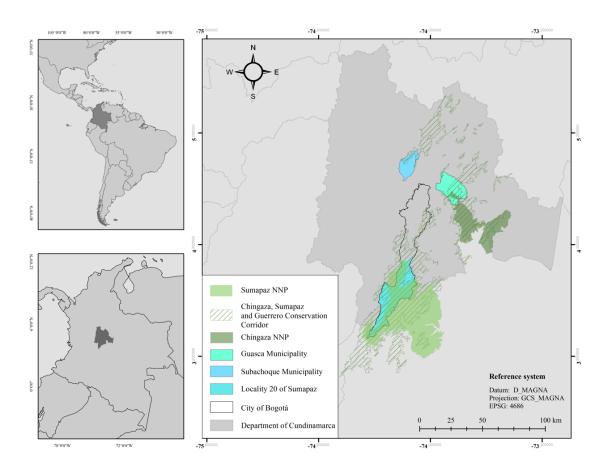


Figure 3.4. Map of the Area of Study

3.5.1 Criteria used to select the communities

The selected cases are characterized by being initiatives of social organization around the production and distribution of food, alternative projects to the dominant model, and in favor of the search for the food sovereignty of the communities that compose them, for which they are processes that are expected to meet several of the following criteria:

- Practices of sustainable production, eliminating as much as possible the use
 of agrochemicals, monocultures, among other practices that claim food
 sovereignty over the dominant production model based on agroecology,
 clean production, family and peasant agriculture.
- 2. Connection with agroecological networks or short supply circuits, that promote local production and purchase, as well as self-consumption. And allow alternative exchanges to the conventional economic environment.
- 3. Interest in bringing closer the relationship between producers and consumers.
- 4. Farmers and projects that are part of an organizational and associative base that has allowed the creation and strengthening of the social fabric.
- 5. Farmers and projects that were closed to the *páramos* corridor.
- 6. Processes that have lasted over time

3.5.2 Sumapaz (Locality 20 of Bogotá City)

Sumapaz is the Locality 20 of the Capital District (Bogotá City) (**Figure 3.5**). It is located in the extreme south of Bogotá, and its borders to the north with the locality of Usme; to the south with the department of Huila; to the east with the municipalities of Une,

Gutiérrez (department of Cundinamarca) and the department of Meta; and to the west with the municipalities of Cabrera, Pasca, and Venecia. It is the only locality of Bogotá that is more than 90% rural. It is located 31 km from the urban area and was annexed to Bogotá by Agreement 9 of 1986 signed by the Special District Council of Bogotá, headed by the Mayor of Bogotá, Julio César Sánchez, but it was only recognized as a Locality of Bogotá by the Article 318 of the Political Constitution of Colombia (ESEHN, 2014).

Sumapaz lies on the Eastern Cordillera of the Andes in the area of Alto del Sumapaz between 2,600 and 4,320 meters above sea level, has an area of 76,906 ha, and constitutes 48% of the total area of Bogotá (ESEHN, 2014). The entire local territory is classified as a rural area, which is directly related to its environmental characteristics and the fact that it is part of the Sumapaz *páramo*, considered one of the largest in the world. Besides, 46,811.5 ha of the total 78,095.2 ha of the locality corresponds to the National and Natural Park of Sumapaz. It is also a place with great abundance of water resources, becoming one of the strategic territories for the country in ecosystemic terms (Alcaldía Mayor de Bogotá, 2004).

Sumapaz is divided into three *corregimientos* (San Juan, Nazareth, Betania), and the total population living in this locality is 7457 (DANE, 2016). The study took place in Nazareth and Betania, particularly with farmers that live in the following *veredas*⁸: Betania, Las Ánimas, Nazareth and Peñalisa (**Figure 3.5**). Unlike the other two study sites, Sumapaz has been a disputed territory since the beginning of the twentieth century. This territory has been the desire of many, not only for its natural resources but for its strategic value in

⁸ *Vereda* is a term used in Colombia to define a type of administrative subdivision of some Colombian municipalities. *Veredas* mainly comprise rural areas, although on occasion they may contain a micro-urban center. Commonly, a trail has between 50 and 1200 inhabitants, although in some locations may vary depending on their position and geographical concentration (Mendoza Morales, 2011; RAE, 2019).

geopolitical and economic terms (Marulanda, 1991). In the case of Sumapaz, power schemes are evidenced by a conflict dynamic from the very conformation of the territory. In Sumapaz all forms of armed conflict have taken place that have historically occurred in Colombia, due territorial disputes of various kinds (Bautista-Gómez, 2018).

Sumapaz has accentuated features of rurality in that it exists in a natural environment with little human intervention, with low population size and density, a high level of isolation, and a mainly agrarian economic occupation. But at the same time, it is beginning to present increasingly urban features, fundamentally given the growing expansion of its social interactions, establishing permanent two-way contacts with the city, and with global society through media. Currently, Sumapaz's peasants have limited resources. Some are landless, and other are owners of smallholdings. Through their history, these peasants have confronted first the landowning class, then the conservative political spheres, then armed agents - legal or illegal - and more recently, business agents. All of these actors have sought to appropriate the territory or its natural resources at different historical moments.

These conflicts have affected the locality and produced social fractures. However, this situation has also led peasants to develop defense forms to advocate for their rights and remain in their territory. Through these conflicts, peasants acquired an important capacity of resistance. Peasant social organizations have historically faced numerous struggles on the past, and currently face conflicts for the defense of the territory and the possibility of staying in the territory. Thus, while the armed conflict in Sumapaz has been a crucial factor in its social history, the capacity of its peasants to resist also demonstrates the strength of their collective actions. An example of the latter is the peasants who are part of the

Collective C, who have lived in the territory for generations and still persist in seeking better opportunities through their agroecological production projects. Currently, this collective is integrated by nine families, in their entirety, the families are historical peasant inhabitants of this territory of Sumapaz, just one of the families' members arrived seven years ago. Six of the peasants' families are owners of their land, two of them lease the property, and one family is still litigating their tenure. Four out of the nine family members participated in this study, opening their homes and farms in order to share with me their stories and experiences. I also interviewed other three women farmers that are not affiliated to any collective but collaborate with the *Collective C* and are members of two of the alternative food networks I worked with.

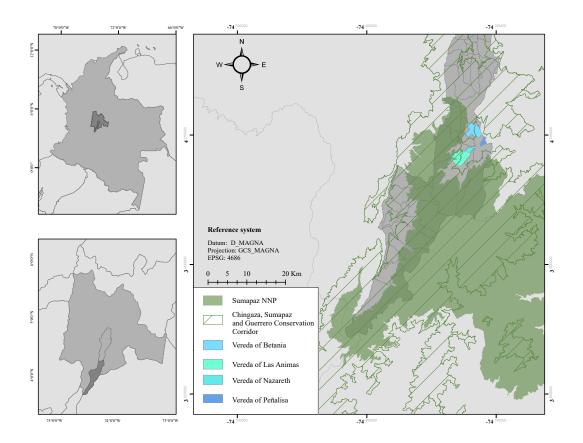


Figure 3.5. Map of **Sumapaz Locality** showing the veredas where the study took place, and the areas of the National Natural Park and the Chingaza, Sumapaz and Guerrero Conservation Corridor

3.5.3 Municipality of Guasca

The municipality of Guasca is located in the department of Cundinamarca (see **Figure 3.6)**, with an altitude of 2710 meters above sea level and an average temperature of 13°C. It has an area of 346 km2 and is bordered to the north by the municipality of Guatavita, to the east by the municipality of Junín, to the south by the municipalities of La Calera and Fómeque, and to the west by the municipality of Sopó. Guasca has 12347 inhabitants, 4229 in the municipal capital and 8118 in the *veredas*.

The Municipality of Guasca is a strategic territory due to the environmental services it provides, represented in the water supply for the Sabana de Bogotá and its importance for the conservation of the regional ecological structure. It is located in the Department of Cundinamarca and in the province of Guavio. The environmental richness of the province has been consolidated as a structural axis of the department of Cundinamarca. The environmental richness is manifested in its large forest and water reserves and its innumerable unique species of fauna and flora. For this same reason, within the Municipality of Guasca, there are sectors of special environmental importance, characterized by the presence of forests, *páramos* and wetlands, which contribute to water regulation, carbon capture, regulation of the local climate and also constitute the habitat of a very diverse flora and fauna. Therefore, the latter makes a portion of the Guasca territory part of the Chingaza National Natural Park (see **Figure 3.6**).

Guasca, as in other municipalities of the Sabana de Bogotá, is identified as a smallholder landscape. The current landscape has much to do with land use. That is, it is associated with the remains of living fences, native and exotic trees, orchards, some fruit

trees (blueberries and strawberries) and small potato and carrot crops. Also, in this municipality are open pastures used for small-scale livestock activities. This landscape differs from the wide and open landscape of the large *haciendas* (big farms), mainly with cattle, where the pastures dominate.

At the end of the 19th century land ownership belonged mainly to a few landowners. The few *haciendas* that existed in Guasca at that time represented the continuity of an inheritance from the colonial organization of Guasca. Later, in the first half of the 20th century, the large *haciendas* were gradually parceled out. Guasca, as a municipality of Cundinamarca, was not oblivious to the land conflicts that occurred in other parts of the department. A large part of the parceling of *haciendas* carried out in the first half of the 20th century, and the sale of the plots to peasants, made with a term of 10 years, was motivated by the liquidation of credits granted to large landowners in previous years by the *Banco Agricola Hipotecario* or to solve the difficulties of the owners with tenant farmers, thus not advancing the process of reforming the structure of the property (Machado, 2009, p. 240). In this way, large landowners were getting rid of distant, unproductive lands and those in hillside areas. That is why currently, in Guasca, the trend is to concentrate land mainly in flat areas, while the slopes are located for poor people with small plots and in poor conditions (Rojas Arias, 2013).

At the beginning of the 20th century, wheat and barley crops predominated in Guasca. However, after the middle of the 20th century, with the international division of labor and the import of cereals from North America, the production of cereals in Colombia was discouraged. It was then, when producers began to plant potatoes, carrots, and began to open pastures for livestock (Montañez et al., 1994, p. 123). However, these monoculture

crops were accompanied by small gardens with a diversity of products for self-consumption (Cristina - Guasca, personal communication, 2017).

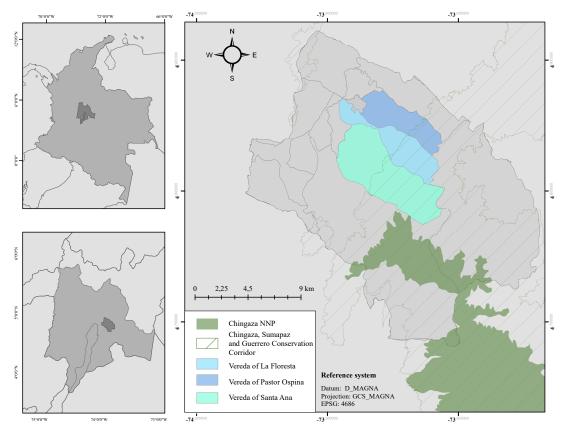


Figure 3.6. Map of **Guasca Municipality** showing the veredas where the study took place, and the areas of the Chingaza National Natural Park and the Chingaza, Sumapaz and Guerrero Conservation Corridor

Finally, it can be said that Guasca is a historically peasant municipality in which its inhabitants have created close relations with the countryside through agriculture and livestock. For some years now this has been changing due to the presence of the flower companies that offer work, so many farmers, especially the youngest ones, are leaving aside the other activities of the countryside (Alicia - Guasca, personal communication, 2018). In addition, the peasants have gone from owning the land to administering the land of other people who are usually city dwellers that buy land with recreational purposes. In

this sense, the initiatives of small producers like those described in this dissertation, show alternatives of production and other forms of permanence in this municipality. At the same time the natural wealth of Guasca and the strategies of its conservation, allows the farmers find synergies and opportunities for added value to their work as cultivators with an ecological approach.

In Guasca, I met the Collective A and Collective D, which members generously participated in this study. They opened the doors of their houses and farms to me, and above all they shared with me their stories and anecdotes about their experiences with agroecology. I interviewed six farmers from *Collective A*, three women and three men; three women from Collective D, and one woman that was not affiliated to any collective. From all the Guasca's interviewees, only two migrated from the city. All the farmers I interviewed owned their land or live on family land.

3.5.4 Municipality of Subachoque

The municipality of Subachoque is located in the department of Cundinamarca (see **Figure 3.7**), 45 kilometers northwest of the city of Bogotá in the province of Sabana Occidente. The municipality is made up of the municipal capital, including the urban population centers of La Pradera and Galdámez and 14 villages. It has a population of 17077 inhabitants (DANE, 2016). It is located in the high Andean region of Colombia at 2663 meters above sea level. This municipality is characterized by its agricultural vocation, focused mainly on livestock, potatoes, corn, carrots, strawberries, peaches, vegetables, and flowers. Subachoque is one of the municipalities that has been characterized by its monocultures. This has affected the sterility of its soils and the pollution of its rivers. Along

with the traditional farms, flower agroindustries for export emerged; the construction of roads made it possible for many of the inhabitants to live in their territory but work in the capital. In recent years tourism has become a source of employment in restaurants, hostels, and other enterprises.

Of the three municipalities presented in this dissertation, Subachoque is the closest to Bogotá. Within the projections of the possible creation of the metropolitan area of Bogotá, Subachoque may suffer impacts from the generation of road infrastructure projects and urban development that has already been affecting the surrounding municipalities. This growing wave of urbanization has been caused by the migration of the city to these territories as a result of the increase in property costs in Bogotá.

Subachoque, as a municipality, has been committed for several years to the protection of the environment, natural resources and especially water resources. In this sense, the care of the Guerrero *Páramo* has been a joint effort between the local authorities and the community. This was particularly reflected in 2008 when a landowner in the *páramo* applied for an environmental license to extract charcoal in the area of influence of the Protected Forest Reserve at the source of the Subachoque River and *Pantano de Arce*. In reaction, the population living in the area and in the town of Guamal began a process of mobilization to reject the project and put forward a series of proposals to stop the potential effects of such extractions (Parada-Ruiz, 2018).

In Subachoque, I met the Collective B through one of the solidarity purchase groups (Sembrando Confianza) I worked with. Nowadays, the collective has 21 members, and I interviewed 14 of them, four women and ten men, as well as in Guasca, I had the great opportunity to meet them in their homes and farms, and generously they share with me

their stories and experiences as farmers. Just two of the farmers were living in rented land. They opened the doors of their houses and farms to me, and above all they shared with me their stories and anecdotes about their experiences with agroecology.

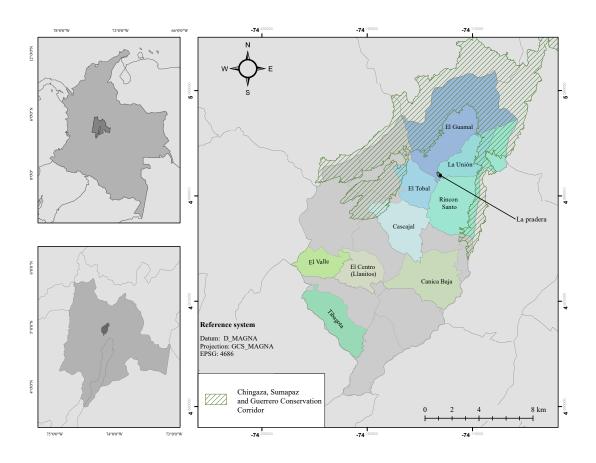


Figure 3.7. Map of **Subachoque Municipality** showing the veredas where the study took place, and the Chingaza, Sumapaz and Guerrero Conservation of Corridor

3.6 Reflections on process of the methodological and area of study choices

In this section, I reflect on the choices I made during the research process and on my role as a researcher. Ethnographic methods helped me to be involved in the social practice of producing food, being in community and participating in agroecological food networks. The interviews were important to identify discourses and narratives about change and transformative practices, as well to understand daily choices and motivations

regarding food production, food distribution, live styles, being part of a collective, ways of food distribution. Among those interviewed were farmers and other actors related to agrifood networks. The interviews were accompanied by participant observation, which allowed me to participate in different activities on a farm and other activities of producers' daily lives. I also attended ordinary events such as markets, the organization of the harvest, meetings, and special events. My participant observation was not limited only to the context of the producers. I also participated in the daily activities of the alternative food initiatives and NGOs oriented to the organization, communication, marketing and management of local agri-food supply systems. The participant observation allowed me to analyze complementarities and contrasts with the interviewed actors' discourses and narratives. Likewise, the discourses and narratives were enriched and contrasted with the analyzed contents of social networking, notably contributing to the analysis of AFNs' role. Therefore, the narratives and discourses allowed me to have a more semantic dimension while the descriptions, resulting from the participant observation, a more pragmatic dimension of the fieldwork. It is important to note that this whole fieldwork process was a dialogical relationship with the actors with whom I interacted; it was not only an exchange of information but also of many learnings.

For putting together the puzzle of this research, it was necessary to make a composition of the study area, which is made up of three municipalities surrounding the city of Bogotá, the city of Bogotá itself and the circuits that connect this city with the particular places of each producer that are located in these municipalities. As I mentioned before I had two entry points for field research: (a) my experience as volunteer in a Civil Society Organization (CSO) and (b) my previous relationship as consumer and later

member of one of the AFN. Through them I met agroecological networks, and they introduced me the farmers collectives. As I described in section 3.4.1., I wanted to work with farmers who had a relationship with networks, collectives and have lasted over time in an agroecological project. Additionally, one of the area study choices was to explore experiences that were situated in places with a relationship with the páramos. The latter with the idea to understand to what extent agroecology can be an alternative to inhabit this fragile ecosystem and the adjacent areas. I also wanted to understand the relationships within the agroecological networks that are growing within the Bogotá-Region, and explore the close interrelationship between the rural and urban worlds, it was vital to think of these places as agri-food territories that integrate both the city and the surrounding municipalities through their multiple interactions. These places were chosen for their close relationship with the city and their ecosystemic and productive characteristics that make them strategic places of interest for various actors. These social and environmental features can bring both tensions and opportunities for the inhabitants of these municipalities. Finally, it should be noted, as an inhabitant of Bogotá, this research was an opportunity to engage with my region and to connect with it, as I have already mentioned in the introductory chapter.

The next four chapters will describe the results and discussions of the fieldwork described in this chapter.

Chapter 4. The Huerta: sowing the seed of transformation

The purpose of this chapter is to explore the farmers' motivations behind the decision to adopt agroecological practices, which nurture their daily labor and their quest to thrive in a rural world full of environmental and social challenges. Within the three spheres of transformation, the farmers' motivations may be laid in the personal sphere of transformation. Motivations often derive from a range of feelings, desires and values that sow seeds of transformation and alternatives, to allow farmers to connect with other ways of doing agriculture and being in this world by growing agroecological food. This chapter provides insights into one of the many contexts in which alternative food initiatives can be born, answers questions about the transformation of the material and symbolic realities of our food system and give us clues to rethink the rural world that has been devastated by the world food economy.

This chapter is an opportunity to shed light on examples of transformation towards sustainability in a particular context, through specific practices that aim to transform the way food is produced and to promote other ways of living. The motivations found in this chapter, as mentioned before, are linked to particular feelings, views, worldviews, and attitudes that will therefore frame the agroecological practices of the farm. Focusing on the personal sphere of transformation, this chapter focuses shows how personal factors overarch the decision-making process to adopt agroecology. Through stories about *huertas* and farmers' life experiences, I explore the motivations that can spark transformation, looking into the subjective and human dimensions of processes of change in three sites of the Bogotá-Region and the Conservation Corridor of Sumapaz, Chingaza and Guerrero.

Drawing on the self-determination theory (SDT) (Chirkov et al., 2003), farmers' motivations are differentiated between intrinsic and extrinsic. These two categories are interdependent in the way they lie on a continuum from "heteronomous actions that are controlled by forces experienced as external to the self" to "autonomous or truly volitional actions" (Moller et al., 2006, p. 104). Also, these categories of motivations go from lesser to greater internalization, thus, when motivations tend to be more autonomous, the probability of behavioral change or adoption of a practice is higher, but also the change will persist significantly longer (Garini et al., 2017; Moller et al., 2006). Garini et al. (2017) specify three categories of motivations along the mentioned continuum: external, identified and intrinsic (Figure 4.1). Both "external and identified motivations are extrinsic because they are referred to some attainable separable outcomes, while intrinsic motivations are referred only to personal interest or enjoyment. Identified and intrinsic motivations are both referred to an autonomous choice while external motivations are referred to a controlled choice." (Garini et al., 2017, p. 203). Therefore, in order to understand the drivers of adoption of agroecological practices, the study of farmers' motivations is crucial due it captures the individual and collective "views" of possible and autonomous solutions (O'Brien & Sygna, 2013) towards more sustainable and welfare futures.

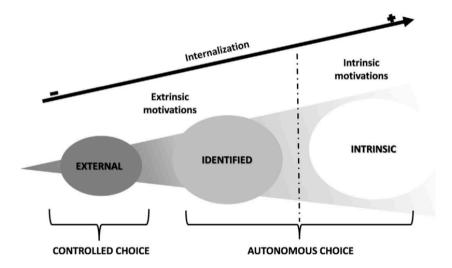


Figure 4.1. Graphical representation of the three categories of drivers of adoption of agroecological practices according to the self-determination theory of human motivation.

Source: Garini et al. 2017

With this interest in farmers motivations, during my fieldwork, I spent much of my time trying to listen, sometimes with a recorder in hand sometimes just with my notebook, to how are farmers engaged in everyday work in the *huerta*, and to their stories about the motivations behind this long-term commitment to the agroecological practice of growing food. I visited their farms and walked with them. I participated in several gatherings as well as in ordinary meetings where farmers meet as members of associations or collectives. I attended special events such as festivals, local markets, *trueques* (barterings) of knowledge and seeds, and *mingas*⁹. Through interviews and conversations with farmers, I was able to identify the initial motivations that gave life to their *huertas*, and to other motivations that strengthen their commitment to work daily in the *huerta*.

⁹ The *minga* is a form of Andean collective work, in which people work together on something beneficial for all participants. It also has a collaborative character to a particular individual (Ferraro, 2004).

Through this chapter I highlight the link between farmers' motivations and the sustainability of the agri-food territories that surround the city of Bogotá. The initial motivations vary from experience to experience, and the decision to undertake an agroecological project can be motivated by a complex mixture of both internal and/or external motivations. In some cases, farmers started agroecological projects because they found about external projects of conservation or rural development led by NGOs, or a local or regional government program. In other cases, they decided to start their own projects (intrinsic motivations), which does not mean that they won't later be a part of a larger project with other peasant families (identified motivations). Motivations, which are the compass of processes of radical change, have to set the course of the action towards transformation regarding the feelings, desires, values, worldviews, and attitude of farmers.

The chapter is divided in three sections: the economic, socio-cultural, and socio-ecological factors of said motivations. Although, depending on the factors, the motivations are presented in different sections, some of them are intertwined and may be at different categories at the same time. Besides, while it is true that the environmental and social contexts of farmers are determinant to their decisions, I found more similarities than particularities within the motivations behind farmers actions in the three sites I visited, and this is why in this chapter, I do not differentiate the motivations regarding the three places. The farmers that I interviewed are Andean inhabitants of the *páramos* from the Chingaza, Sumapaz and Guerrero Conservation Corridor, and I believe that it is important to emphasize their shared interest in putting down roots through a just and better living in these Andean high-mountain landscapes.

4.1 Connecting with economies of good living and solidarity economies

The main factor influencing farmers' decisions about growing food agroecologically can be broadly categorized as economic motivations. These economic motivations are not mere financial or connected with a capitalist rationale, but are also personal and collective motivations that allow farmers and their families to make microdecisions about economic experiments that can improve their lives (Gibson-Graham et al., 2013, p. 23). It is important to see farmers' economic motivations from a more comprehensive and diverse approach, in which economic plurality is the key to understanding the convergence of different economic practices that can provide well-being to farmers. In farmers' narratives, some motivations were financial in a first moment, but along their narratives about growing agroecologically, farmers also incorporated ethical directions that they have been following in the search of new meanings of life and of their projects' sustainability. Therefore, at the periphery of the capitalistic narratives of productivity and profitability, farmers stories show possibilities of radical new ruralities (Chaves et al., 2017). I focus on two main ways of seeing these economic factors of motivations. The first one is related with the search of good living and dignity. The second one is linked with being-in-common, how growing agroecologically brings new associations and connections, and relates with solidarity economies.

4.1.1 In search of an autonomous good living

"This is my huerta and my office, here is where I permanently work [...]. I have lettuce, spinach, swiss chard, [...] look this gorgeous quinoa. I'm also starting to grow chia, here I have the *maiz*, here are the native potatoes, with the collective, we are trying to rescue these varieties of native tubers, aren't they pretty? [...] Over there are the trees of *papayuela* and *feijoas*, and... do you know what is this? [...] yes, *lulo de páramo*, I also have blackberries. [...] This is the place of

all the *aromáticas* and medicinal plants, you know... having la huerta is like having my own apothecary, you see, pure diversity, because here I grow life, not death." (Julio - Subachoque, personal communication, 2018)

The *huerta* is the ground zero of agroecological projects, it is the place of new openings, new learnings, new interactions, but also comebacks, memories and reconnections, but most of all is where people can see their lives from a different perspective. The goal of searching for a better way of living appears constantly in farmers' stories. High up in the Andean mountains of Central Colombia, farmers from the Chingaza, Sumapaz and Guerrero Conservation Corridor told me about their desires for having a better life experience. For some of them, as Arnulfo and Sebastián (both from Subachoque), their projects started as an autonomous choice for exploring agroecology. For others as Aurelia, Lucerito and Omar (from Guasca), their agroecological projects were rooted in their strong longing for improving their self-provisioning and contributing to income generation but their projects really took shape when they started to work with a conservation project in their *vereda* (village).

For Arnulfo living from his own *huerta* was just a utopic dream. He grew up seeing his parents struggling with agriculture without successful economic results. For the time of his parents, agro-industrial practices started to be the mainstream way of doing agriculture. They surrendered to the perpetual dependency on agro-industrial inputs and agrochemicals to sustain themselves in the broken linkage between food production and commercialization. Fortunately, Arnulfo's parents did not lose their land, as many other small-scale farmers that could not thrive as a result of the debts that came from these dependencies of the agro-industrial practices. When Arnulfo reached the age of having his own family, he had no other choice than to be an agrarian worker because it would have

been impossible to live without a salary from the land he inherited from his parents. It was easier and more secure to be an employee, despite the unjust conditions of his work without health insurance and social security. He worked in a big farm growing carrots where he had to manipulate a lot of agrochemicals. One day he had a heart attack, and his "boss did not give to [him] even one mejoral (painkiller pill) to help [him]." He paid with his health the use of agrochemicals in his old job. Since then, he decided to start a new life, in his land with an agroecological huerta:

"I knew that it would be difficult to raise a family without a salary and also without chemicals [laughter] but at least I could give them good food, and I could take care of my health and well-being." (Arnulfo - Subachoque, personal communication, 2017)

Since then, Arnulfo became an authority of agroecology in Subachoque. Now he lives from agroecology, he distributes what he produces in different places, markets and food fairs but most of all, his *huerta* became an experimental laboratory of agroecology, he also has additional income through agroecological consultancies and workshops:

"Now my huerta is more than a productive place, is a place where people can learn how to grow food without harming the earth. I have to be very dedicated to my huerta, I have to study her, which plants get along well, do you see this spinach? I'm growing it with lettuce, they get along well. [...] Also, which are the plants that can help as insect repellents, as this big rue. [...] What are the rates of growth of each plant? [...] How can I propagate my own plants and also keep the seed in a seed bank. [...] Now my huerta is a laboratory for students, and that motivates me for continuing working on it". (Arnulfo - Subachoque, personal communication, 2017)

Aurelia tells that her *huerta* was a new beginning for her. During her whole life she had never stopped growing *alguito* (something) because "*in a rural family at least, you should have some medicinal plants.*" (Aurelia - Guasca, personal communication, 2018). But in her family, they had forgotten the benefits of growing food on their own:

"We abandoned our practice of growing food. My husband found a job as administrator of a country house, and I started working for two Bogotanian families helping them with the general offices during the weekends, then I lost my job, we had my husband's income, but it wasn't enough. [...] When the paramos project of the Bogotá aqueduct arrived to Guasca [...], I realized that you are not poor when you cultivate the land. Maybe I do not have a monthly salary, but I am autonomous in my work, I feel very happy to grow my own food, have my daily eggs, that's a kind of income, now we do not spend so much money on food. [...] Being a farmer is not an easy job, there are always many difficulties, but it makes me feel good." (Aurelia - Guasca, personal communication, 2018)

These two stories describe how *la huerta* can be a new opening for reconnection with the self, the body and the land. This reconnection brings new meanings and feelings of living different, it arises a search of a good living. As shown in the stories of Arnulfo and Aurelia, the longing for better life conditions is a driver that influences the farmers' adoption of agroecological practices. The existence of favorable conditions in their quotidian work and the possibility to find new work opportunities, are one of the main *identified* motivations, in the way are autonomous choices but extrinsic because the health concerns of Arnulfo and the economic possibilities that Aurelia was searching.

In the case of neo-rural farmers, one of the main motivations to move to rural areas is the search of a simpler life through a harmonic and peaceful coexistence with nature. Sebastián in Subachoque found a new way of living, in his thirties he was having a very busy life and he was longing all the time a fulfilled life.

"We, urban inhabitants, are facing an enormous problem in our lives today. It's so big we can hardly see it, and it's right in front of our face all day, every day. We're all living too big lives, crammed from top to toe with activities, urgencies, and obligations that seem absolute. There's no time for you, for your own life. That is why I decided to move from Bogotá to Subachoque." (Sebastián - Subachoque, personal communication, 2017)

For Sebastián as for other farmers like Pilar and Alejandro, living in rural areas is an opportunity to build a life based on emotional relationships between the self and natural environment. They are unmaking deliberately their urban lives at three different levels of the self, the society and nature. In the case of Sebastián he is encountering a new way of connecting with himself. It is the first time that he lives totally alone, with just the plants and his animals as the only company. He says that feels like he is rebirthing, he feels again like a kid, and the "magic of curiosity" is always present. He has some mentors, Jesús and Armando, peasants that are teaching him how to grow food and raise animals. He had never thought applying again chemistry or biology in his life, now with his relationship with plants everything is chemistry and biology.

In the case of Pilar, she decided to move to Subachoque as a retirement plan. She needed peace; she is a doctor and one of her whole life desires was to learn about medicinal plants. Through agroecology and biodynamic agriculture, she is reconnecting with nature and encountering peace. For her, "peace is an internal and personal process" and now she is experiencing it through her work in her huerta (Pilar - Subachoque, personal communication, 2018)

In the case of Alejandro and Laura, they decided to move to Subachoque because they wanted to have a simple life for their family, they want to be present all the time for their children, and the rural life is giving them this great opportunity of being present for their daughters. In terms of productivity, their main achievement to date are the yogurts. Alejandro and Laura make yogurt, using purchased milk from a neighbor that operates sustainable livestock production. However, they are starting to grow vegetables and connect with peasant neighbors through *mingas* in their *huerta*. Alejandro was the more

persistent of the family by pointing the need to become rural inhabitants. Before they arrived to Subachoque, he was in the northern coast of Colombia, where he learned how to grow food and experienced to live a simpler life with less stuff and activities that was more pleasant and rewarding. Now he is relearning how to grow in the highlands, because in Subachoque the climate and the environmental conditions are different. Now he is an inhabitant of the high mountains of the Andes (Alejandro - Subachoque, personal communication, 2018).

The last three stories illustrate the longing to find a good living as a driver to adopt agroecology and an alternative life to the one they were living in the city. Being urban inhabitants, they decide autonomously to move to the countryside, searching for more simple and wholesome life. Thus, the total of the five stories of this subsection are examples of new economic possibilities towards better living conditions that are based on a different ethical basis than they had before. The new ethical basis is that of care, more precisely that of self-care, which will later be reflected in caring practices toward others. Thus, these motivations, which can have both an extrinsic and an intrinsic but autonomous origin, contribute to transforming ways of life, and therefore everyday practices based on agroecology. Hence, the huerta became an important space to undertake a personal-andfamily journey towards a behavioral change based on agroecology that is sustained through a sense of well-being and an opportunity for an "ever-expanding worldview" (Gosnell et al., 2019). In regard to the personal sphere of transformation, we can see that farmers' decisions illustrate the ways in which values and worldviews around well-being have led them to transformational learning experiences based on agroecology.

4.1.2 Associativity and collective construction of solidarity economies

(Motivations to connect with others)

Most of the farmers that I interviewed (**Table 4.1**) are members of agroecological collectives. Within farmers' narratives being part of a collective is not the main driver for starting to work in the *huerta*, but it is one of the motivations to remain in agroecological projects. Being in a collective is also a strategy for continuing and sustaining the work in the *huerta*. Later, in Chapter Five, I will describe in a more detailed way farmers' associativity and collective actions as strategies for strengthening agroecological initiatives. As we can see in Table 4.1, I met members of four farmers' collectives: two collectives from Guasca (Farmers' Collective A and D), one from Subachoque (Farmers' Collective B) and one from Sumapaz (Farmers' Collective C). These collectives articulate initiatives around the cycles of production, distribution (exchange) and consumption that rethink the ways of farmers' lives and the interaction between the countryside and the city.

One of the initial farmers' motivations for being part of a group is the opportunity to sell and exchange their products more easily. We label this as a market motivation. Most farmers draw on the economic diversification as a way for increasing their income. Agroecology is not always the first alternative to get the main income, however farmers expressed that if they get more revenues from the agroecological practice it would be better. The four collectives in similar ways have tried to generate alternative spaces of commercialization, inspired by principles of solidarity economy, where they agree to reciprocal commitments and fair prices for producers and consumers, and where they promote conscious and responsible consumption. Creating alternative spaces of food exchange and commercialization is just one of many other goals of the collectives, but we

can say it is one of the initial purposes of the establishment of food collectives. Farmers acknowledge that being part of a collective is an opportunity to gain access to alternative markets and improve their income. This is the case of Constanza, who told me: "I feel motivated because now my blackberries orchard and my huerta are my main source of income. I stopped going to work somewhere else, and that makes a huge different in my life." (Constanza - Subachoque, personal communication, 2017). So, she found in Collective B an opportunity to sell her blackberries and other products of her huerta, generating more meaning and profits from her garden.

Table 4.1. Farmers' affiliation

Farmers' Collective	Location	Number of Interviewed farmers
Collective A	Guasca	6
Collective B	Subachoque	14
Collective C	Sumapaz	4
Collective D	Guasca	3
Non-affiliation		5
Total		32

Also, for farmers being part of a collectivity has allowed them to participate in a process that aims to strengthen ties of solidarity among farmers. Evangelina, who is a member of the *Collective C*, told me that since she joined the collective, the future started to matter. When I asked her why it has been important for her being part of the network, she answered that being in a collective has allowed her to project herself in the future: "now I can look beyond today" (Evangelina - Sumapaz, personal communication, 2017). Evangelina arrived in Sumapaz eight years ago with her whole family. They lost their land in the southwest of Colombia and decided to seek other places to establish a new life. She and her family did not want to move to a city; they wanted to find a new place in which

they could continue their rural life. For her and her family starting a new life in another place have been tough, especially because it was not easy to find a place that the rent was affordable. Now they feel better, and they have a place to grow food. She was a beneficiary from a food security program leaded by the public hospital of Sumapaz. Through this program she met the women of the *Collective C*. Participating in this network has been an important motivation for continuing working in her *huerta*. She likes to participate in the activities, gatherings and events that promotes the network. She learns from the other women, and she can also share her experiences and her knowledge. She told me that the network has opened in her heart, hopeful feelings.

Hopeful feeling is an experience that can be an inspiration for reconnection in moments of crisis. Hope allows energy to flow and raise the spirit, it allows one think about new possibilities. In company with other women Evangelina is improving her *huerta* and seeing possibilities to sell some of the products in fairs and local markets that are looking forward to getting agroecological products. She manifests that for her it is important to have the possibility of sharing and learning together with other women, and most of all to feel that she can count on other women. As Gibson-Graham et al. 2013 say, "one thing that gives us hope that we can change ourselves and the economy is that people do change" (p. xxii). Farmers gain hope by seeing others reframing their lives and adopting new behaviors, practices and ethics on food production and distribution/commercialization.

Also, for Sebastian, one of the members of Collective B, Collective B has played an important role in the development of his huerta. "I have felt encouragement from Collective B's members all the time. They support me, they teach me, and thanks to them I have this new place, and I can start my project of life". Aurelia, from Guasca and a member

of the group *Collective A*, explained in a simpler way, that being part of a collective is to have a new family; for her it is a significant motivation to continue and pursuing their dream of having a more sustainable farm for their food sovereignty and well-being. Aurelia also thinks that the group *Collective A* has brought to her other perspectives of life, other ways to share with people, and most of all a new way of imagining and reframing her future.

Collectivities can encourage farmers through constant support of their members and their solidarity work. The minga is a vivid example of solidarity and support. Since they started to meet and do mingas together, Lucerito and Omar, as members of Collective A, feel like they have an extended family. Lucerito (2017) expressed: "Since we are in the group, we have learned that one can cultivate, and have their food sovereignty without huge extensions of land. That's possible because we all support each other and can cultivate collaboratively. We meet weekly to exchange learnings, tips, new ideas, and share our challenges, we feel that we are not alone, and working together with other families, we can have better results with our huertas." Ana, the director of El Parque Agroecológico Chaquén (Agroecological Park "Chaquén") in Nazareth (Sumapaz) tells that the *minga* is a core practice for strengthening the social organizations; it fosters the co-working and opportunities for innovating together. Ana as researcher of the Public Hospital of Nazareth (Sumapaz) started a project of food security with one hundred families, and now only nine families remained. They have still been active because they are organized in a solidarity collective. Ana explains that families, being together through mingas of work and also "thinking" mingas, do not feel alone and they know they can count on the members' solidarity of the Collective C. For farmers, being together with other farmers, allow them to envision different ways of working the land and also other possibilities of selling their products. Through the collectivities, farmers also can join efforts: they can have more significant quantities of products and get shared surpluses that they can sell. They can also share transport costs that are part of the product distribution.

In peasant and rural communities as an indigenous legacy, the *minga* is a tradition of cooperative, solidarity and voluntary work for the common good. The *minga* is a widespread practice in the whole continent of South America; it is an ancient practice that reveals how in our continent the way of life was absolutely communitarian before the Spaniards. This practice is more present in indigenous communities than in peasant communities. However, when peasants adopt this practice it is easier for them to rebuild their social fabric and boost the individual projects of each member.

Thus, being part of a collective allows farmers to see prosperity as a shared vision. But also, being part of a collective can give them a more critical and proactive view of the food production and distribution dynamics based on values of ecology, solidarity, and reciprocity. Additionally, in this subsection, we can see how personal decisions and motivations become collective. With that in mind, this subsection shows how personal decisions connect with collective decisions, allowing the small and individual actions to reframe farmers' sense of possibility and unleashing new capacities with a broader scope.

Persisting in agroecology can be tough if farmers are alone, Sebastián mentioned that he couldn't have grown his huerta without the help of Jesús and Armando; for him they have been his teachers and masters (Sebastián - Subachoque, personal communication, 2017). Collectivity can be a source of transformation in three ways. First, farmers build their peer support networks and social learning spaces. Second, they open up other ways

to do economy. Third, collectivity scales up the agroecological practice that requires believers and inspirers that can show tangible results. Through these illustrations, it is difficult to neatly delineate the personal and practical spheres of transformation. We can see that a sense of community allows creation of common values, shared worldviews and feelings of hope, which can be considered as part of the personal sphere. It also builds networks of practice and peer support that are part of the practical sphere, allowing farmers to maintain the interest and enthusiasm towards agroecology.

4.2 Re-existence and co-existence practices of campesinos and neocampesinos: socio-cultural and ecological motivations

In Colombia, more than 25 years ago, the new national constitution (1991) acknowledged indigenous and afro-colombians as cultural, social and political subjects. Instead, the construction of the *campesino* subject, that is different from the indigenous people and afro-colombians, has aroused questions and doubts among researchers, politicians, and activists. Indeed, indigenous and afro-colombians are also peasants and, as Hoffmann (2016) says, it would be risky to erect borders between these categories and thus promote a forced ethnicization of society, leading, at times, to problems of social fragmentation and horizontal discrimination between ethnic and cultural groups. However, at the same time, one cannot ignore the fact that *campesinos* who do not recognize themselves as indigenous or afro-descendants lack political and legal tools to defend themselves against attacks on their resources, whether material (lands, waters, soils, vegetables, crops, but also their houses and *huertas*) or intangible (knowledge, rural costumes, culture, life). In other words, the multiculturalist policies of the last decades in

Colombia, by recognizing the rights of certain sectors of the rural population under the banner of ethnic rights, left other sectors, such as the peasant one, without protection.

Particularly for farmers that identify themselves as *campesinos*, they recognize that taking part in an agroecological process allows them to re-connect with a peasant history that has been relegated and forgotten in Colombia. The peasants have been historically silenced, but they are an essential part of the cultural and social fabric of the rural world where diversities, differences and socio-cultural inequalities are struggling to achieve recognition and/or positioning as participating social subjects. Agroecology in Latin America has been also a political movement, and within the narratives of peasants reside the acknowledgement of the role that they are playing in the rural world of Colombia, growing food with agroecological principles. As it was mentioned in Chapter Two, practices and principles of agroecology lie also in the knowledge and practices accumulated in peasant and indigenous agriculture around the world. Although neither peasants nor indigenous people have historically used this term, nowadays the concept of agroecology starts to appear in peasants' narratives.

"We are a group of peasant families (familias campesinas) who have decided to be a community that grows food naturally, without applying chemicals to the soil and plants. We promote solidarity, fair trade, shared labor, and seek to dignify peasant life. We want to be agents of change through the practice and dissemination of agroecology, conceived as a way for social transformation in harmony with the environment." (ARAC, 2017)

In this section, I use the concept of re-existence, which is a central theme of the decolonial studies. Here, re-existence is a more radical expression of the resistance of a modern/colonial world. Resistance is not only about denying an oppressive power, but also about creating ways of existing, which includes ways of feeling, thinking, and acting

differently in this world (Maldonado, 2017). In this section, I show how agroecology and its expression in the *huerta*, can be a way of re-existence, how the huerta becomes a vital space that invites people to recognize and self-affirm in their socio-cultural and ecological particularities.

4.2.1 Re-existing as campesino: socio-cultural motivations

The agroecological *huerta* is a starting point to take back the work of land and to learn or re-learn, depending on the case, to make sustainable use of land to ensure the conditions of a life with dignity, for both farmers and also other beings that are part of the agroecosystems. Notably, the agroecological *huertas* are entry points for re-valuating the role played by peasants in the food production of the rural Bogotá but also the cultural configuration of this region. Farmers agree that there is not enough respect for peasants' work, culture, and life. Agroecology is an opportunity to acknowledge the importance of *campesinos* again as cultural, political, and economic subjects.

Adopting agroecological principles, farmers allow themselves to move towards claims linked to the defense of their territory, their rights, and their political participation, in addition to important aspects such as the recognition of their food sovereignty and autonomy, culture, and role in the production of food.

The adoption of the economic liberalization policies of the 1990s and free trade agreements, such as the one Colombia has with the United States since 2012, have brought harmful consequences to the agricultural sector. The concentration of land in large national and international landowners has increased, leaving rural communities with marginal holdings. In this sense, the small peasant subsistence economy and small-scale supply have

been weakened due to the little investment to activate the rural and urban social economy (Ortega García, 2018). The economic liberalization causes the loss of Colombia's internal productive capacity. It enables the consolidation of transgenic crops, the growth of imports, the marginalization of the peasantry, the general detriment of the agricultural sector in the economy, the advance of cash crops oriented to the export sector and raw materials, a strengthening commercial agriculture, and the distortion in prices. This list of consequences shows the contradictions presented for food sovereignty in Colombia.

Thus, the working conditions of rural workers are currently regrettable: often wages are not fair, they do not have minimum social security, and exposure to contamination by agrochemicals puts the health of farmers at risk. Another aggravating factor in food sovereignty and the permanence of peasants in the territory is the monopolization of seed management, which is also linked to foreign policies and transnationals, which, through legal channels, have developed mechanisms for their control (Gutiérrez-Escobar, 2016). Alberto talks about these commercial dynamics and how he has experienced them:

"When I was young, I worked a lot. All the young people used to work hard. There were other times, in which the government used to support our agriculture, in this territory, especially wheat crops. That changed when Colombia began to import wheat and stopped supporting peasants, the interest in the campo has been lost. The costs of agricultural inputs went up; we entered to compete with imported wheat, so we did not sell. In my case, I started borrowing from the bank, and then when I could not pay because I had to sell a piece of land, I stopped fighting. Now you can't get work easily, the life of the peasant is hard. [...] And now we have this project of the chickens, the cows, I work with a lady taking care of her cows and the agroecological huerta, that thanks to my son we have it afloat." (Alberto - Subachoque, personal communication, 2017)

When I had this conversation, Alberto was pessimistic but his son Armando (43 years) after our conversation and through our walk from the house to the *huerta* gave me another perspective of my conversation with his father:

"I understand that for him was hard to see how agriculture in this country has been changed, and our opportunities as peasants were closing, but at least we still have our land. With this project of the agroecological huerta, we have another opportunity; we're also growing organic potato. I'm showing my father that we can go back to our grandparents' agriculture without chemicals and take advantage of the organic products, especially now that we are members of the association and we're having access to different markets. I'm not so pessimistic, look this huerta, isn't it gorgeous. And we're still here doing what my grandparents also did." (Armando - Subachoque, personal communication, 2017)

My campesino interviewees see agroecology as a way to acknowledge and show to the entire world the meaning of being campesinos (peasants), and the importance of their work with the land. They re-exist through it. Peasants' life experiences become counterhegemonic, occurring in the peripheries of power and challenging the status quo. Lucerito from Guasca sees that agroecology is bringing to her and her collective some experiences that allow them to see a more dignified future that might be ignored from conventional agriculture (Lucerito - Guasca, personal communication, 2017). Julio, a peasant from Subachoque, highlights that the world needs to acknowledge that the campesinos have a pivotal role in the production of food, especially healthy food: "You don't need a doctor or a lawyer every day, but a food producer... you need him every day. That is why our work is so important, and people should value us" (Julio - Subachoque, personal communication, 2018).

The process of re-existing as a campesino is one reason for adopting agroecology. This motivation to adopt agroecological practices seeks to explore and recognize other, more inclusive and critical, rationalities about being a campesino. Through agroecology, doors are opened for a process of re-enchantment and seduction to others, particularly to young people who no longer believe in a life in the countryside. Adult peasants are still concerned about the situation of the young people in the rural world. They are migrating

to the city, "they prefer to abandon the type of life of their parents, not seeing the possibility of leading a life with dignity, prefer to go to the city," as Alicia told me (Alicia - Guasca, personal communication, 2018).

For this reason, the four collectives of farmers consider the involvement of young people in their production projects as crucial for the countryside survival. Under these concerns, Arnulfo has undertaken an education project in his *huerta*. One of his motivations for growing and taking care of his agroecological huerta is to generate an open and alive space in which he can teach young people to work and care about the land, and at the same time, honor the possibility of being *campesino*. For him it has been a challenge to motivate young *campesinos* to see opportunity in the *campo* (countryside), particularly with his own children. However, his enthusiasm and perseverance brought him "other children," and at this moment, he feels very proud to think that he has "many adoptive children thanks to agroecology." He has taught many people to cultivate agroecologically, and now more, since "students from different universities come to visit [him]." He told me he goes an important amount of time teaching the practical stuff of agroecology in his teachings. However, what he always highlights, is that through agroecology, peasants can recognize the value of their work and to seek dignidad campesina (peasant dignity). He thinks a lot about a more contextualized rural education, and he expresses that "one part of this education should occur in the huertas." For him one of the main reasons for peasant migration has been given by the discouraging laws of the State around rural education, where the child can only go to a decontextualized school, which force them to think that the only opportunities for getting a better life is in the city, "it seems that in these rural schools people is teaching to the students that is something wrong to work in agriculture.

But then, how will children learn to work and take care of the land? [...] So, the challenge is how to encourage young people with agroecology so they can see el campo differently." (Arnulfo - Subachoque, personal communication, 2017)

That is why agroecology is a starting point for valuing the quotidian labor of the campesinos' differently. Practicing agroecology is a recovery of campesinos' tradition and a way of recovering the dignity of being campesino, of being proud of campesinos' work. Cristina has a strong conviction about the importance of the recovery of the campesinos' dignity through growing food again as her grandparents used to do it. And so, when she takes care of her *huerta*, she is honoring something that she learned from her peasant heritage. Cristina believes agroecology is also a micropolitical action; she explains that agroecology gives *campesinos* back its social and cultural relevance. It is also an opportunity to experiment with different ways of sowing, growing, fertilize, seedling, etc., and, most of all, is the way she guarantees healthy food for her and her family.

In this sense, peasants are growing food not just for a market, when I asked Miguel if he has been getting an income from his *huerta*, he declared: "the reality is that at this very moment we cannot live totally from agroecology, the main purpose for us to grow food agroecologically goes beyond an economic purpose. Here we are talking about food autonomy." (Miguel - Guasca, personal communication, 2018) Peasants grow food also for their own, and this allows them to take back their autonomy of deciding what to grow, produce, how to distribute and consume. Deepening the importance of being *campesinos* and recognizing the *campesinos*' traditions, they recover also their right to self-development. For Miguel, being part of an agroecological project has also allowed him to have more rootedness to the land, and through the reconnection with their neighbors, he

and his wife feels that they are recovering the social cohesion that sometimes they have felt was disappearing in their *vereda* (village).

The re-existence of peasants is one of the motivations for adopting agroecological practices. This re-existence is based on the recovery of peasant dignity and food autonomy. On the one hand, dignity has to do with the recreation and visibility of new narratives about being a campesino through agroecology. The idea is to leave behind the perspective of victimization and seek a dignified life in the countryside. On the other hand, food autonomy, as Miguel's quote shows, responds to the right of each social group to develop its own food process. The latter requires the company of others to strengthen the social fabric to enhance social participation in the search for alternatives to improve living conditions in the countryside. Therefore, the motivations, framed in the search for dignity and autonomy, respond to both identified and intrinsic factors. They are identified motivations because there are external pressures that affect peasants: a) the way Colombian society value peasants and b) the way agrarian policies based on agribusiness affect the dignity and autonomy of peasants. And they are intrinsic motivations because there are very personal motivations to connect with peasant values that allow social cohesion among peasants and the re-enchantment with the land.

Thus, *huertas* are cultural spaces and allow farmers to re-connect with worldviews based on the campesino heritage. This is a motivation that can be extrinsic in the ways peasants respond to their marginalization but also is an intrinsic motivation because it emerges from the interior of each peasant as a way of reconnection. Here, it is clear that the personal sphere of transformation is recreated by the recovery of worldviews and practices that make viable other ways of life. Therefore, transformation happens through

the valuation and recreation of knowledge and practices of peasant communities. The agroecological *huerta* contributes to creating conditions so that the peasants' knowledge is taken seriously, shows that another agriculture has been, is, and will be possible. Peasants' ways of life, as well as other forms of being in the world, are evidence that the transitions and transformations towards sustainability are plural, and to the extent that awareness of this plurality increases, a transformation towards "a world where many worlds fit" is promoted, as is mentioned by De La Cadena & Blaser (2018), taking up the Zapatista call.

4.2.2 Re-existing and co-existing with the past

Many of the peasants I interviewed have known how to grow food for their whole life. Since they were children, they have had contact with the *tierra* (soil, ground, Earth), they have learned to grow food mainly by watching and collaborating with their parents and grandparents, but especially from their mothers and grandmothers. Some have cultivated without chemicals, others have used them to the extent that it facilitates agricultural production. Omar tells: [...] I have had my whole life huertas, since I was a chicorio (little child), but most of all I learned from my grandmother, she was the keeper of la huerta." (Omar - Guasca, personal communication, 2017)

Omar and Lucerito are a couple and come from peasants' families. They talk about their *herencia campesina tradicional* (traditional peasant heritage). They come from different municipalities, but they evoked in our conversations their grandparents. For Omar, the figure of his grandmother is vital for what he is doing now: "my grandpa was the one who was in charge of the big agriculture, but my grandmother was the one that cared about the food for the house, she always had her huerta, it is a nice memory." Lucerito

has worked the land since she was a little girl, also with their grandparents and parents. She learned how to cultivate, but also to take care of the animals like rabbits, pigs, sheep, and cows: "I was raised in an environment of care and protection, we had to be aware of the animals, of cutting the grass for the cow." Six years ago, they received land from an inheritance. This land has been an excellent opportunity for them to begin a project of agroecology since they have been working on some farms from Bogotanian people as administrators. They always tried to negotiate with the owners a piece of land for growing their huerta with basic stuff (medicinal plants, vegetables, some potatoes, fruits). Still, it was not their land, and it was not the same.

"After working for other people on their farms, it is our time to have our huerta and animals. I was born with the love for agriculture. That is why we're thrilled to have finally our land. Now we can work for us and to put into practice what we learned from our grandparents." (Lucerito - Guasca, personal communication, 2017)

Within farmers' narratives, they recognize the importance of recovering the agriculture of the grandparents, the agriculture of subsistence, the one without chemicals, the one that was cared for by women, as the way of maintaining food for their families. When Arnulfo decided to take back his land and to start an agroecological project, as I mentioned in a former section, he began to look for alternatives within vocational courses in organic agriculture and agroecology, not acknowledging in a first moment the fact that he had known the solutions all the time.

"I took a course in the SENA¹⁰, and it was useful, but I realized that agroecology was the new name for the agriculture of my grandparents, then I went back to my memories, and started to remember my grandparents' teachings." (Arnulfo -

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¹⁰ SENA (in Spanish: Servicio Nacional de Aprendizaje – National Apprenticeship Service) is a Colombian public institution aimed to develop vocational training programs, SENA offers a wide variety of courses across numerous occupations, industries and skill levels.

Subachoque, personal communication, 2017)

Thus, for Arnulfo, it is important to understand that the innovation promulgated by some new discourses about ecological agriculture should embrace ancestral experiences and knowledge that have provided through time the sustainability of the environment and also of the peasant culture. Agroecology encompasses, therefore, a combination of knowledges and practices. That is why the search for ancestral practices goes beyond their past practices. That is the case of Miguel, who asserts that both peasants and indigenous still preserve elements of "traditional agriculture that can also be an example of what we now call agroecology." (Miguel - Guasca, personal communication, 2018) Through the project of Páramos, Miguel, and other members of the Collective A visited agroecological projects in an indigenous community in the southwest of Colombia. For him it was a remarkable experience to know more about indigenous culture.

"It was interesting to know other ways of doing agriculture, maybe their agriculture is not very different from ours, but they have more rituals, they make some practices and knowledge more sacred. I think we forgot some practices that our grandparents did before, within the group [Collective A] we are also trying to rethink agriculture invoking our memories and deepening our peasant heritage". (Miguel - Guasca, personal communication, 2018)

Carola and Cristina, inhabitants from Guasca and members of Collective D, expressed that one of the main purposes of Collective D is to re-connect with the quinoa and its history. The quinoa in the Bogotá region was cultivated by the Muiscas, but was replaced by the Spaniards with wheat and barley, quinoa comes from the Quechua word kinúwa (Baldoceda Espinoza, 2016), but in the Bogotá region, the Chibcha name of quinoa was Suba (the seed of the sun) (Medina et al., 2010). So, Carola and Cristina believe that through the re-connection and protection of native seeds, they re-connect with the past.

They connect to both, the immediate peasant past and the remote past from the former inhabitants of the Bogotá region: the Muiscas.

So, the past acquires in agroecology a new life, being the central foundation for the recognition of a peasant heritage, and also, an older ancestral heritage that survives in the native seeds. Appropriating the native seeds, farmers become guardians of seeds, and it strengthens their food autonomy. At the same time, they become knowledgeable and guardians of ancestral ways of working and caring for the land. This sense of belonging through a heritage falls in the personal sphere of transformation. This way to see the past as means to transform the present is an important motivation in how farmers, particularly peasants, become guardians of an ancestral knowledge and ways of living in the territory through the *huertas*. Therefore, the *huerta* becomes a motivation for personal and spiritual transformation. It becomes a place of connection with the ancestors through agroecological practice to the extent farmers recover memories, teachings, and seeds that have lasted over time as a form of resistance to the great transformations of agriculture.

4.2.3 Re-existing and co-existing with the present

The past is also linked to the present that connects with other "presents" as farmers, who recognize themselves as new-rural subjects, have also been encountering new connections with the land, the soil, the territory, the plants, the insects, the four elements, and peasant knowledge. These new entanglements allow them to have new means of reexistence and personal identifications in this world. They re-connect and re-exist from a

more socio-ecological perspective. Their new rural life represents a turn towards more ecocentric, interconnected, and collective ways of understanding and being in the world.

Particularly in the agroecological projects that I studied, peasants interact with neorural or neo-campesinos. These new rural inhabitants, who move from the city to the *campo*, abandoned their urban past to have a new present in the company with *campesinos*. For Sebastián, it is challenging to identify himself with a unique category, concerning his role in the countryside. People from the city call him neo-rural, but in the campo, he is just a boy from the city. However, he has built a new relationship with himself and the rest of the world without labels. For him, one of the motivations to move to the countryside was to live better in this world. For that, he has had to re-connect with nature, to understand the natural cycles. He showed me how he is learning from biodynamic agriculture the connections with the movement of the heavenly bodies and also how he should also make some rituals with the purpose of bringing harmony to his *huerta*. The agriculture that he practices is based on radical ecological techniques, based on a series of herbal preparations, the knowledge of the cycles of the planets, and some recovered traditions from ancestral cultures that can generate self-sufficient organisms in the soil that can be the ground for producing food based on quality, free of any chemicals and respectful with the human being and nature.

I'm also learning from the peasants. Now they see me differently because I can also 'echar azadón' (use the hoe). Then through collaborative work, we are learning together, I learn from them, most all the time, but they also learn from me; I also have stuff for sharing through my experience with the biodynamic agriculture. (Sebastián - Subachoque, personal communication, 2017)

David and Eliana are the owners of the Huerta Salvaje (Wild huerta). I met them through Aureliana and Miguel that said to me: "you must know them, they have a special

philosophy of care the soil, they don't plow the soil, they are very radical with this thinking about taking care of the environment." They follow the philosopher Masanobu Fukuoka. He is known worldwide by his philosophy of natural farming and re-vegetation of decertified lands based on nature's principles. "We are convinced that we can live in a different way, and we have a commitment with the environment." (Eliana - Guasca, personal communication, 2017)

Living in the *campo*, they have learned from nature. But also books and peasants have been their teachers. Eliana says that peasants have a lot to say and share about how to live in the countryside. They are glad to be members of the group Collective A. For them, it is a significant space for sharing and learn together. Sometimes they have conflicts because of their different perspectives, but they explain that this is the idea of a collective. They join efforts, but also share knowledge, practices, and ways to see life and the world. Through the mingas, "we learn together, we share our experiences, and we build new ways to grow our food." (Eliana - Guasca, personal communication, 2017)

4.2.4 Re-existing and co-existing with the past and present

Present and past times merge in the agroecological projects. Farmers find that some pasts are the vehicle to reconnect with ancestral practices that allow farmers an identification with their campesino and indigenous heritage. Likewise, farmers can reconnect with other pasts more culturally distant, which can be found in books. And all these "pasts" find themselves in the present moment of the daily activity of the *huerta*. Being in nature can be another motivation to adopt agroecological practices in the *huerta*. Nature can be the past but especially the present. If farmers want to learn from nature, they

need to be present in the here and now, and deeply listen from her. Looking into the past but also being in the present, *campesinos* and *neo-campesinos* build new ways of identification with cultures and the natures of food production.

Miguel manifests that since he is working with agroecology, he is starting to recognize the receptivity of nature: "Since I grow my own food, it becomes more alive and intense the way the earth gives you back when you do something for her." For Miguel, as well as for other farmers, agroecological food production requires living differently. Particularly, agroecology invites to be related to the cycles of nature. This relationship with nature occurs with the constant observation of the life cycles of plants and animals, and their interaction with soil, water, sunlight and climate, now so changing. And it is from this observation, and subsequent understanding of nature, that a re-enchantment arises. This reenchantment allows them to have a sense of caring for each other, a topic we will explore in the next chapter. The farmers returning to the dynamics of nature begin to have a more meaningful life, marking some daily life that brings them closer to themselves and other humans and non-humans.

Being clear about the importance of reconnecting with nature has allowed farmers to have new motivations to stay in their territories more sustainably. Thus, agroecology, as a way of taking care of nature and life, becomes a political ally to defend the presence of farmers in their territories.

"We have been here all our lives. I was born here. Now we're having problems with parques, and they are saying we shouldn't live here. They don't see that here is our home. And we're conserving the páramo, we have been cultivating without chemicals, my family has been here for years, and we have been taking care of this territory with other families, nowadays the government is claiming for these lands, who knows for what. Still, nobody can't get us out of here, because we're doing things right." (Dora - Sumapaz, personal communication, 2017)

Dora and other women have organized themselves around the defense of their territory and the care of the *páramo*. The latter, to guarantee the permanence of their families and communities. Also, they have claimed the significance of maintaining peasant culture in the municipality of Nazareth. As I asked her why it is so important to grow agroecologically, she answered the following:

"We adopt agroecology because we care about the paramo and our territory. We are showing Parques (National Natural Parks Institution) that there is another way to preserve nature while growing food with agroecological practices, there are multiple solutions for preserving the paramos, not just expelling people from their lands." (Dora - Sumapaz, personal communication, 2017)

Agroecology is both re-existence and co-existence. It recognizes, respects, and revitalizes ancestral and current logics, principles, and knowledge of different cultural origins, which have high validity and importance to understand the world and contribute to the creation of a new form of relationship and co-existence of different ways of living on the earth. The *huerta* is a laboratory in which multi-diverse beings interact, sustaining, and nourishing new futures of more sustainable ways of life.

The motivations of re-existence and co-existence are, therefore, intrinsic and extrinsic, both being autonomous, insofar as they are part of the rationalities and ethical coordinates of farmers to rethink their ways of doing agriculture and of interacting with the territory, nature and their own culture. In some cases, more than others, as in the case of the farmers of Nazareth, adopting agroecological practices can be motivated by external causes, which make the farmers accept ways of re-existing and remaining in the territory. In the end, farmers in Sumapaz have sought alternatives to the imposition of natural areas and biocultural landscapes of biological conservation. This guides the motivation of

recreating the struggle for the permanence of the territory. In the case of neo-peasants, they have migrated to the countryside with intrinsic motivations, in the sense that they are looking for new forms of life and co-existence with a more natural environment that provides them with well-being.

Therefore, socio-cultural re-existence and socio-ecological co-existence are opportunities for transformation that require re-creation and re-imagination of the past, present, and future based on connection, collaboration, and trust with other people, as well as the harmonization and dignification of relationships with nature.

4.3 Conclusions

Returning to the campo can be going back to a physical space, but it is also going back to a way of feeling, enjoying, caring, and living life. That which I call the campo includes a network of humans and non-humans, of materialities and symbolisms, of struggles and resistances, and also alternatives. In the countryside, farmers motivated to build a more dignified life for themselves and, at the same time, motivated to take care of their territories, adopt agroecological practices, understanding that there can be alternatives to agroindustry. But this is only part of it. Behind the adoption of agroecological practices, and the productive force that farmers can represent, they can also re-exist in the countryside valuing their identity, culture, and spirituality. These autonomous motivations, which can be extrinsic or intrinsic, strengthen the individual and collective processes of adoption of agroecology, allowing not only the production of healthy food but also resistance to certain social injustices, environmental impacts, and other possible problems.

Therefore, farmers' stories show that the adoption of agroecological practices is based on autonomous choices, not imposed or controlled, and therefore are more rooted in farmers' doing and being. This chapter reveals that knowing these motivations is critical for elucidating transformation processes from a more personal place, but that has some practical implications (discussed in the next chapter). Finally, this chapter shows how the adoption of agroecological practices allow both farmers and neocampesinos to take back the countryside. Agroecology is an opportunity for farmers to recognize themselves as agents of change in their lives, in the life of the ecosystem, in the life of the community, and later in the lives of other actors such as consumers (discussed later in Chapter Seven). Farmers growing their *huertas* rescue traditional knowledge of agriculture, re-value the work of the land, recognize the value of eating healthy food, acknowledge themselves as well-being agents, and recover the dignity of the peasant being, honoring the peasant work. In addition to this, the *neo-campesino*, become a new rural actor that has agency over transformation in the rural Bogotá. Overall, farmers' stories showed what different aspects were involved within the motivation to adopt agroecological practices. Both external biophysical and socio-economic drivers and farmers' individual attributes and cultural conditioning play a significant role in farmers' decision-making (Garini et al., 2017). Likewise, drawing on motivations as a way to answer the question about "why farmers adopt agroecological practices," shows that there is a relationship of multiple factors that influence farmers' decision making. But it is important to note that this interaction of factors is of vital importance to think about more sustainable socio-agroecosystems, which respond to how places are perceived, lived, and built.

Finally, the farmers' autonomous motivations to adopt agroecology, allow them to find other metaphors, other frames of meaning that inspire new ways of being and acting (Gibson-Graham et al., 2013, p. xxii) and can contribute to the transformation of the rural world of the Bogotá-Region. The next chapter describes new ways of being and acting inspired by agroecology and how these practices are based on care and acts of connection. Delving into these practices, the next chapter shows a more practical side of the transformative potential of agroecology.

Chapter 5. Sprouting actions of change based on care and connection

Chapter Five explores the practical sphere of transformation within agroecology, delving into the following questions: What are the practical enabling factors and farmers' actions that support and facilitate agroecology, and to what extent agroecological practices foster transformation in the Bogotá-Region? I addressed these questions by delving into the farmers' behavioral shifts based on care practices that are part of agroecological processes. This chapter looks into the materialization of the motivations behind adopting agroecology (described in Chapter Four), through practices with ethical coordinates based on care and connection with other humans and non-humans. Practices of connection and care allow the sprout of actions of change and allow farmers to propagate them by connecting with others through collective action (Chapter Six), and with other actors through alternative food networks (Chapter Seven). In this chapter, I focus on the everyday embodied work based on farmers' experiences with agroecology, which in phenomenological terms, allow them to discover nature in an unsuspected communion of their inner self with nature (Echarri, 1990). This communion enables the emergence of care for others, what can ensure more sustainable livelihoods. The empirical information shows how this care ethics in agroecology is based on the care for soils, native seeds, plants, agroecosystems, and for the health of farmers and their families. This chapter focuses on three practices: a) soil care, b) plant care, and c) seed care, and in how other social and communitarian practices emerge from within them. I talk about care because the well-being of farmers and their entanglements with their agroecological huertas and territories are more a matter of care than a matter of concern (Puig de la Bellacasa, 2012, 2017, 2019), as discussed in Chapter Two. Through farmer's stories about the practices in their *huertas*,

this chapter looks at care and connection as transformative paradigms, delving into the practice and ethics of care, and the perceptions about connection and care from the viewpoint of agroecology.



Figure 5.1 Huerta in Subachoque (crops of quinoa, zuchini, other vegetables)
Source: Author

Care practices are based on the connections that farmers establish with their immediate surroundings, *sprouting* actions of change. Through agroecology farmers reconnect with the natural and cultural universes that are part of their quotidian labor as food producers. The natural universe is reflected in the *huerta* and its connection with a surrounding agroecosystem, which transcends the biophysical limits of the plot or agricultural property (Álvarez-Salas et al., 2014) (See **Figure 5.1**). On the other hand, the

cultural universe is reflected by the cultural and historical contexts and knowledges of farmers. Farmers start to connect with multiple universes from the moment they begin to prepare the soil for sowing the seeds in the *huerta*. Through the tasks of sowing, growing, caring and harvesting, farmers discover an entire world of relationships, interactions, interdependencies and complementarities. Thus, the agroecological *huerta* is a symbolical space of connection. In the *huerta*, farmers connect with a living community with interdependent relationships between fungi, microorganisms, minerals, nutrients, insects, plants, water, light. A deep listening and a permanent observation of these relationships allow farmers to engage with a practice of care and collaboration. And through this practice, farmers build a practical experience and knowledge that is worthy to share, in the sense that they create new stories for being in this world (See **Chapter Six**). Through practice and observation, farmers can see transformation emerging from the *huerta*, making it a space of innovation, reflexive action and connection with a wider world that surround it.

Consequently, through the connection with the *huerta*, farmers understand how their small-scale agroecosystems work and how they are intertwined with socio-economic-and-political forces. They recognize the important challenges that come from these forces that can affect their quotidian labor of growing food. This is why in some cases they require the collaboration or support of others. So, in searching for collaboration and solidarity, and looking towards complementarities and solidarities, the *huerta* opens opportunities to connect with other *huertas*, allowing farmers to find spaces of deliberate transformation. In Chapter Six, I will examine these collective spaces of transformation.

The agroecological *huerta* is a diversified system which includes crops, trees, and different kinds of animal and vegetal species (**Figure 5.6** and **Figure 5.7**). Agrobiodiversity is one of the crucial principles of agroecology. It is the co-existence between plants, animals, micro-organisms, resulting of the interaction between the environment, genetic resources, and human management systems and practices. The *huertas* are privileged small-scale spaces for agrobiodiversity, that give priority to the betterment of the quality of soil, plants health, interaction of multispecies, polycultures development, recovery and conservation of seeds and ecosystems. Also, the *huerta* is the starting point where farmers adopt pathways to transformative change and can become agents of change in their territories.

Farmers get gradually involved with the practices of care, where connection with others is pivotal. The decision to practice agroecology requires determination, interaction, experimentation, acknowledgement that failure can be part of the process and confidence that "the next time things will be better", as a farmer told me. It is a conscious decision that requires commitment and constant learning and reinvention.

Participatory observation was my main research method in this chapter, and my field journal was my most important tool for connecting with and describing my research experience of visiting the farms. I also draw on the information collected in interviews and conversations with farmers.

In this chapter we continue to discover how the practical and personal spheres of transformation are intertwined. Notwithstanding this, in this chapter I focus on the discussion of the practical sphere of transformation associated with behavioral change in the production techniques, management of ecosystems, relationships with nature and

family. In the first section of this chapter, I explore the practice of soil care, showing how farmers engage in the preparation of soil, with the purpose in mind of growing healthy plants, and healthy projects. A good soil that nurtures healthy plants, is after all, the place where the roots of transformation start to grow. Then, in the second section, I talk about the visible parts of the plant, and how through the practice of caring, farmers and plants connect with the agroecosystem as a whole. In the third and last section of the chapter, I talk about seeds. Seeds contains the genetic information of the plant, what metaphorically can be seen as the *cultural* and *territorial information* of culture and territory, and the *practical information* for doing agroecology. This last section will connect this chapter with the next one (Chapter Six), where I describe how collectivity emerges from the work at the *huerta*, and how agroecological communities emerge from this productive experience.

5.1 The little universe of soil

One of the agroecological practices that is based on an ethic of care and generates reconnection with the non-human is the practice of soil care. That is why this section describes some of the daily activities associated with soil care to understand it as a transformative practice as producers begin to break with the logic of conventional agriculture, seeking alternatives for greater environmental, economic, and social sustainability of their farms and lives.

One of the main purposes of agroecology is to recover the soil. Arnulfo comments that "la tierra se acabó" (the soil is badly deteriorated), mainly because of the chemicals and overexploitation. It became impoverished; it lost its minerals and organic matter. In order to recover the land again, it takes between two and three years. And that is why

recovering the soil is an intensive and persistent labor. "We have to nourish the earth again, and that takes time, patience, and a daily work from us". (Arnulfo - Subachoque, personal communication, 2017).

The soil is more than a "receptacle for crops" (Puig de la Bellacasa, 2015, p. 691); it is the source of life that ensure the production of food. This "hidden world beneath our feet" (Robbins, 2013) is the food of plants, and that is why farmers use much of their labor force taking care of soil. Plants as other living beings on planet Earth need to live with two things: energy and materials (Vandermeer et al., 1998; Vandermeer & Perfecto, 2018). We humans, as all other animals, eat food for gaining energy and for obtaining the required materials to make proteins, fats and carbohydrates (Gliessman, 2014). Both the energy and materials are obtained by our digestive system. The case of plants is different. They have two different systems including the leaves that allow the plant to gain energy through the process of photosynthesis and the roots for gaining the nutrients (materials) from the soil (Vandermeer & Perfecto, 2018). The root system is the apparatus of the plant that allow it to obtain the essential materials. And this system interacts with an interdependent community of chemicals, microorganisms, fungi, large organisms like earthworms, beetles, biotic and abiotic elements. This interdependent community needs fertile soil and enabling conditions to survive (Gliessman, 2014). That is why producers take care of the soil through three primary practices: soil conservation, soil fertilization and soil cultivation (see Table

5.1)

Table 5.1. Quotes about care practices in agroecology

Soil Conservation

- "The cover keeps the temperature, protects from heavy rain and preserves soil fertility." (Arnulfo, 2017)
- "I put the pulled-out weeds on the ground, the soils must be protected, they cannot have the direct sunlight. There is a lot of life in them, and they require humidity, a lot of sun can dry them." (Julio, 2018)

Soil Fertilization

- "We must take care of the soil, that is why I have all these bins with bio preparations here, this takes time, but since we are with this project, the soil must be kept alive." (Aurelia, 2018).
- Nurture and taking care of soils has a special pace: "this requires time [...] every single day we have to work in our huerta, preparing the food for the soil through composting, preparing the hidrolatos (organic pest control) and bioles (organic soil fertilizers), covering the soils with straw [...]". (Aurelia, 2018)

Soil cultivation

- "Here I have the vermicompost, this is wonderful. Here I made the dung of the cows, and the worms do all the work. I use the worm leachate to fertilize and the humus to feed the soil." (Sebastian, 2017)
- Compost and other practices are like remedies for our *huerta* since it invigorates the earth. (Julio, 2018)

Application of bioproducts

• We have also learned to prepare and use bio-products for the control of pests and diseases using aromatic plants that always remain cultivated in the huertas; as the preparation of rue that is good to cure the potato drop, or the garlic and onion broth to remove aphids and moths from leafy vegetables.

Reforestation

- You have to plant trees to protect your land, to provide shade, we do it by logic [...]. So, people tend to protect the house and remove the trees, and it's the opposite. The tree is giving you protection, it is giving you shade, it is giving you nice air, it is giving you stability in the ground.
- The huertas with the surrounding trees become small oases, here in the association, we look forward to planting more trees and protect our crops and the environment.

Diversification of crops

• Here you can find what you want. In my garden I have a pharmacy with all these medicinal plants, I have fruits, vegetables, legumes. [...] It is a blessing to be able to grow my own food.

Water harvesting

• We have to protect resources such as water. We must recover the land so that there is more humidity and protect those water sources. It is also essential to know the topography because we shouldn't waste water, and we could take advantage of topography for irrigating our crops more efficiently. We have to guarantee that the water that falls can remain on the ground. Also, we have to work much more with rainwater channels and capture water for the reservoirs, which will help us during the summer.

Management of genetic resources

- Here in the group, we all have to guard the seeds, but we do exchange them.
- We have been able to rescue seeds and deliver them to families, so I believe that one of the most tangible impacts is to have families that are sowing quinoa, yacon, amaranth, native potatoes, seeds from here.
- Through the group, we have been able to diversify the number of seeds

When Julio was showing me the *huerta*, he pulled out a weed but instead of throwing it away, he left it on the ground. Julio explained to me that it is a big mistake of

conventional agriculture to leave the soil all bare. Making an analogy with animals, he said: "green covers like these weeds are the skin of the ground. We have to change the concept of weeds because the truth is that they provide goodness. This practice of covering the soil has excellent benefits since the soil is less dry and so the plants are less stressed, the fermentation of the weeds generates organic material, and thus the soil becomes a more conducive shelter for insects and microorganisms that help the ground fertility. Here the fundamental is to turn the bad enemies into allies of fertility." (Julio - Subachoque, personal communication, 2017)

Farmers, through these practices of care, begin to make sense of their work; in the way, they feel that their work show results on the fertility and productivity of the huerta. Also, the constant learning and improvement of practices allow producers to have feelings of pride and value towards themselves, we can see that in the quote of Aurelia: "I'm happy, you know. The last two years I've learned a lot of things and that make me proud that I can do things different." While she was sharing her feelings with me, Aurelia was showing me the bin in which she was preparing the compost tea and was happy to show me how to prepare it. Aurelia and Julio are just two of other farmers committed to the everyday practices of care that allow them to think of the soil as a living organism. The abandonment of agrochemicals and the appropriation of cleaner technologies based on the ecology of soil and plants, is a re-learning process, in which there is a reconfiguration of the relationships between human and soil. It is a reconnection with the small universe of soil. But also, it is something that make farmers proud of their work. Besides, this experience with the soil has an active manifestation in the way of expressing life and therefore has a power of transformation. Especially when I talked to women, they often highlighted how

their work in agroecology has allowed them to change the way they value themselves and feel that they are bearers of practices and knowledge that allow them to maintain and develop their own forms of care for their family, their territory and the planet.

The preparation of soil implies time and commitment, not using agrochemicals requires extra labor for the on-farm fertilizers elaboration: "Now the amount of work is more, if you see here, we are preparing the biol [compost tea]. This is the [liquid fertilizer] that is applied to plants, it is a natural preparation that we do, the good thing is that you do not have to buy fertilizer, we produce it on the farm, but it takes time." (Aurelia - Guasca, personal communication, 2018). Furthermore, Arnulfo explains that this effort of caring about soil has to be accompanied with a deep understanding of the different interdependent elements and components of the soil. The practice comes with knowledge building, and this cognitive construction can be autonomous but also farmers are open to get expert and other types of knowledge: "Through experience we learn about the soil, but sometimes if we get some training, it helps to enhance our way we care about soil. That is why we hired soil chemists with the grant that we got from Colciencias in order to learn more about our soils. We wanted to know about the soil features, aptitude and quality" (Arnulfo -Subachoque, personal communication, 2017). Through interviews, you can perceive how the role of training is important to improve certain practices. This received knowledge will be internalized, put into practice, and will be modified for the particular conditions of each farm. "Right now, we have a collective project with Uniminuto, we are growing lupin, a legume, that helps a lot to the nitrogen-fixing. We're doing this project with the farmers of the association and students from the university to improve our soils." It is important to highlight how actors as universities, NGOs and government agents contribute to building

knowledge, especially in terms of soil chemistry. Training courses are spaces of knowledge sharing and network building. In the next two chapters, I will develop in a more detailed discussion of how training spaces are crucial in sharing ideas, thoughts, and knowledge. In the case of the *lupine project*, university students and farmers grew lupine with the purpose to enable the adequate environment for the nitrogen-fixing organisms, which are special "bacteria that live within special organs called nodules in specific plants, most usually legumes" (Vandermeer and Perfecto, 2018), as the lupin. When I visited Arnulfo, he showed me the lupine as a key part of his home-garden, and he told me how the quality of the soil has improved in the last year. He also mentioned that they do not eat the lupine bean but are experimenting and investigating with other farmers to turn it into chicken food. The latter is an example of how a soil care practice generates another synergy with the care practice of animals, connecting different universes within the *huerta*.

Composting is another way of connection to the soil and the nutrient cycle (or ecological recycling). Composting is a practice of returning organic matter to the earth where it can decompose an add its nutrients to the soil. The compost place is one of the important places we can find in farms. Every time I visited a *huerta*, people showed me the compost. "Here, we try not to waste anything. We try to take advantage from food waste, and from animal manure." (Armando - Subachoque, personal communication, 2017). Each farmer has his/her technique for composting, but something that they highlight is the importance of returning the organic waste into the ground as a recycling process. "We have to stop relying on external inputs and generate our inputs. [...] Also, when you're in this thing of the agroecology, we need to enter again into the natural cycles, when you do compost or vermiculture, you re-enter in the nutrient cycle." (Sebastián, 2017) Both

composting and vermicompost are ways of growing soil (Gliessman, 2014), and for farmers, these practices require immersion in the food web, in which provides them with knowledge and also an eco-ethical obligation of taking care of the nutrient cycle. When I asked farmers about their commitment to composting, they usually answered: "It's something that we have to do, and it's something that our parents and grandparents used to do, when I was a child, we didn't think that the food leftovers were waste." (Arnulfo - Subachoque, personal communication, 2017).

Soil is where the roots grow and take the materials that the plant needs. Soil care is a metaphor of transformation. In farmers' words the fertility of their huertas depends on having a nurtured soil, and through the process of cultivating good soil they also nurture their inner soil, in the way they learn, innovate and fertilize themselves with new ways of doing agriculture. The soil in Spanish is *suelo*, but soil can also be *tierra*, and *tierra* can mean planet Earth, land, and territory too. That is why caring about the soil is the start to caring not just for the dirt for the plants. It is the beginning of connection to something bigger: an agroecological movement that allow dignified forms of coexistence, "this type of agriculture gives us dignity, but it is not just for us, I have understood that dignity is for any being that is interconnected in this process of agroecology from soil to the mountain" (Sebastián - Subachoque, personal communication, 2017). Farmers-soil relationships open up new ways to see the Earth and allow them to connect to something bigger. Soil is related to farmers' territory, and soil care is also territorial care. These agroecological processes seek to build alternative territories, in which conflicts are recognized, and endogenous development is generated to germinate real transformation processes, in the sense of creating more social and environmental justice, through economic and ecological alternatives.

Here, we're not caring just our plot. We're also caring the *páramo*. And that's also what we would like to show to the environmental authorities. We're part of this territory, and we'll fight for it, and one way is showing that we're not deteriorating the *páramo*, we are taking care of it. (Dora - Sumapaz, personal communication, 2017).

Particularly in Sumapaz and Guasca, where farmers live not far from or in the same areas of *páramo* and *subpáramo*, potato cultivation and cattle raising have been developed as a survival strategy (Morales et al., 2015), practices learned since the green revolution. These agricultural practices have generated contradictions between the conservation of the ecosystem and the improvement of its inhabitants' quality of life (Avellaneda-Torres et al., 2014). The advancing agricultural frontier and the increasing livestock in altitudinal strips above 2,800 meters above the sea level has resulted in the loss of habitat for biotic species and the fragmentation of forests, which has led to the loss of ecological connectivity (Rivera Ospina & Rodríguez, 2011). This situation is a threat to conservation. The strengthening of *huertas* and their ecological management, together with ecological restoration actions, is a bid to promote connectivity between fragmented biodiverse spaces and take advantage of the area's agricultural potential in an environmentally responsible way (Avellaneda-Torres et al., 2014).

The reality is that the *páramos* are not uninhabited (see **Figure 5.2**). Rivera and Rodríguez (2011) state that "the *páramos* are not only ecosystems, but they are also socially and culturally constructed, thought, interpreted and inhabited territories for several centuries" (Rivera Ospina & Rodríguez, 2011, p. 37).

Since the pre-Hispanic period, the páramos were temporarily occupied by Amerindian populations, who inhabited them following ritual, food, and reproductive cycles typical of the fauna associated with these ecosystems (Guhl Nimtz, 2015, pp. 36–37). Later, after the Spanish Conquest and Colonization, the páramos were transformed in terms of their property and production relationships. Then, in the mid-20th century, several groups of peasants and indigenous people located in these ecosystems above 3000 meters above the sea level (Ministerio de Medio Ambiente, 2002) led new ways of inhabiting the páramos by peasant dwellers (Avellaneda-Torres et al., 2014).



Figure 5.2 The inhabited páramo. One of the farms in Sumapaz. Source: Author

In that sense, for the management of the páramos, a participatory and democratic approach must prevail, which considers both the environmental supply and the limits and capacity of resilience of the region, in the perspective of amplifying and replicating the management actions of both conservation, restoration, reconversion, and sustainable uses. A way to prevail and re-exist in the *páramo* is the conversion to more sustainable agicultures.

That is why Miguel, since he began working with agroecology, has realized how his work is connected with a bigger cause that has to do with caring for the environment:

"I am a musician, we have a 'carranga' group, and we composed a song that talks about taking care of our territory and environment." (Miguel - Guasca, personal communication, 2018).

Once farmers recognize the soil where they live, they internalize ecological and agroecological knowledge, environmental values reflected both in their forms of production, and the construction of coexistence and future goals, making possible ways and means for profound transformation towards more sustainable territories. In the process of transformation, the care practice of soil and also the care practice of plants open spaces for innovation, understandings, connections, and reflection. And that is why, sprouts to evolve into a whole edible plant require special and enabling conditions, that are provided by nature but also by farmers through their care practices.

5.2 Plants: our medicine, our food, our economy

Another practice that is based on an ethic of care and generates reconnection with the non-human is the one of plant care. Caring for plants requires constant observation and understanding of plant life. The aforementioned generates a deep connection with all the elements and non-human beings involved in plant growth, which allows for transformative processes regarding the care of water, ecosystems, and the soil—all of them. These are key elements to plant growth but also for supporting life on Earth. Later, this leads to empirical knowledge about plant growth that will enter into dialogue with other knowledge about the nutritional, sacred, and allelopathic characteristics of plants (Gliessman, 2014).

Farmers are innovating all the time with strategies that allow them to protect their crops from pests, excess or lack of sunlight and water, changing weather patterns, among

others (See **Table 5.1**). In each stage of food production, farmers deepen their knowledge of nature, and through this understanding, they innovate. From seed to the mature plant that is ready to harvest, farmers are reading any detail of the complex ecology that exists in their huertas and farms. "Plants are our food, medicine, and also our income. I learned since childhood to take care of plants. My mother taught me. What do they like, if they are difficult or not, how much water do they need. Even how we should talk to them." (Julio - Subachoque, personal communication, 2017). Julio is one of the oldest farmers I interviewed. He knows all his plants, and he is also in permanent search of new seeds with the purpose of diversifying his huerta. Also, when Mauricio showed me his huerta, he told me about the relationships that farmers need to understand to caring plants. For example, the harmonic dance of water and sunlight: We have to know what are the plants that like more sun, or the ones that require shadow, how to water them, you have to observe them and see the ground levels with the purpose to avoid that the plants that don't like water decay." (Mauricio - Subachoque, personal communication, 2017).

Plants require sunlight to gain energy via photosynthesis. Both light excess and lack can cause problems for plants. This is why understanding the light exposure of the plant will help it to achieve the best growth. Water is also a key element for the chemical and physical processes that plants need to grow (Gliessman, 2014). However, water is not a constant feature of the environment: it comes and goes with rainfall (or irrigation) and gravity (Murtinho et al., 2013). This is a "complicated dance" between the supply and retention of water of soil, that depends on soil texture and structure (Vandermeer & Perfecto, 2018). Here again, farmers sharpen their way of seeing nature to better understand the dynamics of their *huerta*, especially the interactions between the different processes

and elements present in the *huerta*. Both light and water are two other variables that come into play in food production, and when farmers learn about them, they connect more with the cycles of nature, the hydrological cycle, the water resources conditions of their territory (availability and lack), and brightness conditions.



Figure 5.3 Agroecological huertas are polycultures and connect with wider ecosystem as the native forest of subpáramo. Guasca, Cundinamarca. Source: Author

Agricultural producers around the world, large and small, corporatized, agroecological and conventional know the importance of water for agriculture, and they recognize the challenges on hydrological resources due to rapid environmental changes (Altieri & Toledo, 2011; Cid-Aguayo, 2016; IPCC, 2014). Julio perceives with great concern the changes in the quantity of water in his region of Subachoque. When he was a

child, he could see water everywhere, it came from the páramo El Guamal: "you could see all the water flowing down as long mirrors lying on the mountain. We could bring water from everywhere. Now we have few springs very high in the mountains." Julio says that the monocultures of potato crops and especially the livestock have been damaging the forests and therefore the water resources. That is why in his farmers' association, they have a project, in which they are building water reservoirs, as a strategy of water harvesting for coping during dry seasons. Besides, farmers that live near water sources are planting and conserving the shores of rivers and streams. "Right now, we're fortunate. We live close to the páramo, and most all the time we have water, but the climate is crazy, and we have had times without water, that is why we have to storage it, be efficient with its use, but overall care for the rivers, watersheds, lakes and lagoons that provide us with water." (Omar Guasca, personal communication, 2017).

As farmers become more aware about the interdependencies between the resources they need (e.g., water) and the health of ecosystems, they start to project themselves also as guardians of the ecosystems and territories. Miguel from Guasca states that it is "important to take care about the paramo and the stream water that comes from the uplands, we feel compromised with these mountains, and planting trees is a way to help them." It is noteworthy to mention that in Guasca and Sumapaz regions through projects with the local government they have been able to build nurseries for the production of native trees to reforest certain natural reserve areas and use certain species for the farmers' farms. Agroecological farmers acknowledge the importance to plant trees on their farms. Omar's family have adopted an agroforestry system, that is a combination of crops and trees. "We started to plant trees around the huerta and in the whole farm during the project

Páramos. [...] It is difficult to talk right now about results, because the trees are still young. But we believe that those trees will help us to protect our crops from the intense sun but also from the frosts, we'll see." (Omar - Guasca, personal communication, 2017). Trees bring protection to crops from weather events and generate on the farm such as the diversity of fauna and flora, watershed protection, food, windbreakers. In the case of Alicia, she is no longer waiting for results. She implemented years ago an agroforestry system in her farm, and she is proud of it:

"We have had frosts, extreme frosts, once the whole municipality was affected by a frost, but it did not affect us so much because we had sown trees, we have native trees, we have sown around our huerta, and overall, the farm. When a frost occurs, below, you see the white bed. But the frost didn't affect us as other farmers. Why? [...] Because the trees protected us." (Alicia - Guasca, personal communication, 2018).

The diversity of the *huertas* comes also from the polyculture of intercropped plants, along with other organisms. The way farmers know better about polycultures is through allelopathy¹¹, which is the form of symmetrical and asymmetrical interaction between the multispecies in the huerta, is the way in which agroecological farmers understands plant relationships. That is why farmers require a special knowledge and experience. They are careful to understand the multispecies interactions, and in general the natural cycles. Plants, insects, soil, microbes, sunlight, water co-exist, and the combination of diverse crops will determine the ecology of the *huerta*. For Arnulfo throughout his experience, he has learned about the life cycle of the plants, also which plants get along well, or in more technical

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¹¹ Gliessman (2014) explains the ecological process of allelopathy as "production of a compound by a plant that when released into the environment has an inhibitory or stimulatory impact on other organisms. Allelopathic interactions have been shown to occur in a wide variety of natural ecosystems and agroecosystems. [...] In agroecosystems, allelopathy may play important roles in biological control, the design of intercropping systems, and crop rotation management." (Gliessman, 2014, p. 136)

terms, he has learned about allelopathy that is a biological phenomenon, in which a plant produces a biochemical compound that is released into the environment impacting other organisms in an inhibitory or stimulatory way (Gliessman, 2014).

In agroecology you need to understand which plants get along well, do you see this spinach? I'm growing it with onions, they get along well. [...] Also, we have to know which are the plants that can be used as insect repellents, as this big rue [...]. (Arnulfo - Subachoque, personal communication, 2017)

Farmers also observe the rhythms and cycles of plants growth. This helps them to understand how they can sow in successive waves to ensure staggered harvest throughout the year. Other natural cycles as the moon cycle and the weather patterns are crucial for the huerta operations as the preparatory work, seeds planting, fertilization, pruning, harvesting. "I learned to walk with the moon, [...] I remembered that my grandparents used to sow the maize when the moon was waning half. [...] I'm also aware when is the best moon for preparing the soil and making pruning plans." (Cristina - Guasca, personal communication, 2017). Farmers have an intrinsic agricultural calendar, in which they know during the year when is the best time to start preparing the land, the soil, when to sow, when to harvest in relation to rainy and dry seasons. However, for farmers the climate is no longer the climate that used to be for their grandparents. Farmers usually state that people and their ancestors who have worked the land have always had to deal with the weather. But, in the last decades the "climate has been going crazy" and for peasants it is not easy to predict. The rainy and dry seasons are changing overtime and yet are uncertain, they are depended on "God's wishes, just him knows what it will happen." (Eliana - Guasca, personal communication, 2017). Farmers say that now it is difficult to have sown plans,

some of them continue sowing the seeds according of their agroecological calendars but this will not guarantee that all the plants planted will grow or thrive in the future.

Now we have to trust in god when we sow, 50 years ago it was known with more precision in what months it rained, for example, it was known that during October it is the rains, and already in December until February a drier season begins, and again in March, the rains begin, April and May being the season with the highest intensity of rain, that time was called "the broken sky", after June to August the dry season began again. But now, it can rain all year round, or like last year there were several droughts. (Omar - Guasca, personal communication, 2017).

Peasants' experiences and resulting lessons are the indicators that climate is changing in the present and potentially in the future. In peasants' perceptions the changing climate affects the power of control of their food production. Farmers learn all the time from nature's cycles. They are empirical researchers on allelopathy and the role of vegetal communities. They learn about plants life cycles, animal care, moon cycles, watering plants, soil care. Through their experience with agroecology, and their near interactions with agroecosystems, they recognize that they can control some variables, "but there are other variables that we can't control, the climate is one of those uncontrollable variables, especially the last years. It was known before when it was winter, when it was summer, but now it is tough, things had changed, before you knew what time to plant, now you do not, you can control it." (David - Guasca, personal communication, 2017). Despite the climatic pressures, farmers continue with the daily pursuit of living better, also they make decisions and commitments to cope with them. Agroecology has been the strategy that allows them to understand other ways of interpreting nature, respecting ecosystems and life cycles, to thrive in a world with multiple stressors.

The possibility of understanding the cycles, the rhythms, the interactions of plants with other beings and their environments, and the possibility also of co-existence with environmental and climatic changes, shows a form of rooted and persistent autonomy that demonstrates resilience and thus allows the co-existence with the non-humans (plants, light, water, climate, etc.). Therefore, this capacity of observation and resilience is a way for farmers to reinvent themselves, connect, find new paths and routes, known and unknown, and inhabit the territory and face changes.

5.3 Sharing the seeds of autonomy and dignity

The care of seeds is another transformative practice that responds to the peasant struggle to recover their autonomy in terms of what they sow, how they sow, and for whom to grow food. It breaks the dependence on the global capitalist economy and the marginalization of the peasantry. Besides, seed diversity is also a metaphor for resilience and sustainability over time. The aforementioned, in turn, is transformative as producers prepare for the future, and leave a legacy for future generations.

Seeds are vital for growing food, increasing agrobiodiversity, and enhancing the food autonomy of farmers. Agroecological farmers take actions for the recovery, conservation and defense of native, *criollo* and traditional seeds. Particularly in the Andean highlands, seeds of native potatoes, maize and tuber roots (yacon, achira, Andean tubers) are an essential part of the culture. The recovery of these seeds allows farmers to connect with ancestral knowledges and allows cultural traditions associated with food and

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¹² Using the words of Gutiérrez Escobar (2016) in Spanish "*criollo/criolla* refers to both landraces and creolized varieties, the latter of which are the outcome of an intentional or accidental mix of landraces with scientifically improved varieties." (p. 5).

the *campesino* identities to be alive again. This is a crucial matter in the face of increasing pressure from transnational seed corporations to pass legislation allowing genetically modified organisms to be introduced in Colombia (Grupo Semillas 2018). "Without our seeds we're lose our autonomy and dignity. It's very sad when you depend on the agribusiness' inputs that the government impose to you" (Alberto - Subachoque, personal communication, 2017).

The loss of seeds is not something new from the modern era of South American countries. Spaniards through their colonial regime colonized also subsistence systems, imposing their rules about what crops could and could not be planted and consumed (Gutiérrez Escobar, 2016), forcing into obscurity thousands of roots, grains, legumes and fruits crops (IDNRC, 1989). Some of the crops in the highlands of Cundinamarca and Boyacá where conserved by generations, but other such as quinoa and amaranth where totally displaced by other grains such as wheat and barley, as was discussed in Chapter Four.

Today agroecological farmers are growing quinoa and amaranth again, as well other tuber roots. This recovery of seeds is a process of reconnection with the ancestral territory, a revival of cropping practices and ancient flavors. Through seeds and the potential food that will emerge from them, farmers are reshaping foodscapes that (re)activate social and cultural processes. The recovery of seeds has material results in the way crops re-germinate and it has repopulated the Andean countryside. Farmers become guardians of seeds and of the knowledge around the care that seeds need.

For Carola, the experience of being in Collective D has been valuable. She said that acknowledging and recovering quinoa as seed and crop, has allowed her to connect with

other women, building a community around quinoa. Plus, it has been an opportunity to know and reconstruct the history of a forgotten crop.

We partnered intending to expand our marketing circle, but now the association has focused on something else. Now we have dedicated ourselves to cultivate the knowledge of quinoa, promote its consumption through education, and we are generating products with quinoa, given its nutritional richness. We are also working quinoa from its cultural dimension since it connects us with an Andean history and world that we did not know. [...] (Carola - Guasca, personal communication, 2018).

Taking back the native seeds, as the quinoa, allows a re-connection to the particular region of the Andes. When farmers start to connect in a more complex way with seeds, they and their *huertas* reconnect with something bigger. New natural and cultural frameworks emerge to re-think the relationships that farmers have with their Andean landscapes and culture. That is why the *huertas* become places that allow connecting to the existence and potential of interconnected micro-worlds and macro-worlds, creating and unveiling relationships with the web of life typical of the Andean mountains. Pointing out the importance of native seeds does not mean that we ignore that farmers are also learning to save non-native seeds. They have emphasized the production of vegetable seeds, which although many are non-native, have already been adapted by farmers to local conditions and there is a great need for this type of seeds. Each family is starting to have seed banks, and they are learning from the more expert farmers how to grow their own seedlings. Because one of the major challenges that they are having is growing their own vegetable seedlings, which is not the case with respect to tuber roots, maize and beans.

Seeds circulate in multiple ways in farmers' territories: as gifts that usually entail the moral obligation to reciprocity; through exchange (*trueque*); and by commercial acquisition. Seed gifting, exchanging and commerce happens among family, neighbors, and other seed guardians, or between farmers, agricultural extension workers, NGOs staff, and

commercial representatives of biotechnology companies. Seed circulation takes place at farms and fields, seed fairs, farmers gatherings.

Likewise, seeds have a symbolic connotation, they are connectors to earlier times. In fact, seeds and all practices around their revival and protection may share continuities from the past that may never have entirely disappeared. Also, seeds as a metaphor are "units of replication that can be planted, repeated in other contexts, or thrown into the air to see where they land and germinate transformation." (Macintyre et al., 2018, p.). That is why agroecological farmers plant a seed within themselves and others, which wake up the need to restore a sense of place and a sense of community with a framework of cooperation to build enabling conditions for a better living for both humans and non-humans.

5.4 Allelo(em)pathies as conclusion

Farmers need mind and hands for working in their *huertas* and farms, but also heart and other types of connection with this farming labor. They also need a sensitivity to relate with other entities as plants, soils, insects, seeds and even the weather and climate, generating ethical and affective connections with their *huertas* and nature. The first time I visited Armando's huerta, I was amazed by the diversity and the abundance of plants. "What is your secret?" I asked him, and Armando with a big smile answered "I talk to them [the plants] gentle and with care. You need to connect with them, know them, and take care of them." (Armando - Subachoque, personal communication, 2017) (See Figure 5.5).

Farmers develop <u>allelo(em)pathies</u>,¹³ empathetic relationships that weave agroecological communities in a new way of co-existence. These relationships between farmers and the non-human world of the *huerta* (e.g., food, plants, seeds, animals, soils, water, sun, climate) are material and symbolic, and intuitively these *alleloempathies* allow farmers to know how to make a living based on practices of care. How to feed themselves and others in a way that also allows other forms of life to live with dignity.

Farmers, through the nearest connections and relationships with the *huerta*, deepen their attention to the surrounding environment in order to get to know their land, the place where they live, becoming a part of it, knowing how to grow food within particular ecosystemic conditions and cultural territories. It is an experience in which farmers open up their perceptions of their reality and connect through a deeper relationship with their agroecosystem.

Connecting is a matter of time and the *huerta* is a place charged with temporality. It is a chronotope (Ingold, 1993) as different temporalities are connected, the temporality of nature, the temporality of farmers' labor, the temporality of the plants, the temporality of soil recovery, the temporality of connection. In the *huerta*, there is not only a rhythmic cycle but a complex interlacing of many concurrent cycles. Temporality is important to connect with nature since the connection with nature is a process of re-cycling, farmers need to understand and empathize again with the cycles of the universe of soil, plants, insects, and even with their own cycles. Then we could say that the agroecological *huerta* is

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¹³ I want to thank Maria Juana Espinosa, a friend and colleague from the collective Savias y Sabias, for this concept. As part of a conversation about our doctoral and master's thesis, this concept emerged in which it describes a deep and empathic relationship between farmers and the non-human world of the garden. Allelo in greek is one another, and pathos is feeling, then alleloempathy is the empathetic feeling that we can have of one another.

a re-cycling place, in which there is a process of reconnection with the natural cycles of humans and non-humans (See Figure 5.4)





Figure 5.4 Ancestral seeds: Quinoa and Cubios. Source: Author

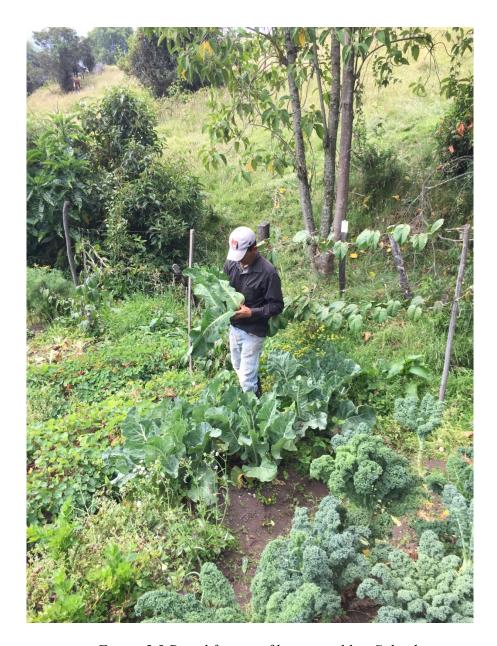


Figure 5.5 Proud farmer of his vegetables, Subachoque Source: Author

As farmers connect to natural cycles and the interdependent life web that supports their *huertas*, both discourses and practices of (re)connection are embedded within ethical frameworks based on care. And these new ethical coordinates allow farmers to deal with an ethic of care both in relation to food and in relation to their natural, cultural and social surroundings.

"The truth is that all this we do is not to fill us with money, it is also to take care of the environment, we are interested in taking care of the paramo." (Miguel - Guasca, personal communication, 2018)

"I believe that there has been a growing awareness that peasants live in a páramo and that there is an impact of pesticides on both the environment and their health." (Ana - Sumapaz, personal communication, 2017)

"Our work begins to have an effect, and that is our role because we have to be responsible and respect the environment in which we live." (Ana - Sumapaz, personal communication, 2017)

"It's nice to see how the bees have returned to the farm more and more. Seeing them makes me feel that I am doing a good job." (Cristina - Guasca, personal communication, 2017)

This ethic of care is related with the value of dignity. Agroecological farmers through their alternatives of production pursue a personal, ecological and also social well-being, in an effort to guarantee food autonomy and environmental protection. It is with this perspective that farmers (women and men) both in their discourses and practices become guardians and caregivers of their *huertas*, their lives, but also the water, the mountain, the native highland forest, pollinators, food and its seeds. Thus, to the extent that peasants deepen the interdependencies and connections that occur in the agroecosystem, they start to see how their commitment to agroecology may contribute to water regulation both in quality and quantity, to the regulation of the local flora and fauna (increasing and maintaining biodiversity and facilitating pollination), to the regulation of diseases by maintaining a high diversity in their farms, to enhance climate resilience (to frosts and other extreme weather events), and finally to conserve soil fertility.

Farmers are changing their stories, and so changing the future in the sense they are working to create new realities from the bottom up by rebuilding their lives and recreating the way they produce food. In **Chapter Four**, farmers' motivations to adopt agroecology

vary, the economic motivation is one of them, but it is not the only one, it is also about rebuilding the relationship with their labor and their role in the world, the relationships with nature, with their health and with the living earth, rediscovering their nature as living beings as part of a larger ecosystem, a larger territory, and why not part of a larger global biosphere. Thus, transformation in agroecology is also a process of regeneration and revitalization of beliefs and values that lead to more critical and reflexive sustainable thinking and action. In that sense, agroecological practices of care allow connection, which occurs across the *huerta*, other spaces, and through time.

Farmers connect with soil and plants through a constant practice of experimentation. Through this practice farmers gain knowledge, and then they build up a deep connection with their little universe of their *huertas* and agroecosystems, that will revitalize and regenerate farmers' beliefs and values. The ecological complexity is vital in agroecology (Vandermeer & Perfecto, 2018). In that sense, the agroecological *huerta* is a complex system built by interdependencies and relationships among the parts, where all the environmental components, forces and factors, both biotic and abiotic can affect the growth, structure and reproduction of plants (Gliessman, 2014; Vandermeer & Perfecto, 2018). For farmers this complexity can be understood through the *lecturaleza* (nature literacy). So, Cristina says that farmers can become nature literates "through constant interaction with nature [...], as we practice the principles of agroecology, we can make sense of where we live. That is why we experiment with techniques. We try them, and on the fly, we improve them while we adapt them to our particular place. It is a full-time immersion experience."

Agroecology allows farmers to learn different ways of looking at their world and discover or rediscover new techniques and practices that will help them refine and deepen

their connection to their agroecosystems. The introduction of agrochemicals in the rural world facilitated the agricultural work, but generated dependencies to agricultural inputs of chemical synthesis. In addition, modified and certified seeds displaced native seeds, creating dependencies to the agribusiness world. This dependency created a gap between farmers and their natural and even cultural universes. In order to break this dependence farmers, have to connect again with the natural cycles and dynamics of growing food. That is why the agroecological *huerta* is a space, in which farmers perform an agriculture based on an ethics of care, with more sustainable techniques of production, using farm's own resources, rescuing native seeds, knowledges, practices, culture, nature and breaking the dependence on intensive technological packages of synthetic agrochemical inputs.

Through the *huerta* farmers re-connect with practices, temporalities and spaces of learning and collaborative knowledge-construction that allow them to innovate their production strategies as well to reinvent themselves. This re-connection is vital for overcoming the daily challenges of food production. Agroecology requires time and hard work to maintain their farms and *huertas*. For Aurelia producing food agroecologically is a mix of things, when I asked her about her work, she answered the following:

"Sometimes can be tiring, I can't tell a lie, but you know this work is different, as I told you before, I'm autonomous here, I'm my own boss, I enjoy my work because I'm learning all the time. Since we decide not to use chemicals we have to invent and explore solutions. You start to have a new relation with the land. I cannot deny that sometimes it can be hard, and sometimes the crops do not go as we would expect, there is a lot of uncertainty. But when things go well it is very nice to see the fruit of my work. ¹⁴ I feel very happy of what I'm doing". (Aurelia - Guasca, personal communication, 2018)

¹⁴ In Colombia when we say, "the fruit of our work", it means the result of our effort and work, but it is not just a product, is something that you are proud of it, something that you deserve to harvest or to have.

Agroecology involves effort and commitment; it also requires an intensive labor. It is a physical effort but also a personal investment of patience, confidence and creativity. For Aurelia agroecology is a constant learning; each *huerta* is different and its environmental conditions are diverse. She has needed to connect differently with nature and learn from her own experience and her daily obligations to care soil, plants, and animals.

This chapter has talked about the practical dimension of agroecology based on care and connection. However, these practices shape the values and beliefs of peasants and farmers and will the connectors to build community with other farmers. The way farmers grow and care about plants is fuel for transformation. The agroecological practice and the construction of knowledge around this practice allows an alignment with nature. Each farmers' experience proposes an alternative based on an autonomous reflection on nature, where rationalities and ways of doing are transformed and build new realities to inhabit the countryside differently from what has been imposed by the agroindustry (See **Figure 5.8**). Therefore, the practical sphere of transformation is intertwined with the personal sphere of transformation: they shape each other.

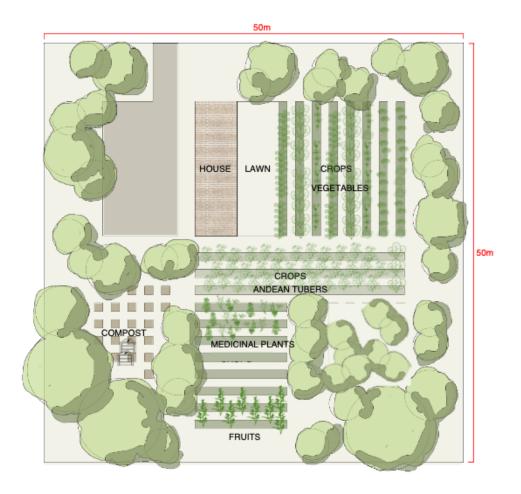


Figure 5.6. Type of huerta of 0.26ha, it has trees, vegetables, fruits, medicinal plants, and tubers

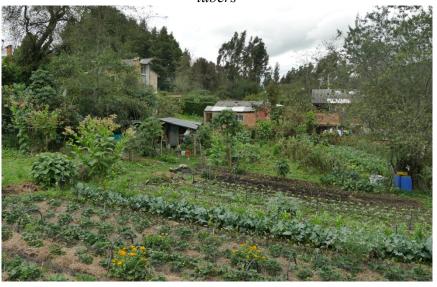


Figure 5.7 Huerta in Subachoque (Strawberries, medicinal plans, vegetables, compost)





Figure 5.8 Agroecological huerta vs. potato conventional crop, Subachoque Source: Author

Chapter 6. Propagating stories of transformation: collective actions in agroecology

This chapter discusses how farmers, through collective action, propagate processes of transformation based on care and connection with their farms. It shows how individual processes of transformation grow stronger once farmers connect with other farmers through collectivity and solidarity. Agroecological collectives nourish from the personal motivations for adopting agroecology (described in Chapter Four), as well as from on-farm practices and knowledge based on care and connection with other humans and non-humans (described in Chapter Five). Also, this chapter shows how the personal, practical, and political spheres of transformation manifest within the collectives of agroecological farmers.

This chapter draws on the information gathered from interviews with farmers and visits to their farms, as well as on my participation in the collectives' meetings and gatherings, which provided me with a better understanding of the internal dynamics of these groups. Through my fieldwork, I was able to understand how collectives can become novel and counter-hegemonic spaces that promote a re-enchantment of the rural. Thus, this chapter illuminates the components and dynamics of social and spatial transformation that the collectivities can generate within their territories.

In the first section of the chapter, through detailed explorations of the four collectives, I describe how collectivity allows farmers to support each other and to generate synergies among themselves to address the challenges that arise from the quotidian labor of agriculture. Also, regarding the practical sphere of transformation, collectivities become communities of practice and peer support, that generate a sense of belonging that motivates

farmers to continue with their agroecological projects. The next section shows how the collectivity is a fertile space to begin to weave political actions concerning farmers' work, and obviously, farmers' lives. It is also where identities are built based on the farmers' collectivities and their diverse forms of connection. Throughout this section the interaction between the personal and practical sphere of transformation is also evident. In the closing section, I explore how transformation gets stronger through farmers collectivities, which in turn weave micropolitics that emerge in concrete actions and landscapes in the Bogotá-Region.

The four cases presented in this chapter constitute examples of collective experiences that show progress in the participatory construction of alternatives to development, based on farmers' desire for "good living" and a dignified life. These collectives have been articulating organizational proposals around the production cycles, and around commercialization by rethinking the conventional food system. While two of the collectives are located in Guasca, one is located in Sumapaz and the other one in Subachoque. These three places, as can be seen in the maps presented at the beginning of the dissertation (Chapter Three), are located in areas close to the *páramos* that are part of the Chingaza-Sumapaz-Guerrero Conservation Corridor

6.1 Creating connection-scapes

In this section, I describe how collectivity is an opportunity for farmers to support each other and generate synergies with each other to address the challenges that arise from the quotidian labor of agriculture. In doing this, I examine the multidimensionality of the relationships within farmers' collectivities, including the economic imperative, and also the ethical, emotional and reflexive spaces of connection. While is true that each collective has its particular origin, they have some similarities that shed light on the importance of building community around agroecology and giving farmer aggregated values for their experiences. Adolfo states this when he talks about his Collective B:

"Well, I think that a great accomplishment of all is the strengthening of associativity. Being able to generate community-based on agroecology is an aggregated value that we have from our experience as farmers. The most beautiful of this is the human values within [Collective B], we think like family, which has allowed us to stay together. We're here because of the experience of sharing and generating well-being for all." (Adolfo - Subachqoue, personal communication, 2018)

Each collective action is located and responds to a specific problem, need, and interest, which can be modified over time. By building a community, farmers also discover a chain of connections based on a specific problem. The following descriptions illustrate the particularities of each collective drawing on Holloway's categories of: a) site of production and collective practice, b) food production methods, c) economic interactions, d) motivations for participation, e) constitution of individual and group identities (Holloway et al., 2007). A more detailed description of these categories is in Chapter Two.

6.1.1 Collective A: Being Environment

It is a collective (not legally constituted) of seven producers' families that have been working together since 2014. All the families live in the village of Pastor Ospina in the municipality of Guasca. Only two of the seven families did not know each other before, because they had recently arrived in this village. From these two families, one couple comes from the city of Bogotá. The other five families have been neighbors and friends for several generations. Six of the seven families own their land. In the family that does not

own its land, the man of the family works in a bigger farm as a manager. He and his family are allowed to use some plots for their agricultural project. All of the other members own small plots of land, which they use to cultivate both for sale and self-consumption. The seven families deepened their friendship and began to work collectively due to their participation in the "Proyecto Páramos" led by the Aqueduct and Sewer Company of Bogotá (EAAB in Spanish).

The objective of this Páramos project was to "build strategies and policy guidelines for water management as a territorial principle for adaptation to climate change." One of the central strategies of the project was the transition from conventional agriculture towards a more sustainable agriculture. The latter with the purpose to preserve and protect the micro-basins of the area of Chingaza of the Chingaza-Sumapaz-Guerrero Conservation Corridor. To start the process of productive reconversion, the Páramos Project used the Agroecological Peasant Schools (ECAS in Spanish) methodology to generate spaces for social learning and knowledge construction for the implementation of sustainable production systems and the creation of economic opportunities in the communities that lived in the micro-basins. The project was developed in 12 municipalities with 168 families.

A total of 25 families from Guasca participated in the project. However, only seven families continued with this process, and through a collective effort they have been strengthening their productive projects that started or potentiated with the aforementioned project. This collective for its members has become an "extended family" where they have

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¹⁵ The official name of the project was "Conservation, restoration and sustainable use of ecosystem services between the páramos of Guerrero, Chingaza, Sumapaz, the Cerros Orientales of Bogotá and its area of influence". The producers and people involved in the project abbreviated the name of the project to "Proyecto Páramos". From now on in this document the abbreviated name of the project will be adopted.

been building bonds of friendship and a productive identity based on agroecology. They have continued to work with the ECAS strategy, but they have different ways of working. On one hand they have their ordinary meetings, in which they build their individual and "collective life plans", and they plan their productive activities and other activities related to their work. It is a space in which they can share practical learnings, their achievements, their concerns, while they also share seeds and other resources between the members. On the other hand, the collective performs *mingas*, shared labor days, where they support each other to make improvements and practical activities in the gardens, do experiments, and innovate collectively. The main motivation to be together and in community is to help each other in their agricultural projects and grow collectively. This is a way to maintain the trust in each other about the traceability of the agroecological products.

As they began to see surpluses in their production, they saw the opportunity to sell their products in the Guasca Peasant Market. For this purpose, they presented themselves as a collective, which was vital to exert greater pressure on the market coordination committee to be accepted. In the market, they participate as a collective, unlike the other producers who participate as individual projects. Among all the members of the collective "Collective A" can have a greater supply of products to sell every Sunday in the peasant market than they could have being alone. Every Sunday they take turns among all the members, there are always two members of the group supporting the activity of the market. They also have a representative who participates in the market coordination committee. In addition to the market, some of the farmers have other clients, and they sell to them individually. However, they help themselves with the clients, if someone does not have a product, he/she ask to his/her partners for the missing products.

6.1.2 Collective B: Weaving Agroecological Networks

This network was born in the village La Pradera in Subachoque (Cundinamarca). It emerged with four families in 2011 with the purpose of promoting agroecology as a way of life and as an associative exercise of care for their immediate territory. Its main goal has been to strengthen ties among farmers through agroecology and commercialization processes with more dignified, solidarity and justice principles. Over the years, other families were admitted and in 2013 it was formalized as a non-profit entity with a total of 19 families. Today, twenty-nine families constitute Collective B. This collective is diverse, composed of both peasants and new rural inhabitants who have migrated from the city. The diversity of the members of Collective B has brought the community strengths in terms of the diversity of members' backgrounds, knowledge and experiences, as well as access to other networks with the city. For members who come from the city, having the support of their fellow peasants has been vital to their approach to agriculture and work with the earth.

Collective B has been a key actor at the local level, a rural platform for learning, co-construction, reflection, research and implementation of knowledge and practices in the *huertas* of the associates, "contributing to their good living" through "principles that seek peasant dignity, caring for mother earth, food sovereignty, fair trade and the solidarity economy" (Collective B Foundational Statutes, 2013). Collective B has been able to exist over a relatively long period time because of the strong ties among the associates built over the years under clear and common purposes. These strong ties have been formed through the commitment and responsibility of each partner in the processes, projects and activities. Efforts have been made to build affective bonds through mutual trust. The members meet

weekly and are strict with this commitment. In these meetings they plan their activities, projects, logistics, and they check each of the commitments that they have as organization. They also review their sales and who will be in charge of the "agroecological point" -- a place within the local marketplace that is open during the weekends.

Even though Collective B was an autonomous initiative of farmers, institutions like the National University of Colombia and the University Minuto de Dios have played important roles its establishment and continuous process of action-research. Collective B has been an important example of collective action through solidarity and trust mechanisms. The participatory guarantee system (PGS)_that was created by the members of Collective B has been a shared experience in other food initiatives, as it was for the creation of the PGS of the Network of Agroecological Markets of Bogotá-Region. The strengthening of Collective B's PGS has also been supported by the two universities mentioned above.

Each of the members of Collective B owns small plots of land (see **Table 6.1**), though farmers grow their food in their own plots. Two years ago, the collective decided to have a place that allowed them to grow food collectively and can be an open and live laboratory for educational purposes to teach agroecology (See **Figure 6.1**). For this moment they are renting the plot, but they are asking the municipality for help in order to have an own collective plot. Besides, farmers make partnerships between them and rent small plots to enhance their production and join forces.





Figure 6.1. Collective Huerta. Source: Collective B Facebook fan page. Retrieved 2020

Since Collective B started as a collective, they decided to sell collectively their extra products. Currently the collective has direct and indirect exchange arenas such as "La Canasta", "Sembrando Confianza" and the "agroecological point" in the marketplace, in which Collective B has a direct relationship with consumers. Since 2016, Collective B as a collective won a grant from *Colciencias*, the Colombian Administrative Department of Science, Technology and Innovation. Through this grant, they could improve their productivity and all the operations of post-harvest. Members of Collective B say that this grant has allowed them to strengthening ties with both solidarity purchase groups and to bond stronger with all members of Collective B.

Table 6.1. General Information of Farmers' Collectives

Categories	Sub-categories		Kind of			
		Collective A	Collective B	Collective C	Collective D	identities
Site of food production	Mean of Farm size (ha)	1.13	0.51	7.54	1.33	Environmental identities Territorial identities
	Standard Deviation of Farm size (ha)	1.06	0.47	11.46	1.04	
	Land Tenure %	100%	85%	66%	100%	
	Villages involved	Pastor Ospina	La Pradera, Guamal	Nazareth, Betania	Santa Ana	
ıf fc	Municipalities	Guasca	Subachoque	Sumapaz	Guasca	
Site o	Relation to National Natural Parks	Area of influence	Not in the area of influence	Conflict, border area	Area of influence	
	Environment Territory	Páramo, Water, Forest	Páramo, Water	Páramo, Water	Páramo, Water, Forest	
Food production methods	Forms of labor	Family farming Shared labor	Family farming Paid labor Shared labor	Family farming Shared labor	Family farming Shared labor	Productive identities
	Production practices	Agroecology	Agroecolog y	Agroecology	Agroecology	
	External Support	Local Government - Aqueduct Company of Bogotá	No	Chaquén Park	Sometimes Local Government	
Economic interactions	Exchange	Market, Barter, Self- consumption	Market, Barter, Self- consumption	Market, Barter, Self- consumption	Market, Barter, Self- consumption	Economic identities
	Producer- consumer interactions	Direct	Direct - Alternative distribution	Alternative distribution Direct	Direct	
	Types of markets	Fairs - Farmers Market	Fairs - Solidarity Purchase Groups - Farmers Market	Fairs - Solidarity Purchase Groups	Farmers Market - Alternative Grocery Stores - Local Coffee Shop	
Motivations for participation	Established since	2014	2011	2013	2014	Cultural identities Economic Identities
	Collective's original reasons	Strengthenin g social fabric, Collective learning, collective support	Collective learning, increase sales, access to markets	Strengthening social fabric, Collective learning	Collective learning around quinoa	

Constitution of individual and group identities	Members description- Main principles	We are families united by the need to take care of the water, the protection and conservation of the Montoque River. [] We are organized with the purpose of supporting each farm in the work to improve our quality of life and those who consume our products, becoming a support and example for those who want to grow clean, caring for the planet leaving welfare for the future."	"We are a group of farmers' families who have come together to grow food naturally without applying chemicals to the soil and plants. We promote solidarity, fair trade, share tasks, and seek to dignify peasant life."	Community organization that empowers its natural and local resources to generate transformative and productive practices that seek to care for health and the territory.	It is an association of women, mothers who are heads of households dedicated to the cultivation of quinoa, the process of drying and obtaining the grain, and then transforming it into healthy food products. Beliefs, Lack	Cultural identities Environmental identities
	Challenges	markets, Time, Conventional Believes		Environmental and territorial conflicts	of Knowledge about the benefits of quinoa	

6.1.3 Collective C: Producing Life and Peace

The Collective C was constituted approximately seven years ago in the village of Las Animas in the rural locality of Sumapaz. They are currently nine families. In their entirety, the families are historical peasant inhabitants of this territory of Sumapaz. Within their reasons for continued living in the Sumapaz region, is the preference of the rural lifestyle over the city. This collective was formed during the project "Strengthening of the Social Fabric in Food Sovereignty, Food and Nutritional Security, for Sumapaz, location 20 of Bogotá", led by the Observatory of Food Sovereignty, Food and Nutritional Security of the National University of Colombia in partnership with the Public Hospital of Nazareth. Initially, the project began working with 25 families, with the aim of developing a "peasant school of leaders in food sovereignty and food and nutritional security", with the purpose of creating educational and productive strategies that would allow the reduction of food and nutrition insecurity of peasant communities in Sumapaz. This collective emerged as a strategy to continue the project that they started with the university and hospital, in order to make it sustainable in the future. They recognized that establishing a collective was an opportunity to join forces for many reasons: fund raising, self and community organization, peasant labor acknowledgement, access to just markets, strengthening agroecological and organic knowledges and actions, and promotion of alternative exchanges as the trueque. For the members of Collective C, associating themselves has provided a chance to strengthen a series of skills, such as mutual cooperation, solidarity, teamwork, leadership, decision-making and economic autonomy.

This collective has a close relationship with the Parque El Chaquén (El Chaquén Park). This is an open space that is managed by the Public Hospital of Nazareth, and it is

located in the village of Nazareth near the Animas village. El Chaquén has 5.6 acres, 3.2 acres are a conservation area, while the rest is destined for food production, seed conservation and ecotherapy. Agroecology is the main premise of the park. For this purpose, the park has a greenhouse, a plant nursery, a composting center and at least 14 plots where polycultures of different species are carried out. Peasants, particularly the members of the Collective C benefit from this thematic park. This is a place of communitarian learning and experimentation, and it is also a place where they can connect and share with other peasants and people about their own agroecological experiences, knowledges about medicinal plants and nutrition. El Chaquén has been a platform for the collective to connect with other networks (particularly from the city) allowing them to sell their products, and to have an extra income. They are connected with solidarity purchase groups as *Sembrando Confianza* and *Agrosolidaria*, besides they sell their products in farmers markets in Bogotá as the one in the Botanical Garden of Bogotá and the National University of Colombia.

The Collective C through the Chaquén Park has participated in a bigger project of biodiversity with the Botanical Garden of Bogotá. The purpose of the project has been to strengthen the knowledge generation and appropriation, based on the conservation of agrobiodiversity, the recovery of ancestral knowledge about the rural world, and solidarity forms of agricultural production. The project, with the constant participation of peasants, has sought to develop practices of production, commercialization, and consumption of species, that enhance the agrobiodiversity of the region.

6.1.4 Collective D: Recovering Seeds

Collective D is a collective that was born in 2014 in the municipality of Guasca, as a non-profit association. Currently, the association is made up of 11 people, including eight women, who are heads of households. The members decided to establish the association to share their experience in the cultivation, production, and processing of quinoa. As well, they connected to ascertain new ways of marketing and creating products derived from quinoa, such as quinoa bread, shakes, and cookies.

They began within the framework of a project "Strengthening of Community Green Businesses of the Province of Guavio," led by the University of Minuto de Dios and the Government of Cundinamarca. For them, participating in this project was an opportunity to create strategies that allowed members to create added value to their agricultural product. The members of Collective D state that the purpose of their association is to strengthen their production capacities, replicability and scalability of the processes. These are seen as fundamental factors to access differentiated markets with a high social, environmental and economic value that, in turn, improve the conditions of life of its associates.

Additionally, they have wanted to investigate and experiment with other native seeds such as chia, amaranth, *yacón*, and other vegetables native to the region. They operate under the principles of the rescue of ancestral and local knowledge, environmental conservation, good agricultural practices (such as agroecological production), fair trade, improvement of quality of life. The adoption process of these principles has been slow; at this time, not all partners are growing quinoa one hundred percent organically; they are in the process of transition.

Their distribution channels are diverse. They have direct relationships with some consumers, and they also sell in *Raices Campesinas* (Peasants Roots), which is a local coffee shop and cultural place, in which they sell just peasant products and is a cultural revitalization center. The local farmers' market is another selling place. Currently, they have within their aspirations: a) establish a quinoa route as agroecotourism project, b) a trust certification for Collective D focused on organic production, c) increase the number of quinoa producers in the municipality of Guasca, d) have demonstrative crops, e) have quinoa products with INVIMA¹⁶ registration, and f) strengthen the organization of quinoa producers.

While Collective D has a firm purpose of becoming a green business, it also has the longing to recover the quinoa as a seed, as a crop and as a connector with the ancestral knowledge. That is why Collective D is focusing their commercialization first in Guasca, members of this collective want the people of Guasca to incorporate quinoa into their diet and promote it as a high-consumption product. They have already been incorporating it into their diet, in grain or transformed into flour, experimenting with derivatives such as *masato*, milk dessert, milkshake, cookies, and bread, among others. Although the objectives of the association are ambitious, they still have challenges: most of the plots are small, which, added to the lack of threshing machines and skilled labor, results in a low production capacity. Thus, they are frequently applying for local and national grants to improving their production and their educational project.

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¹⁶ The National Institute for Drug and Food Surveillance of Colombia.

6.2 Creating community and exploring identities of connection

In the previous section, we can see how agroecological initiatives (individual or collective) generates links between farmers. One of the initial farmers' motivations for being part of a collective is the opportunity to more easily sell their products. The four collectives in which farmers in study participate have each tried to generate alternative spaces of commercialization, inspired by principles of economic solidarity, where they agree upon reciprocal commitments and fair prices for producers and consumers, and where they promote conscious and responsible consumption. However, creating alternative spaces of commercialization is just one of many of the collectives' goals. Being part of a collective can also give farmers a more critical and proactive view of the food production and distribution dynamics based on values of ecology, solidarity, and reciprocity. Additionally, we can see how personal decisions and motivations become collective, allowing seemingly small and individual actions to reframe farmers' sense of possibility and unleashing new capacities with a broader scope.

Collectivity is an opportunity for farmers to support each other and generate synergies to address the challenges that arise from the quotidian labor of agriculture. By building a community, farmers engage in a collective identification that gives them "other readings of reality" (Rivera Cusicanqui, 2018, p. 37) towards shared interests in agroecological production, solidarity economy, environment, territory and recovery of cultural values. This identification also emerged at the conjunction of micropolitical action of the daily practices of subsistence and the appreciation of farmers' role in the reimagination of an alternative food system. In the following lines, I elaborate in more

detail, how are build these identities, and how they connect with micropolitical action toward deliberative transformation.

6.2.1 Productive identities based on agroecology

Connecting with other farmers, allows individual farmers to enhance their work as agroecologists for four reasons in particular: a) they do not feel alone; b) the collectivity becomes a community of practice and learning; c) they can scale up their own agroecological and political projects; and d) as a collective it is easier to access to markets.

The conditions of agricultural production and access to basic services constitute the most frequent and also the most traditional demands of the rural inhabitants (Osorio-Pérez, 2016). Thus, the agroecological farmers' commitment is based on the permanent search for alternatives to industrial agriculture and the different stressors that afflict them. Among the collectives and social organizations, farmers are collectively experiencing alternative ways of doing agriculture.

The *mingas*, the meetings, and training times are spaces in which farmers share, experiment, innovate, and create productive strategies based on agroecology. As we have seen, connecting with another way of doing agriculture entails knowledge-intensive labor, farmers require to engage in a practice of learning and study their agroecosystem and intensive labor based on a continuous capacity of creating innovative farming strategies and solutions to internal and external stressors within the farm and *huerta*. Furthermore, agroecological principles encourage farmers to re-think their work and ways of connecting with other farmers. These interests, as well as the challenges that emerge with the agroecological work, are discussed and shared with other farmers.

"Life brings the right people together at the right time when things are done for the common good. When we worked alone, the work became more intense, and solutions came more slowly. That's why the group is a joy for everyone. We started with the *mingas*, every fifteen days, we went to a farm owned by one of the collective members, and we supported her/him in whatever she/he needed. That's how we began to get to know each other, find common ground in our work. Then we started to get together if we wanted something, we would start going to fairs and farmer's markets together, if we had to fight about something, there we would be, or we would get along to work. We have had many moments of learning and fun. So, the collective process became stronger, and we as farmers, identified the importance of our work". (Eliana - Guasca, personal communication, 2017)

Likewise, being in community generates bonds of trust and support, paving the ground for the development of strategies that aim at the consolidation and strengthening of local and regional agri-food circuits. These circuits, in turn, require integral understanding of the relations of interdependence and complementarity that exists between producers, transformers, distributors, marketers and consumers, as opposed to a linear vision of the food production chain. This perspective looks towards a solidarity economic rationality, integrating values of reciprocity, co-responsibility, and trust, in an attempt to restore awareness about the decision power that people have in their different roles throughout the food cycle and that goes beyond the criteria imposed by the market. Due to the scale and the forms of production, the producers establish lasting relationships mainly with consumers, and distributors who know these agroecological processes and also coincide with the principles of the producers. The development of these commercial ties is crucial to farmers' sustainability and even motivation. The materiality of their work, we can see it through their harvest, but also in an income that allows them to improve their well-being.

For us, it has been good to be associated, we have been able to link to projects with the Bogotanian government, we have received some inputs, the same national university has been supremely strategic. All these supports are necessary for us: having the greenhouses and the other stuff for our production

has been vital for us. However, if there are no sales, our project is not sustainable. Thus, clients such as EcoSavia, Organic Markets, Sembrando Confianza, and small clients, such as families that know the process and remain here with us, because they understand the agroecological dynamics, are key actors for the sustainability of our projects. They have been vital to maintaining our project alive. (Ana - Sumapaz, personal communication, 2017).

Thus, productive identities are built based on agroecological activities, which imply common experiences in production and commercialization. The collective actions, organized by these groups of farmers, highlight a specific productive identity, more than just that of being peasants. The latter means that in these collectives, not all members identify with a peasant heritage, but they all identify with a way of being and doing in agroecology, which they share with the peasants who adopt agroecology. This occurs mainly in Collective B and Collective A, in which being peasants is an important narrative, but they also reinforce the environmental and territorial narrative. While in the case of Collective C and Collective D, one of the leading narratives is being proud of the peasant heritage.

Therefore, it can be said that productive identities reflect how the collectivities carry out reflections and practices that give life to other forms of being and doing agriculture in the Bogotá-Region. Still, above all, it gives life to other desires for the future. In this sense, the transformation is given from other readings of reality that allow us to rethink and transform both practices of agricultural production and forms of identity around this production.

Collective B is a big family, and as such we project ourselves into the future, seeking the well-being of all. That's why we are always looking for support from universities, experts, or other groups that help us improve our agroecological practice. For example, a month ago some members of the *Collective B* were in Natagaima. There we were exchanging experiences with another collective of agroecological farmers. [...] Also with the aim of promoting responsible consumption, we opened the ecological point in the market of the town of

Subachoque. This has also united us, because every time we commit to what we do and we all have to be at the bottom of the barrel to continue with our project. (Adolfo - Subachqoue, personal communication, 2018)

6.2.2 Environmental identities

One of the elderly farmers told me "that a wise community is one that respects, observes, and learns the vital processes of soil, air, water, and its territory to which it belongs. And feel all the visible and invisible elements of the world that keep them and the earth healthy." According to the area of my study, the farmers inhabit highlands that are part of the Sabana de Bogotá and the Páramos corridor of Chingaza, Guerrero, and Sumapaz. Therefore, the páramo is a crucial element in the environmental narratives of the four collectives. The páramo ecosystem is a definite referent of nature, as one of the most critical ecosystems that provides water: "the water I consume comes from the páramo, but who knows if we have water in the future, people are destroying the páramo, that is why we keep in mind the páramo in our productive duties." (Julio - Subachoque, personal communication, 2018). It is an entity that peasants and farmers decide to care for it for the good of the environment, but also for the good of their own.

I have always considered myself a resident of the páramo, it was where I was born, grew up, married, and had my children. I sing to the páramo, and now with all this páramos project, we have become more aware of what the páramo is. We live in a privileged place because of the water. But unfortunately, it has been badly damaged by cows, potato crops, and mining. (Miguel - Guasca, personal communication, 2018)

These environmental identities are managed and negotiated between different actors.

And this is evidenced through the various projects in which the groups have been involved.

In Colombia, the *páramos* are strategic ecosystems in which economic, political,

environmental, and social interests converge. Notably, the Chingaza and Sumapaz *páramos* have local and national relevance, they stand out for the provision of multiple ecosystem services related to water production, biodiversity conservation, and food production, among others. For this reason, producers enter into a game of both environmental demands and proposals. They negotiate with the different actors who have their interests in both conservation and exploitation of the *páramo*.

Well, the truth is that we have always been aware of the importance of the páramo. I recognize we used to grow conventional potatoes, but it was because it is easier to sell them. [...] Now, we have changed our way of production, we are already sowing organic potatoes, but we need to sell it, and for this, we require support. There should be more help for the farmers who are taking care of the páramo (Nubia – Sumapaz, personal communication, 2017).

This is a complex field, where communities not only face challenges of survival, but also notions of development and progress strongly anchored in collective imaginary. Many of these collective actions require alliances and networking to confront various environmental conflicts. In the case of the *Collective C*, we can see the importance of their alliance with the Chaquén Park, in order to access to projects of conservation and agrobiodiversity. This kind of participation in bigger projects allows farmers to strengthen their commitment to agroecology as well as their well-being. They claim that protection and conservation plans should be inclusive, and with outputs that improve not only the well-being of the *páramo* but also the well-being of the communities that inhabit it. In conversations with farmers, it can be shown that self-affirming practices (Zibechi, 2007) become more evident in the environmental field through actions of use, care, and monitoring of the *páramo*, growing food agroecologically for their conservation, recovery and seed exchange, among others. Choosing to start up other ways of doing agriculture and marketing has a profound and, although not very explicit, transformative character,

compared to current predatory practices, which are incorporated and even legitimized in the actions of rural habitants. Therefore, they are slow and complicated processes. Sometimes, the logic of the market affects and influences some farmers' decisions and actions. However, collectives have been transforming their ideas and practices of cultivation and commercialization, caring about the environment. That is why environmental identities show how transformation comes from ideas related to the immediate environment but also from the broader territory. These ideas affect agricultural practices, but they also lay the groundwork for political views of how farmers should care the *páramos*.

Our group is like a big family; some of us know each other so far; others are lifelong neighbors. But it has been nice to think of us as a collective that supports each other. [...] Besides, we are also beginning to have strength in our *vereda* (village). There are already several of us in the community action committee, and we have been able to influence how to improve our village, for example, by fixing the roads, building the community hall, and the native tree nursery. This project of the nursery has the purpose to reforest all the area of sub-*páramo*, because we are working just with native trees, we are learning about the flora of our territory. (Omar - Guasca, personal communication, 2017)

6.2.3 Territorial and cultural identities

In Colombia, mainly ethnic groups, through the constitution, have the right to collective territories, but the peasants do not have this right. The peasant movement has fought for equal rights and has fought for land. In some areas of the country, the Campesino Reserve Zones have been built, a situation that is not common/available for all Colombian peasants.

For the particular case of the Capital-Region, the peasant population sector has an important link with the city of Bogotá, due to the interdependence of the city's food supply. In this sense, territorial identities are embodied in the notion that the geographer Rodríguez

(2019) proposes as "agri-food territories of Bogotá." The author analyzes these territories under relational territoriality, which is a different approach that the one to the peasant territories associated with the struggle for land and peasant rights. However, these two territorialities may be complementary, and in some areas of the country they coincide (Rodríguez, 2019, p. 70).

In the case of the farmers who participated in this research, they share these relational territorialities, where the interests and demands at stake fundamentally go through the collective experience of inhabiting the same territory (Osorio-Pérez, 2016). This implies participation in the construction of the *vereda* (village), with solidarity, common rules, appropriation of resources and resolution of collective needs that configure memories linked to the place. This territorial configuration and experience of dwelling the same area are articulated by an interacting dynamic between the environmental, social, productive, and food market particularities. These peculiarities of the *vereda* are connections agents, which strengthen the political exercise towards the improvement of the well-being of the *vereda*. In that sense, collectivities elevate political awareness and make the practice of agroecology more of a political act. Here, the transformation process is territorialized through the ideas of how to inhabit a common territory and productive and commercial practices that give an account of the intention of the producers to conserve the resources of their territory.

"For us, it has been important that we all belong to the Pastor Ospina village, which is one of the areas of influence of the Chingaza Páramo. We could show that we as neighbors of the páramo and as agroecological producers have done a conservation work, and thus fight for a space in the peasant market of Guasca. The Páramos project allowed us to start with our productive project, but for us, it was essential to have a place to sell our products, and what better than the Guasca peasant market to show our work based on both, agroecological production and conservation." (Eliana - Guasca, personal communication, 2017).

For rural populations, particularly those in areas of influence or in the same areas of *páramo*, this ecosystem becomes a territorial reference. The *páramo* is a historical result of the interaction between its communities and natural elements (such as water). This interaction has generated not only the transformation of the landscape but also the construction of various meanings around the *páramo* and its elements (water, air, frailejón, lagoons, myths, etc.), which are directly related to past and present experiences and perceptions of those who have been related to it. The communities of the *páramos* establish with this landscape a material and symbolic connection. In the first case, because people live and have productive activity in the *páramo*; and in the second case, because the qualities and values attributable to the landscape, which correspond "to those attributed to the people who inhabit it" (Ortega Cantero, 2009, p. 51), are part of their identity.

The *páramos* are also recognized for their symbolic and cultural values linked to the cultural identity of indigenous¹⁷ and peasants of these territories. The symbolic connection of communities with the *páramo* landscape is expressed in festivals and cultural events in regions and municipalities. For example, in the municipality of Guasca, the Guaque Festival is held, where different social peasant organizations participate. Collective D participates with its products, and some of the producers of Collective A participate playing traditional music from the region. This particular festival aims to acknowledge the role of the Andean peasant families and their proposals for transformation, seed custody, and construction of decent permanence acknowledging the ancestral, peasant, mountaineer,

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¹⁷ The ancient inhabitants of these territories were the Muiscas. For these peoples, the páramos of Chingaza, Sumapaz, Guerrero, and others constituted part of their territory and gave them great significance, especially to their lagoons, rock shelters, mountains, and water sources. These places represented ceremonial centers and sacred places of worship and respect. Today, the current inhabitants, interested in protecting these ecosystems, rescue the sacred sense of the *páramo*.

and *páramo* territory. Therefore, transformation possibilities are also cultural, in the sense the transformation is rooted in knowledge and embodied in a collective experience particular to a territory and a culture.

6.3 Conclusions: Joining actions and thoughts to transform territories

The four collectives of farmers are examples of social experiences of transformation. They have a specific purpose aimed to solve challenges that emerge from their daily agroecological practice. Therefore, farmers undertake through collectivity a range of actions that might start from specific actions to more dense and prolonged processes, from local experiences to network dynamics that bring together various actors and collective spaces. (This issue will be explored in Chapter Seven). The collectives also encompass solidarity and social justice actions, processes of social organization, and daily micro-political practices (Osorio-Perez 2016, Rivera-Cusicanqui 2018). As farmers join with and connect to other farmers, they build a community around productive, environmental, and territorial identities.

Thus, farmers stories provide evidence of the desire to generate other ways to approach the rural. "[...] More than taking back the ecological agriculture, we are revaluing the peasant and family agriculture, and how this agriculture gives us back our dignity" (Adolfo - Subachqoue, personal communication, 2018). Thus, farmers commit with other ways to inhabit the territory more sustainably. Farmers pursue productive alternatives to a better living for themselves, their communities, and their territories, and guarantee their food autonomy and the environmental protection of their territories. They

also pledge to build alternative agri-food circuits and other types of commercial exchange based more on the social and solidarity economy between the countryside and the city.

Farmers' families struggle daily to create a better life. Agroecology is an alternative, but it also brings challenges, and its sustainability becomes very difficult in the logic of economies of scale. And that is why peasants and their families find a way to generate social capital, strengthen production, food processing, financing, marketing of products and services of farming families, through a collective. In this regard, agroecology inspires farmers to be interwoven to other farmers and communities. That is why agroecological farmers find benefits and opportunities to connect with other farmers and build community.

Building community also requires connection, and connection is pivotal for transformation. It is the way we can transition to an abundance thinking that can be revealed through practices of collaboration and sharing (Wahl, 2016). The emergence of farmers' collectives allow farmers connect with other farmers, as a way of expanding the learning actions that each farmer experiences in the *huerta*, and how they transform collectively. Farmers collectivities can generate new life pathways and visions of social possibility, allowing them to focus more on their capacity for transformation rather than their deficiencies.

In that sense, when we talk about how farmers connect with others to build collectivity and community, it appears that they develop different relationships based on empathy, mutual recognition, and shared identities, interests, values and also experiences. Through this connection, "the circle of attention" of farmers widens and new realities enter the horizon and come into being. In this regard, when farmers connect with other farmers or people, they can stop feeling alone in their agroecological projects, and can start to be

"connected to and operating from a widening surrounding sphere" (Scharmer & Kaufer, 2013). This sphere is represented in a wider circle of farmers and people that care about agroecology, other ways to perform economy and well-being practices that will help them to thrive in their pursuits.

Connection can also be one of the levers for realizing transformation towards sustainability. Through connection we can identify and focus more on how the internal changes, such as farmers' beliefs and values, might contribute to a more sustained, long-term change through learning processes that can come in many shapes from individual processes to social learning within groups, collectives and networks, creating cultures of collaboration.

In addition, agroecological actors when connected with the wider world, experience a survival and resurgence of crops, seeds, agricultural practices, local economies, cultural values and knowledges, socio-ecological and communitarian relationships that can be in danger or have disappeared through time.

In Chapters Four and Five, I explored farmers' motivations to grow food agroecologically and the farmers-*huerta* relations based on caring practices and obligations. Behind the motivations and care practices is the action of connection, farmers perceive different disconnections within their lives and territories, and being part of an agroecological process they feel that they can find new ways of connectedness. Connection is a daily practice that allow farmers to grow in experience and knowledge, and above all, allow them to be part of collectivities and networks.

For Arnulfo, when farmers join actions and thought, they are transforming their territories and themselves. Connection requires time. It is a process. There are *aha* moments

that are vital to realizing the importance of raising awareness. In the case of Arnulfo, when he realized that his health was being affected by agrochemicals, he then questioned the way we were doing agriculture, and he started to be aware of his health and then the health of his soils.

"I started to feel the urge to cure myself and to start to cultivate differently, and so you begin to see things differently, and the sensibility also starts to change. For example, I don't see the plants anymore just as a product, now for me they have other values, and you start to feel if people have the same feeling and sensibility that I have. And yes, I found other people like me. I remember when Alejandro came to me asking me about my huerta and if I could teach him. He was not a peasant, he came from the city, but I felt his sensibility. And so, started Collective B, because we found interests in common, and we saw the opportunity to create a community around agroecology here in Subachoque. Then we met other people and started to work together. [...] Now, we have our principles, rules, our ways to do things, and to take action when we find challenges because if we do not go over the difficulties, that's not good for the group's health". (Arnulfo - Subachoque, personal communication, 2017)

For building collectivities and undertaking actions together, the common interests are vital, as we saw in the former sections. The socio-environmental context and tensions, which unfold there, also motivates the meeting and collective action. Thus, in the face of dynamic realities of rural areas in Bogotá, farmers and their actions adopt ways of posing and solving the problems that challenge existing ways of addressing the difficulties of rural people. Even their own problems are viewed as collectives.

While most of the collective actions occur in the practical sphere of transformation, to the extent that farmers deepen their discussions and actions around well-being, solidarity economies, and alternative forms of living on the planet based on agroecological principles, they are engaging in political sphere. In particular, farmers are waking up to the need to restore a sense of commonplace, a sense of community with a framework of collaboration to sharing practices, knowledge, values, and motivations for being guardians of ways to do

agriculture and the well-being of farmers and peasants. In Chapters Four and Five, we have talked about connection and care as practices that enable transformation. When farmers connect empathetically with the natural and the socio-cultural world of their agroecosystems and territories, it allows them to cultivate themselves as change agents, questioning certain schemes and structures of being, inhabiting, and living in the rural world. As collectives, farmers enhance their envision and enacting of good living forms in the Bogotá-Region.

The collective actions, in the beginning, are not oriented towards an external actor, since they seek important changes in the being and work of the same communities. We can say what Zibechi (2007) mentions that auto-affirmative practices "build a different world from the place they occupy" (Zibechi, 2007, p. 92). However, they include daily actions that form a potential basis for political projects within the agri-food circuits in the Bogotá-Region, which articulate a set of concepts and practices that allow enacting other ways of food economies. Drawing on Osorio-Perez (2016), we can say that these collective actions may not be very political in the beginning, but later, they turn in quotidian resistance and re-existence (Maldonado, 2017). The latter gives farmers elements to strengthen themselves organizationally, and then build alliances and enter regional networks that will allow them to scale their interests, resistances, and re-existences.

Returning to the model of the three spheres of transformation, practices of care and connection integrate the personal, practical, and political spheres, as farmers grow their harvest, build communities, and undertake collective action. Although many of the actions associated with care and connection occur in the practical sphere, they also allow farmers to engage with the political sphere via a focus on well-being, solidarity economies, and

alternative forms of living based on agroecological principles. In particular, farmers awaken to the need to restore a framework of collaboration that includes sharing practices, knowledge, values, and motivations for engaging in agroecology. The practical actions of each farmer thus lead to collective actions aimed at the search for dignified co-existence and social change. Ultimately, the farmers' autonomous motivations to adopt agroecology, allow them to find other metaphors, other frames of meaning that inspire new ways of being and acting (Gibson-Graham et al., 2013, p. xxii) and can contribute to the transformation of the rural world of the Bogotá-Region.

In the next chapter, we turn our attention to how regional agroecological circuits define the constraints and possibilities under which practical transformations take place and can become political transformations facilitating re-thinking in alternative local food systems in the Bogotá-Region.

Chapter 7. Connecting the huerta to the table: weaving transformation and political re-existence within food networks

This chapter explores how farmers' networks and alliances make new connections and scale up their agroecological processes, practices, values and products through alternative food networks (AFNs). It highlights how AFNs exemplify other ways to understand the complex flow of food between the countryside and the city and makes explicit how peasant and farmers' agroecological initiatives—described in the previous chapters—play an essential role in consolidating an alternative food supply for Bogotá. This examination of the configuration of AFNs also allows us to better understand how the city of Bogotá connects with its rural environment by creating new agri-food territories and reimagining urban-rural dynamics in the Bogotá-Region.

By exploring the configuration of the agroecological projects and AFNs along the Bogotá-Region, we can also find tangible outcomes associated with behavioral changes around food consumption. These changes, in turn, play an important role in upholding alternative ways of doing agriculture, producing food, and supporting farmers' livelihoods. By describing the changes of practices and behaviors around food consumption and presenting examples about the emergence of collective actions of food exchange and distribution, the chapter also sheds light on the values and discourses that are present in AFNs, making visible how its emergence can constitute a form of citizen political intervention. While not all collective actions are political, it is illuminating to realize how any collective action, such as AFNs, however restricted or functional, has the potential to activate other political dynamics. The latter responds to what Bloch (1996) calls the importance of celebrating what is not yet or appears not to be but is an active and possible

potential in the future. This chapter celebrates such potential, by giving value to the active political potential of AFNs.

In the previous chapters, I delved into the practical and personal spheres of transformation. In this chapter, I focus on the political leverage that AFNs can provide to agroecological initiatives. Among the AFNs, this leverage includes the way people consume, the relationship between producers and consumers, and the connection between producers, food and soil. I also show how AFNs can transform the established ways of thinking about food economies, which is crucial if they want to contribute to local development. Thus, this chapter aims to understand the political potential of the elements that are immersed in the quotidian practices of food distribution, exchange and consumption.

The chapter is divided in two sections. The first one describes four initiatives around food distribution in the Bogotá-Region that can be seen as AFNs that incorporate social practices of food exchange, and other material and symbolic values. By paying attention to the flow of matter-energy, discourses, emotions, and lived experiences involved in the highly-contingent-open-ended process of building responsible and just markets, this section describes the economic diversity of the agri-food initiatives in terms of how they can become enterprises, configure markets, and enact labor practices differentially (Cameron & Gordon, 2010). The section demonstrates how these AFNs interweave narratives about dignity, social justice, climate change, care, *buen vivir*, sustainable rural development and solidarity, and reveal key elements of their political discourses.

The second section demonstrates how AFNs' activities can have practical effects on political actions, giving a glimpse of the possible food futures that might be built in the

Bogotá-Region. Here it is important to highlight which economic, political and social aspects of these alternative food initiatives are worth expanding and strengthening. Drawing on Cameron & Gordon (2010), this question opens the discussions about how the world might be and the sort of food futures that this work would like to contribute to. This entails thinking beyond the debates and contestation about how the world is today, to identify the activities and practices of AFNs that reflect the new ethics of care towards humans and non-humans. My hope is that these ethics shall eventually influence political discourses around the production and consumption principles that will strengthen alternative food futures in the Bogotá-Region based on experiences of *buen vivir* and well-being.

The material in this chapter draws on the information collected during my fieldwork at four AFNs. I met them through the people of Agrosolidaria Bogotá—one of the AFNs I was connected before as a consumer member, and ATI—a local NGO that promotes social organization around solidarity economy and support initiatives of family agriculture. I selected these four initiatives from the purpose-built database of "alternative" food distribution initiatives that I put together—working as a volunteer—at ATI in the framework of the project "Hacia la comercialización de productos en el Corredor de Páramos" (Towards the commercialization of products in the Corridor de Páramos). As a consumer, I focused on the traceability of the food that I was purchasing, as well as on learning about other alternatives to purchase healthier and agroecological food in the Bogotá-Region. I interviewed the managers of the food initiatives, as well some of their members and consumers; I did an online questionnaire that was answered by 25 consumers; I attended some meetings and cultural events organized by the AFNs; and I also joined

them in their quotidian activities such as the purchase organization and preparation, planning sessions, and distribution activities. AFNs' social networks, such as Facebook, Instagram and their websites were also helpful to identify the narratives and stories about food, as well as some of the values associated with them.

7.1 Cultivating Alternative Food Networks in the Bogotá-Region

On Saturday, June 10, 2017, at the door of one of the innovation hubs of Bogotá, I met Arnulfo, one of the farmers of Collective B. He had come to support the launch of the *Red de Mercados Agroecológicos de Bogotá Región* (Network of Agroecological Markets of Bogotá-Region – from now on RMABR), and to promote the products of Collective B that are marketed by two of RMABR's initiatives. Arnulfo told me that he had been at the event for a couple of hours, and he was happy because he had been talking with the crowd about his work and the objectives of Collective B. There were many people, and it was hard to move around, but I was excited to see so many people interested in knowing more about RMABR. All the initiatives of the network were present. Each initiative had a stand with products and two people available to attend to whomever approached the stand to ask about the products. This included describing the project of each initiative and inviting them to join and to become a member. There were also associated activities, such as seed exchange, lectures, and environmental education activities for children.

The RMABR evidences the growth of novel alternatives of food distribution and supply in Bogotá. This network has also made significant efforts to establish a network of networks to cluster agroecological initiatives to "strengthen more sustainable agri-food

systems" (RMABR, 2020). The RMABR believes that by building a network it can harness the potential of each initiative to collectively face the challenges that arise.

In the Bogotá-Region we can find a diversity of AFNs, with diverse backgrounds, principles, purposes, achievements, and challenges. The common ground of these initiatives is a longing for recreating and rethinking the agri-food system in Bogotá and Colombia. Collectively they move forward towards two objectives: first, they aim to achieve fairer conditions for producers by promoting principles of solidarity, economy and social justice; and second, they work to raise social and environmental awareness about the importance of agroecology, family farming, and solidarity economy. The RMABR seeks to make an impact on civil society and the government in order to make visible and position the network and its members in the process of distribution of agroecological food, with the goal of enhancing food security with sovereignty in the Bogotá-Region. Through these objectives, RMABR seeks to benefit producers, consumers (and therefore society in general), as well as the rest of nature.

I chose three initiatives of RMABR in Bogotá, and a local initiative in Guasca, a municipality of the Bogotá-Region. The three initiatives exemplify the recent emergence of AFNs in Bogotá. Their actions of production, distribution, and consumption of food converge to provide healthy food at fair prices. Even though each initiative has its particular objectives, they all protect small food producers and promote solidarity economy. They also encourage fair trade, shorter food supply circuits and environmental protection. Their differences may come from the rationales of their constitutions and the nature of their creation. In the next part of the chapter, I provide a brief description of each initiative. Based on its economic diversity I explain each initiative in terms of the type of enterprise,

market, and labor (Cameron and Gordon, 2010). Also, this section presents the type of relationships they establish with consumers and other actors, levels of operation, aspirations, and challenges (see **Table 7.1**).

7.1.1 Mercado Campesino de Guasca (Peasant Market of Guasca)

"When Aurelia goes to the market, her face changes." This is what Aurelia's husband said when I asked him about her participation in the Mercado Campesino (Peasant Market¹⁸). He told to me than more than a place where she can sell her produce, the market gives Aurelia the opportunity to offer the product of her work and to share her experience as an agroecological producer. Just like her, many other producers travel each Sunday to the urban center of Guasca to sell fresh and processed products from 8 am to 2 pm.

The *Mercado Campesino* (peasant market) was born in 2005 as a joint initiative between the municipal government and some producers who claimed, at that time, a space to sell their agroecological products. For 14 years, the peasant market has been an open fair where producers sell vegetables and processed products (such as *arepas*, bread, jams, yogurt, among others). The requirement to enter the market is to be a resident of Guasca and be a small producer. Additionally, the fresh products must be organic. However, some products are produced under good practices but are not entirely organic. Peasants call them products in transition. Among the objectives of the market are to promote local farmers, support local agriculture, improve agroecological production, promote local consumption, and boost agroecotourism.

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¹⁸ The peasant market is like a farmers' market. However, the members of the initiative emphasize that this space is exclusive to small producers and farmers. It is a market that highlights peasant values and seeks to support family and peasant agriculture.

To the extent that the *Mercado Campesino* functions as a fair-market, the relationship between producers and consumers is direct, a situation that allows farmers to tell their story and experience in food production. As a consumer mentions, "for me and my mom is important to know the producer, I like to talk to them, look them into each other's eyes, and know firsthand the history of the food I eat." (Lina, Consumer-Mercado Campesino de Guasca, personal communication, 2018)

The Mercado Campesino works thanks to the support of the municipal government of Guasca, which provides the space, tents, tables, and distinctive elements for the producers that participate in the market. Additionally, the municipality pays a person to set up the tents and tables every Sunday. The market also has a coordination committee that is constituted by producers. This committee is responsible for coordinating the activities, certifying, and regulating the productive processes of the people who participate in the market. In turn, it has a coexistence committee to mediate any conflicts that arise between market members. According to Carola, the coordinator of coexistence, mediating disputes is a difficult task. For example, lately, the organic quality of some products has been questioned. Fortunately, they have auto-regulation principles and a visit protocol to evaluate the agroecological processes of the farms. Aurelia mentions that it is "very demotivating to see how some producers put into play the trust and credibility of the others' work, just because they want to increase their income. That's why I like to be part of the committee. I can help to strengthen this part of the producers' trust and awareness." Participants of the *Mercado Campesino* additionally have new aspirations. First, they want to build new networks with producers at neighboring municipalities of lower altitudes. The latter, as a way to have a greater supply of products, such as fruits and other warmer climate

products. Second, the committee is discussing plans to open other spaces for new producers. According to the municipality's market coordinator, more and more producers are requesting to participate in the market. In the case of $Collective\ A$, it took them almost a year to have a market space on Sundays. And third, the market also needs an effective communication and education strategy that motivates local consumers to buy in the market.

7.1.2 Sembrando Confianza (Sowing Trust)

Sembrando Confianza was born in 2012 as a project of the Colombian-French organization *Proyectar Sin Fronteras* (PSF). PSF is an NGO that works with processes of socio-economic reintegration of vulnerable populations and victims of the armed conflict through community integration, professional training, and strengthening of microenterprises in a peri-urban area of Bogotá (Proyectar Sin Fronteras Foundation, 2019). Currently, the NGO has operations in Colombia and Peru. Particularly in Colombia, PSF has the COMparte project, which is an active learning center in diverse subjects, among them urban agriculture. PSF and the population of the Santa Rosa neighborhood have built urban gardens. For PSF, cultivating urban gardens has had the purpose of fostering food security, better well-being and environmental education within the community. All these purposes support the aim of strengthening the social fabric of the neighborhood.

At the time that the urban garden project began to have surpluses, PSF saw the need to promote a distribution circuit. So, *Sembrando Confianza* was the solution to the difficulty that the population of Santa Rosa had in marketing their products. *Sembrando Confianza* expanded subsequently its network of producers. Currently its network includes

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¹⁹ Collective A is one of the farmers' collectives that participated in this study.

producers located in Bogotá-region no more than 80 km away from the city. Sembrando Confianza provides technical support to producers, as well as a marketing channel for their products. Its coordinator explains that more than a business it is a project that seeks to improve producers' quality of life: "we focus mainly on supporting producers who are socially and economically vulnerable. So, we support them with marketing, logistics, pack, and distribute the food boxes. We seek to give added value to their products. We also give technical training, for example in recent days we did a harvest and post-harvest workshop to improve the conservation of food once harvested. We also have cooking workshops for both producers and consumers." (Sembrando Confianza's Coordinator, personal communication, 2017).

Sembrando Confianza functions mainly thanks to the work of French volunteers who provide their civic service in Colombia, and Colombian interns from the Universidad Minuto de Dios and SENA. The training and operational activities are carried out by the volunteers and interns, who are attending their last semesters of university or are recent graduates. The coordinators of PSF and Sembrando Confianza are older than the volunteers, and there is a policy that they should be Colombian; they maintain the continuity of the projects and the memory of the organization. Volunteers rotate every one or two years. This volunteer model has allowed Sembrando Confianza to maintain fair prices for producers and accessible to consumers, allowing more democratic access to healthy food.

Paola, one of the consumers says that since she met *Sembrando Confianza* at an agroecological market fair, she "*loved the market scheme*" and, from that moment, asks every eight days for her food box. She does not know any producers yet, but she trusts in

the organic origin of the products since the Sembrando Confianza promoters have invited her to visit the producers several times: "they constantly organize events with producers both in Bogotá and on their farms. I have never been able to go. Nevertheless, Sembrando Confianza always shares their activities and the stories of the producers in their newsletters" (Paola, Consumer-Sembrando Confianza, personal communication, 2018) (See Figure 7.1). Sembrando Confianza is building a Participatory Guarantee System (PGS) alongside other markets and the RMABR. PGS are alternative certification systems that verify in a participatory manner that agricultural production follows sustainability criteria. The PGS consists of principles and criteria that are a result of a collective agreement between the market initiatives, producers, and consumers that are members of the RMABR. It benefits small producers with an alternative to certify their products. The PGS seeks to ensure that it is the producers themselves, and other agents involved, who verify the production of food, whether the food is in process of transition, or is either organic or agroecological.



La Asociación Red Agroecólogica Campesina (ARAC)

LA ARAC es un grupo de productores de Subachoque – La Pradera que cuenta con alrededor de 30 familias. Es un modelo de proyecto agroecológico casi único en Colombia. Cuenta con el apoyo de los agroecólogos de la Universidad Minuto de Dios que trabajan en colaboración con Sembrando Confianza.

Se unieron para encontrar un mercado más amplio y con precios justos, respectando el medio-ambiente, cultivando con técnicas ancestrales y productivas, y con una gestión comunitaria de los recursos. Por ejemplo, se rotan las funciones anualmente y hacen su propia planificación de siembras colectivas, para no ofrecer el mismo producto al mismo tiempo.

Esta semana, pueden disfrutar de algunos de sus productos en su mercado: huevos, calabacín, perejil, durazno y yacón.

iSizue disfrutando sus deliciosos productos cada semana!



Mercado Familiar

Huevos 12 unidades 1 grande Yogur Almojábanas 3 unidades Lechuga Romana 1 unidad Calabacín 1 lb 1 lb Papa criolla 1 lb Pepino cohombro 1 unidad Cebolla puerro 0,5 lb Perejil 1 atado Bulbo de hinojo 0,5 lb Ciruela Feijoa Yacon 1 lb 1 lb Durazno



Sembrando Confianza es una iniciativa de Proyectar Sin Fronteras. PSF es una creadora e incubadora de proyectos y negocios sostenibles que dan respuesta a desafíos económicos, ambientales, sociales, con énfasis en poblaciones vulnerables. www.sembrandoconfianza.com /pedidos@sembrandoconfianza.com



Figure 7.1. Picture of one of the newsletters of Sembrando Confianza. It describes briefly the Collective B and invites consumers to taste the products that come from this collective.

Source: Sembrando Confianza. (2020) Retrieved from https://www.sembrandoconfianza.com/aso-red-agro-camp/

Sembrando Confianza operates through online orders that consumers make no later than Monday at noon. Sembrando Confianza sends consumers a list with the offers of the week, which is built together with the producers. Each consumer indicates that he wants

for the week, so that Sembrando Confianza can coordinate with the producers the quantities of the products. Sembrando Confianza is responsible for transportation and organization of the boxes for every consumer. Although there is some intermediation, the Sembrando Confianza scheme is a short distribution circuit because consumers can always have the possibility to connect with the origin of their food, and the peasants' or farmers' work. The Sembrando Confianza network offers the possibility of knowing the farms of the producers through agroecotourism. Sembrando Confianza also carries out workshops on urban agriculture, cooking and environmental education, producers are also invited with the purpose to be the ones who lead the workshops together with them.

Although *Sembrando Confianza* still faces several challenges, they are looking to expand their network of producers to include other products, in order to diversify their supply without generating competition among producers. Also, the coordinator feels that they have to strengthen consumers' participation in the activities promoted by *Sembrando Confianza*.

7.1.3 La canasta (The basket)

In 2012, three friends who were worried about their diets and wanted to contribute to rural development decided to create *La Canasta*. One of the co-founders, a consumer who wanted healthy food at affordable prices for his family, decided to join a group of other likeminded consumers who organize themselves to buy directly from agroecological producers. He liked the model so much that he quickly moved from being a consumer to becoming one of the three managers of the network. *La Canasta* has grown, and last year it joined forces with two similar initiatives to fight for the sustainability of these networks

of consumers and producers around agroecology. The merge of the three networks has continued under the name of *La Canasta*.

La Canasta started with the organization of food boxes distributed weekly. Besides the logistics of assembling the food boxes, La Canasta began to develop meaningful educational work. For La Canasta, consumers were initially expected to learn to eat according to the harvests of the home garden, and subsequently, understand the rhythms of production. Later, La Canasta expanded its offerings. Consumers therefore can now have access to other additional products, in addition to food boxes. La Canasta also functions as an alternative purchase group, and it is energized mainly by three people with the logistic support of four other people. La Canasta refers to itself as a "Network of trust formed by different actors of a whole, short and conscious agri-food cycle, which begins in the producers and closes in the consumers. Our goal is to energize this cycle, weaving, and facilitating a balanced and transparent relationship between people who grow in the countryside and those who feed in the city, trying to make our food accessible to most people." (La Canasta, 2020)

Currently, La Canasta's coordinator feels relieved and excited about having joined the other two initiatives. Now the work's dynamics can be divided. Before, he was alone in the coordination, and it was a lot of work for him. As for the profitability of the model, they are still working on it, since today they can only afford to pay the people working in logistics and transportation. For the moment, the promoters donate their time in order to maintain the fair prices established in an annual meeting between producers and consumers. As with *Sembrando Confianza*, *La Canasta* presents an alternative to conventional food intermediation. *La Canasta* aims to dignify the life of farmers, by

guaranteeing them 80% of the profit of the sale of the products. Thus, *La Canasta* allows each of the affiliated producers to market and distribute their products without losing much of the profit left by their sale. This is in contrast to what happens in the traditional marketing channels where producers see their profits directly affected by the participation of intermediaries throughout the process. Collective B producers mentioned on several occasions how vital it has been for them to work along *La Canasta* and *Sembrando Confianza*, since it has allowed them to continue developing their productive projects based on principles of trust and social justice.



Figure 7.2. Instagram picture with legend talking about the importance of peasants for the cities

"The countryside told us that without their crops and the peasants who care for them with dedication and love, it would be impossible to live in cities. The countryside has told us that we must recognize and dignify the work of peasants which is essential to feeding the inhabitants of cities, towns, and villages. Let us recognize this hard and beautiful labor, feeding ourselves with local products and preferably respecting the environment and the health of those who eat and those who produce them. Hooray for Good Living in the Countryside!"

Source: Instagram 2020, #lacanastaorg

La Canasta tries to make a difference. Although nowadays they have a broader range of products, their discourse still focuses on the importance of consuming according

to production and harvesting cycles, trying to raise awareness in consumers about the nature of agriculture and the labor of peasants. La Canasta also persists in educating its consumers on issues of responsibility and political action through food consumption (See **Figure 7.2**). We can see this in their weekly newsletter, where they talk about agroecology and rural development, and in their workshops—both in the city and at farmers' places. La Canasta's coordinator says that many consumers approach them looking for healthy food, but few people stay. Those who stay in La Canasta, understand the importance of rural development, and how through responsible consumption they can contribute to a better future for the countryside. "At the beginning, it was not easy to consume all the food that arrived in the food box, there were things that I had never eaten, but then I learned to make recipes with those more native foods and learn more about the history of the producers. So, I no longer have only the interest of healthy food, I am also interested in how I can contribute to rural development." (Sandra, Consumer-La Canasta, personal communication, 2017). Educational actions constitute an important strategy to captivate new consumers and to motivate existing ones to remain loyal to La Canasta. In these actions the consumers are shown how they can contribute to the well-being of the producers members of La Canasta.

As in *Sembrando Confianza*, *La Canasta*'s consumers purchase online, and they can either pick their products at *La Canasta*'s place or have them delivered at an extra cost. It is important to mention that *La Canasta* does not define itself and does not want to be seen an online grocery delivery service. "We're something more. We're a network of consumers and producers. We encourage all the consumers to be part of the project, through coming to the quotidian activities and participating in the assembly with consumers and

producers that take place every year. We need to encourage our consumers, and now we're improving our communication strategies. Additionally, we have a strong commitment to our producer because they one of the main purposes of *La Canasta*: improve producers' livelihoods through strategies as training in agroecological practices and financial skills." (La Canasta's Coordinator, personal communication, 2018).

Nowadays, the main challenges of *La Canasta* are to reach a point of equilibrium, which they have not yet reached yet, something that would allow the model to be sustainable. Also, they want to strengthen the distribution model of *La Canasta* and then replicate it; to have more collaborative work with other organizations, including other projects of the kind of *La Canasta*; and strengthen consumers' commitment. *La Canasta* also belongs to the RMABR. Therefore, it also participates with the PGS to guarantee the quality and origin of its products.

7.1.4 Agrosolidaria Bogotá (ASB)

ASB was born in January 2013, as an initiative of consumers from the neighborhood of Engativá to purchase healthy food directly from peasants and family farmers. Some of the members knew about the Agrosolidaria movement. So, instead of starting a new initiative, they requested permission to be a branch of the Confederación AgroSolidaria Colombia (now on AgroSolidaria Confederation). The Confederation was born in 1994 in the department of Boyacá in the area of Tibasosa and Sogamoso. In its origins was an initiative of farmers who decided to collaborate to increase their well-being and began to develop an organizational process. This initiative has four basic principles:

(a) solidarity economy, (b) agroecological production, (c) family farming, and (d) responsible consumption and fair trade.

From the beginning, it has been a federated process, which means that each AgroSolidaria Confederation section has been autonomous in its administration, its work, and its organization. However, each section has to comply with the Confederation principles²⁰. AgroSolidarias are mainly from producers that live in rural areas. Nevertheless, twenty-five sectionals are in charge of the marketing processes, including ASB²¹.

As part of the confederation, ASB agrees to their principles and wants to contribute to the development of solidarity economies and support of healthier agricultural production. Thus, the founders, by changing their consumption habits, began to be more aware of and responsible for the socio-political implications of their food choices. Responsible consumption is one of the main messages that ASB wants to transmit. One of its coordinators mentioned that ASB, rather than speaking about conscious consumption, speaks of responsible consumption. This responsibility is also linked to action: "it is useless to have awareness if we do not act responsibly," said the ASB's coordinator in a workshop of responsible consumption.

ASB seeks to encourage consumers' responsibility as a way to strengthen the future communities of *Bien vivir* in Bogotá. For them *Bien vivir* means collective and integrative well-being. *Bien vivir* represents a shift towards a more biocentric, relational, and collective

²¹ Being part of the AgroSolidaria Confederation allow ASB to have access to other products outside the Bogotá-Region. Nowadays, ASB has in its offer fresh products that come from municipalities near Bogotá. However, products that come from warmer territories, such as coffee, coconut oil, flour, and cocoa, come from other sections of the Confederation.

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²⁰ At this moment AgroSolidaria Confederation has 128 sections in 18 departments. AgroSolidaria Bogotá is one of the 128 sections.

understanding of being in the world. ASB emphasizes one of the elements of good living, which is "eating better and guaranteeing the conditions for eating better."

ASB started with 10 families, but as new families became members, distribution and logistics became more complex. The members of ASB decided to establish an association where consumers and producers were connected, intending to guarantee greater participation in the activities of ASB. It was also a solution to obtain funds for maintaining the minimum operation logistics. ASB as *Sembrando Confianza* and *La Canasta* functions as an online market. The consolidation of the association has been a slow process. In 2019 there were 20 associates, of which three were prosumers, and seven were more active than the rest.

These seven people work in different components of ASB, such as operational logistics, communications, and finances. They help with the organization of the offers, communication between producers and consumers, packaging of the food boxes, distribution, and accounting. This takes a significant burden in terms of time, and this effort is not compensated in financial terms. For this reason, the operation scheme is being reconsidered. All the associates have been called upon to assume a greater commitment at ASB. However, reaching agreements has proven difficult. "This has been a slow process. We have not been able to coordinate and understand that a cooperative has to be born from common interests. I think neither the associates nor the consumers are clear about what we want from ASB" (Hernando, Consumer-Agrosolidaria, personal communication, 2019).

The ASB coordinator trust that the solutions will gradually emerge, and he believes in the power of solidarity and social economy. For him, relationships based on affection and solidarity are essential for ASB to thrive, but the truth is that only a few members

participate in the collective activities. Besides, ASB needs to increase its sales in order to maintain the operation scheme and to be able to compensate the people that are more engaged in it. In order to maintain ASB's operation, ASB requires a projected sales volume that is much larger than the actual sales. Right now, they are increasing their campaigns about responsible consumption. ASB's active members want to persuade more people to participate in all the activities that are required for the best functioning and operation of ASB and for creating a real community of *bien vivir*. For the last two years, they have been working with Faircoop-Colombia and Faircoin, organizations that support enterprises and initiatives, which want to change their way they approach their economy. The main objective of Faircoop-Colombia is to "create an innovative glocal economic system from the bottom up in favor of an alternative and post-capitalist model to pave the way for a collective change towards a life in common." (FairCoop, 2020). The active members want a change, but they are still working on reaching the agreements that they need to improve the model of ASB.

7.1.5 The diversity of the AFN's in Bogotá

Among the initiatives presented above, only el *Mercado Campesino* of Guasca has governmental support. This initiative has sought to guarantee a physical and social space for farmers to sell their products, and in some cases to increase their added value. On the other hand, the case of *Sembrando Confianza* is a living example of the interests of international NGOs in generating food security processes, where they promote agroecology through technical advice and environmental education. In the case of *Sembrando Confianza*, they have gone beyond strengthening production and ventured into

food marketing, which is closely aligned with the characteristics of alternative networks. On the other hand, *La Canasta* and ASB are autonomous and civic initiatives inspired especially by consumers who have an interest in conscious and responsible consumption. This interest, in turn, has two ways of seeing it. One way has to do with access to and provision of healthy food. And the other has to do with supporting and protecting small producers through fair trade.

Whatever the origin of the initiatives might be, we can identify how there is a commitment to rethinking the food economy of the Bogotá-Region. One example is the new transaction ways, whether physical or virtual, open spaces for closer relationships between consumers and producers:

"I remember when we entered to ASB, we wanted to acquire healthy food, without chemicals. That was our initial motivation, but then when we learn more about the ASB's project, and we understood the possible synergies that our consumption could have, we started having other motivations to be part of ASB. That is how we delved into issues of solidarity economy, fair trade, and we saw that as consumers, we could have an essential role in rural development." (Hernando, Consumer-Agrosolidaria, personal communication, 2019)

Thus, these types of platforms are examples of other forms of being and doing food distribution, but they also affect the food production and consumption. These AFNs therefore arise as an alternative to meet the food needs of both urban and rural residents of the Bogotá-Region and other associated regions. But ultimately, they also show potential to foster social and political change. The next section develops the latter.

7.2 Propagating transformative actions and political re-existences

"We are too passive. We consume and do not question what we consume, or the origin of what we consume. We chose to buy in ASB because it has a political purpose regarding the transformation of the agri-food economy. ASB is thinking all the time about building different ways to access food. On the one hand, there is an issue that has to do with the autonomy and decentralization of the food system: how can we stop depending on the conventional agri-food system? In the conventional system, we have no voice, no vote. On the contrary, in schemes such as ASB, we have spaces of participation, in which we can decide what we want from our food. Other ways of relating to food, and to the whole economic circuit around it, are generated. On the other hand, as we have become increasingly involved in the dynamics of ASB, we have established new relationships with nature, with producers, with ourselves, with our health. Since we are part of ASB, we have become aware of many connections between what we eat and the places where our food comes from. And with this, we have begun to be environmentally and socially more conscious. Then we started to understand that just by taking responsibility for what we eat, we can have an impact on the lives of ourselves and others. It is a way to do things differently and be part of the change. That is one of the motivations I have to support ASB. [...] I support ASB by my purchases, but above all, by advising them on how to strengthen the business scheme." (Hernando, Consumer-Agrosolidaria, personal communication, 2019)

The last quote from one of ASB consumers illustrates how one of the aspects that characterize alternative networks is the possibility of weaving bridges between the different actors in the food circuit. Said bridges can be direct or indirect. In the case of the *Mercado Campesino* of Guasca, where distribution is direct, it facilitates the establishment of a more humane relationship between producers and consumers, going beyond conventional commercial relationships. One of the consumers of *Mercado Campesino* explains the latter, stating how important it is for her to have direct contact with the farmers.

"I always come to buy at the Mercado Campesino. I like it because I get to know the people who grow my food. Initially, I started to buy at the Mercado because of a health issue. I was suffering from stomachache, and I began to buy at the Mercado to consume food free of agrochemicals. [...] However, after hearing the stories of the farmers that I buy from, I have also started to value their work. So now I have more reasons to buy from them." (Yolanda, Consumer-Mercado Campesino de Guasca, personal communication, 2018)

In non-direct distribution channels, such as the other three experiences presented in the previous section, relationships between producers and consumers get closer as well. This occurs, for example, through the farmers' stories which distributors tell in their newsletters and social networks (Figure 7.1), as well as through the activities and meeting spaces, created for consumers and producers to get to know each other. These relationships are also enhanced through visits to the farms, where the consumers can get to know the places and the ways in which the food they consume is produced. These activities have effects on the education of consumers, making it possible to acknowledge the origin of the food and its traceability. They are important for propagating these agri-food initiatives through face-to-face interaction. Finally, they are also the basis for the construction of certification strategies based on trust.

Some of the consumers interviewed stated that when they started to buy products, they did not take into account the producer's well-being as a priority since the main purchase criterion was their own well-being, health, and food safety. In this regard, the Guasca consumer's quote shows how she initially approached the market aiming to solve a health issue, without interest in the precedence of the food or in farmers' lives. The same is the case of Carolina, an ASB consumer, who when diagnosed with cancer, and began to consume the foods that ASB distributes, looking for a healthier diet that did not jeopardize her well-being. Another case is that of two *Sembrando Confianza* consumers, who wanted to eat healthier as part of their child's education. However, when consumers connect with the agroecological principles of the markets or initiatives where they obtain their food, they often begin to embrace other values associated with agroecological food, such as care for the environment, local development, and fair trade. When consumers start to feel more

attached to the processes, they can begin to feel more committed, and they acquire coresponsibilities, as is the case of Hernando, the consumer of the first quote of this section. Other consumers, such as Carolina (ASB's consumer), realized that behind healthy food, there is a lot of effort, labor, collaboration, and also care. Since then, she promotes ASB and tries to participate in its activities. Now she is learning about urban agriculture and has a small urban garden in her house in Bogotá.

In the beginning, consumers' personal decisions regarding health and self-care are fundamental to building the bridges between consumers, producers, and other actors through AFNs. However, as time passes, these consumers' decisions can become permeated by an interest in supporting the people and the processes behind the healthy foods that they produce. With these new interests, consumers start to become more active within AFNs and to become more aware of the scope of their decisions regarding food. Thus, the act of consuming becomes a political action manifested in a quotidian practice. In this sense, we see how transformation processes in the personal sphere of consumers, can also interact with practical and political spheres of transformation of the food system of the Bogotá-Region. The interaction between the three spheres of transformation is manifested across all the processes, discourses, principles, values and decisions of the AFNs. And all these aspects of the AFNs connect the rural and the urban mainly through the following actions: a) logistic and operational actions; b) communication and education actions; c) mobilization and articulation actions; and finally, d) political advocacy actions. These actions make it possible to understand how, within AFNs, different ways of doing economics are beginning to be woven and therefore become manifestations of transformation of the regional food system. The four necessary actions for building bridges

and links between the different actors involved in an alternative agri-food network are identified below.

7.2.1 Logistic and operational actions

The logistic and operational actions of AFNs' have to do with post-harvesting processes, transportation, administrative processes, service to consumers, communication with producers, and sales among others. All these activities require paid or voluntary work, sales revenues, and the organizational structure conceived by the AFNs' coordinators.

The operation of the initiatives requires diverse forms of labor. In the previous section, we identified that paid personnel can either be paid by the government—as is the case with the *Mercado Campesino*—or by the revenue of selling the food boxes, as is the case with La Canasta. In the case of Sembrando Confianza and ASB, volunteerism is key to keeping operational costs low and prices fair for both producers and consumers. Almost in every case the coordinators are volunteers, with the exception of *Mercado Campesino* where the coordinator is supported by the municipal government. Other types of exchange emerge, such as volunteers who can get discounts on food or even some of the products left over after packing the boxes. However, the initiatives still depend on market transactions concerning the economic transactions between producers, distributors, and consumers. Although the four initiatives depend on sales for their sustainability, they rely on principles of fair trade and solidarity economy in their transactions. One of the ASB members illustrates the latter when she states that even though they operate with traditional market transactions, they tend to have principles of solidarity economy. First, producers of ASB always get the same price that they establish at the beginning of each year. Second,

the sales revenue is distributed equitably between the people that operate ASB. This includes the expectation to share the revenues with the associates in the near future. Third, the economic transaction has other added values. Each economic exchange contributes to solving problems such as the under-valuation of the work of the farmer, the environmental crisis, and the difficulty of food access.

"At ASB we debate about the maximizing tendency of individuals. So, when a consumer or an ASB associate buys food, it is no longer an individual consumer, he becomes a part of a collective in which the members seek a transformation of the food system through collaboration between producers, market promoters and consumers." (Juliana, Consumer-Agosolidaria, personal communication, 2019)

The transport service is also one of the main expenses of the networks. Moreover, it is one of the bottlenecks in the distribution processes. Transportation is fundamental in food supply and distribution circuits, but it is one of the costliest elements in AFNs. That is why another feature of solidarity among AFNs has to do with transport sharing. For example, *Sembrando Confianza* and *La Canasta* share the same transport service. Both initiatives also share the collection site with other initiatives. In other words, these types of solutions allow *Sembrando Confianza* and *La Canasta* to share expenses and to take advantage of economies of scale, to become more efficient. This shared hub is the *Casa Agroecológica*, which serves as pick up center, a strategic place of operation, and a cultural center where consumers and producers meet. For ASB, the houses of two of its associates have become the pick-up places.

These operational and logistical actions have implications in the practical sphere of transformation of the food system. Mainly, the present changes in the economic practices of the AFNs are the manifestation of transformation in the mentioned actions. Drawing on Cameron (2010), AFNs generate economic diversity, manifested in the forms of labor,

market transactions, and the type of economic initiative. Likewise, the economic practices of the AFNs break through the boundaries of the political sphere of transformation of the regional food system, by tearing down the idea of a capitalist food economy. "Capitalism is precisely defined as a form of enterprise in which non-producers (e.g., a proprietor or a board of directors) appropriate and distribute the surplus-labor produced by paid laborers" (Resnick and Wolff 1987 cited by Cameron et al. 2010). The AFNs propose a solidarity and sustainable economy that offers heterogeneity and diversity, by emphasizing the importance of endogenous productive forces including human capacities, local productive resources and the corresponding control of the accumulation and centering of consumption patterns. Changes in the economic practices of AFNs have been accompanied in turn by political and communication processes. Here, counter-powers (economic and political) have been developing, becoming potential to gradually promote transformations in the relations between the countryside and the city. Finally, the will of the people to make these actions work should not be ignored, since personal conviction and the desire to serve and contribute to others is key to making these actions happen. Here again, it is clear that changes in the personal sphere are crucial to trigger changes in the other two spheres.

7.2.2 Communication and education actions

Communication and educative actions throughout the networks and initiatives are essential to attract consumers and other actors that can help support and sustain these alternative forms of distribution and agroecological production. Communication actions mainly take place through social networks, and through face-to-face meetings between consumers, producers, and other actors of the agri-food world. Education actions are

manifested in trainings that the initiatives organize for consumers on healthy food, urban agriculture, environmental education, and healthy cooking. Also, some AFNs provide trainings for their producers so that they can improve their production, post-harvest practices, finances, and even their diets. The trainings are collaborative spaces where practices and knowledge are exchanged. An example of these collaborative meetings is the cooking club promoted by *Sembrando Confianza*, where producers and consumers meet to share, create and cook recipes with the food that comes from the network. Among other activities, there are days when consumers visit producers, where they might be *Mingas* for special planting activities. In those occasions, consumers have the opportunity to get to know the farms and to participate in daily production activities.



Figure 7.3 Farmers from Collective A, have some booklets with pictures in order to illustrate their agroecological stories. (Source: Author)

The purpose behind all these activities is to raise awareness among the members of the initiatives by sharing ideas and experiences, as well as to guarantee the integral development of family farmers. All these actions seek to challenge the dominant ways of knowing the world, in this specific case, influencing and impacting the personal and social world of representations, meanings, and values. The *buen vivir* or *bien vivir* is one of the recurring principles in the communications of the initiatives (see images). The desire to live as a diverse community (because of the diversity of their members) with dignity and full well-being is one of the constant messages of the initiatives' discourse. The *buen vivir* constitutes an implicit critique of the postulates of economic growth and development (put quotes Escobar, and others). The *buen vivir* introduces other themes that are important and also essential to the well-being of the community and members of AFNs, and therefore most worthy of special respect and care: such as nature, territory, peasant work, peasant traditions.

In that sense, the concept of food, within the agroecological networks, goes beyond the physical and material realm of nourishing our bodies. Food becomes a metaphor for *Buen vivir*. Thus, in the initiatives' discourses, food also nourishes lifestyles, feeds connections between people, nourishes soils, reconnects cycles, reconnects the countryside with the city. These AFNs long to be nourished not only by the diversity of actors and the materiality of food, but they also want to be fed by affective relationships. The coordinator of ASB highlights the importance of building affective relationships between all the humans and non-humans within the food networks. It is motivating to know the farmers' stories and their relationships with the non-human world of the Huerta:

"In ASB, we seek to have affective economic relations. We try to encourage foundational principles such as solidarity and sustainability, as well as those of

reciprocity, responsibility, diversity, democracy in access to healthy food. All this with the final objective of building an initiative of solidarity economy, based on community and guided by reciprocity, but at the same time subordinated to the limits imposed by Nature." *Interview to Agrosolidaria's Coordinator, 2018* (see **Figure 7.4**).

In terms of "the respect for nature," the *La Canasta* coordinator elaborates further on this topic. He emphasizes that "at *La Canasta* we talk a lot about the importance of educating consumers so that they understand that agroecological food is alive and therefore, its production requires ecological and contextual conditions that must be respected. We must ensure all the time, economic processes that are respectful of nature and its cycles (See **Figure 7.5**).



Figure 7.4. Instagram picture from ASB, promoting food without agrochemicals

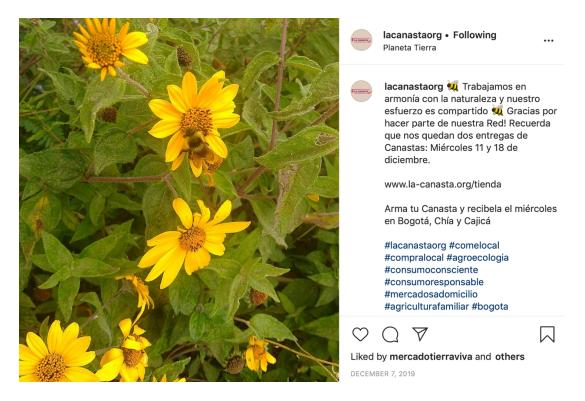


Figure 7.5. Instagram picture of La Canasta, expressing the effort of working with nature.

Therefore, one can see how communication and education have the purpose of strengthening a view of the importance of *buenos convivires* (good co-existences) while opening the door to "build a world where all worlds fit, where all human and non-human beings can live with dignity" (Acosta, 2015; De La Cadena & Blaser, 2018). It is along these lines that alternative food networks contribute to the construction of solidarity and sustainable economies, based on new understandings and critiques of the conventional food systems and the ways farmers live. The latter emphasizes the significance of knowledge production or transformation within the AFNs as a force of change. The aim is to influence and impact on the personal sphere and the realm of social representations on peasant identity and dignity, agroecological principles, ecological values, and territory defense. Communication and education actions, therefore, are critical for transition and

transformation processes which, over time, increase the number of people that support the creation of counter-narratives or counter-discourses, allowing systemic cultural changes to take place (Temper et al., 2018).

7.2.3 Mobilization and articulation actions

AFNs emerge as platforms to rethink the agri-food economy, with political implications in the construction of new markets and the practices of food production. They are an essential bridge for farmers to connect with other networks and with other actors, and to build a fabric in which people can rethink the principles, discourses, and the ways of seeing the world through different forms of enacting food economy. The initiatives presented are also connected to other networks that have broader scopes. Examples of the latter are the networks of networks that are currently operating in the Bogotá-Region and Colombia.

In the previous section, we presented how La Canasta, Sembrando Confianza, and AgroSolidaria are part of the RMABR. This network has played an essential role in rethinking the agri-food system in Bogotá, mainly from an agroecological perspective, with solidarity economy principles and fostering the construction of participatory guarantee systems (PGS). Through education and training, it has sought to strengthen agroecological production; through communication strategies is has sought to educate consumers in conscious consumption, and through the PGS is has sought to build trust between producers and consumers. The RMABR's most advanced process is the articulation of initiatives around the PGS, with work on mobilizing alternative forms of certification from the grassroots.

Networks of networks can expand the movement's technical capacity, as they become more robust platforms, being able to access other types of resources, as is the case of partnerships with international cooperation in solidarity such as the Belgian NGO Solidarité Socialiste. In 2018, in the field of the social and solidarity economy, the RENAF and the NGO ATI, have provided support for 64 local organic markets, through the largescale campaign, "Llevo el Campo Colombiano", which had the ultimate objective of promoting family farming. This campaign also allowed mapping and systematization of information on family farming and agroecology. The Civil Society Organization (CSO) ATI, together with RENAF, have started to analyze the information collected in this campaign. The director of ATI in one of the meetings of the campaign insisted that "to do political advocacy we need data, numbers, key information that allows us to argue why family farming and the markets that sustain it are important." Thus, the alliances generated between agri-food initiatives such as RMABR and RENAF, among others that exist in Colombia, can serve as platforms that allow progress in political actions from civil society and social mobilizations. These alliances may help impact public policies and economic frameworks that support conventional agri-food systems.

Agri-food initiatives, whether they come from producer collectives, solidarity purchase groups, or networks of food networks, also generate alliances with other sectors such as academia and the private sector, allowing different areas of action. For example, the Minuto de Dios University has played a leading role in strengthening agroecology and alternative agri-food systems. This university is one of few that has an academic program of agroecological engineering, which, through its program of extension, supports processes of training for farmers. Also, with the help of one of the professors in this academic

program, the RMABR was born. Notably, the university's support has facilitated the operation of the RMABR. Likewise, the National University and the University of Rosario have extension programs that promote and support the agroecological movement. They have also opened their doors to the agroecological fairs every month, among other actions. Another example is the program with the CESA (College of Higher Studies in Administration), which is supporting the farmers' collective *Collective A* and helping them to create an agroecotourism route. Through the creation of this route, the aim of the collective and the CESA is to strengthen the producers in terms of their social organization and creation of other business lines.

Therefore, networks and alliances, as complex as they may be, have opportunities to create and strengthen platforms to advance social mobilization and political action. It is often thought that such mobilization must impact existing laws, political systems, and economic frameworks on a large scale. These alliances can be understood opportunity to scale-up by strengthening local and regional leadership capacity, generating information and tools for dialogue and negotiation for political advocacy, and strengthening social and political organization under logics of trust. The work of each network is enhanced when they work with other networks, join efforts, and build a critical mass in relation to the solidarity economy, family agriculture, and agroecology.

7.2.4 Actions for political re-existence

In terms of O'Brien & Sygna (2013), the political sphere "represents the systems and structures that define the constraints and possibilities under which practical transformations take place" (O'Brien & Sygna, 2013, p. 6). In general, within the

agricultural and food sector, the political sphere can be conceived through the agricultural network to which the farmer belongs, including the human, institutional-organizational, and non-human (e.g., crops, microbiota, biophysical environment, pollinators) entities that shape a farmer's daily life (Day, 2018). The political sphere, therefore, includes (a) agricultural support institutions (e.g., universities, government agriculture institutions and agencies, local agencies of agriculture, programs of agricultural extension); (b) marketing and commercialization entities (e.g., farmers' markets, solidarity purchase groups, alternative intermediaries), (c) NGOs, agroecological initiatives, collective funds, farmers' collectives, distant and close consumers. Change in the political sphere can thus make barriers lower or higher) to farmers, making a transformative change on their farms, as an urban development policy may affect farmer's land and other resources vital for the practice of agroecology.

In this sense, agroecology-based food initiatives, as presented in this dissertation, show processes of political transformation that entail "more than changes in formal politics" (Leichenko & O'Brien, 2019). In this scenario, the search for alternative production, distribution, and consumption of food is fundamental for the sustainability of the Colombian countryside. The idea of "independent political action" (Jiménez-Reinales, 2019) implies the generation of a commitment in which people understand the urgency of becoming involved and responsible as active citizens in the task of respecting, preserving, and caring for their land and food as a common good. This political independence refers to a civic attitude that seeks not to depend on the State and its institutions for food production and the creation of fair markets. The AFNs in the Bogotá-Region, by bringing together producers, consumers, academics, market coordinators, and NGOs, have generated

alternative spaces that constitute forms of citizen political intervention that go "beyond the traditional logic of power" (Jiménez-Reinales, 2019).

It is then that these experiences, from farmers' collectives and larger scale networks, become a political re-existence, rather than a political resistance. The political re-existence of the agroecological movement has to do with a new understanding of politics. This dissertation has presented how political action manifests itself from the individual act of sowing agroecology as the personal act of conscious and responsible consumption. However, collective efforts gain greater political force when the daily practices of producers, consumers, and coordinators of agri-food initiatives are brought together in nonconventional political work that is based on the ethics of care. These ethics include: a) providing alternatives to the agrarian problems associated with the green revolution model; b) making visible the role of rural communities and their knowledge; c) overcoming inequality and socio-environmental injustice through a dynamic of collective work based on sustainable production and solidarity-based economies; d) consolidating more inclusive and resilient societies through alternative spaces for community and solidarity-based construction; and, e) building community strategies for the sustainable management of ecosystems.

This dissertation does not ignore the importance of other peasant struggles, which are fundamental, like those for the right to land. The point here is to make evident those other political practices that often occur silently in everyday life. Farmers' collectives, as the most extensive agri-food networks, allow the creation and strengthening of community and trust relations (in the case of producer-consumer relationships), decision-making, and the management of daily conflicts. In the case of consumers, one can see how there is a

potential for "connecting the politics of consumption with the practices of being a discerning, choosey consumer [which] embeds altruistic, humanitarian, solidaristic and environmental commitments into the rhythms and routines of everyday life" (Clarke et al. 2007, p. 233 cited by Kneafsey et al., 2008, p. 11). It is then a "radical change" as "people start acting like citizens first and consumers second" (Carolan, 2017, p. 5).

In the case of producers, they become defenders of their territory and their ways of life. Farmers appropriate an idea of sustainability that involves and makes responsible, diverse sectors within the countryside and the city, turning them into actors with an enormous capacity for mobilization and political legitimacy. Finally, other actors, like the promoters of alternative initiatives for distribution, facilitate the political practice through constructing an imaginative infrastructure for cultivating alternative economic subjects and practices (Gibson-Graham, 2003). The latter leads us to think that this cultivation of alternative economic subjects and practices allows the ability to transform ourselves, be different in this world, and more explicitly provides the capacity to establish "a new relation to the economy" (Gibson-Graham, 2003, p. 54), the environment, and others (humans and non-humans). With this principle, the idea is to enrich a political possibility through the cultivation of our capacities to imagine, desire, and practice other ways to be.

7.3 Conclusions

This chapter examined four examples of food initiatives engaged in rethinking the agri-food system. By connecting the actors and processes of agroecological food production, marketing and consumption, the four initiatives rethink both the ways of doing economics and the ways of doing politics. Agri-food initiatives, like the four presented in

this chapter, seek alternatives to rural development, based on a commitment to building coexistence (between humans and non-humans, humans and environment) as an experience rather than a concept. In other words, these initiatives open up possibilities for creating a world where different worlds²² can fit together, where all human and non-human beings can live with dignity. The latter, then, responds to political actions based on the construction of well-being and an ethic of care.

These well-being politics manifest themselves in the narratives of producers and consumers when they talk about the importance of "being well" and "feeling well" through responsible consumption and agroecological practices. On the one hand, as shown in Chapters Three and Four, the agroecological producer is taking care of his health, the health of the land, and the health of the consumers, while also protecting native seeds and the environment, and promoting a dignified life in the rural world. On the other hand, the consumer also takes care of his health, but as he gets involved with the AFNs, he often begins to get involved as a citizen in issues of fair trade and environmental protection. Likewise, AFN promoters promote and manage fair trade through virtual and face-to-face agroecological markets. They concentrate their efforts on weaving links between the rural and the urban and communicating in their speeches and informative actions the importance of those visions and experiences in tune with the praxis of harmonious life and life in fullness.

The participation of the different members of these initiatives is a new form of political action that goes beyond the traditional ways of influencing power. The ultimate goal is not to transform public policy, raise funds from a government program, or establish

²² The worlds to which I refer are the natural system that supports the agrosystem, the cultural world of the peasants, the rural world, and the urban world of the consumers.

alliances with leaders or pressure groups. Instead, it is a matter of strengthening social participation in the search for commitments that make visible the importance of agroecology and the solidarity economy as strategies for overcoming (or at least mitigating) the industrial model and thus improving the living conditions of producers and consumers. The world food economy depends on various forces. It is uncertain whether the critical problems associated with it will be solved, tempered, or what types of new concerns will appear (Clapp, 2016), such as the impacts of climate change or new forms of disease.

All the actors, members of the AFNs, operate behind the forces that shape the world food economy (norms, policies, institutions). Many of these actors are convinced that there are other ways of thinking and building the food systems of the Bogotá-Region and that in their considerations, food ceases to be just a commodity and becomes an element that nurtures new ways of being in this world. Drawing on Pretty (2002), we can say that food should be regarded as a commons, allowing collaborative action and new ways of relationship, trust and understanding between the actors that are involved in the food circuit from production to consumption (Pretty, 2002, p. 117). Food, therefore, becomes a political element within the AFNs, from its material aspect as well as from its symbolic aspect. From its material aspect, the production of agroecological food requires access to the land, to nature, to healthy and well-maintained soils, to favorable climatic conditions. From a symbolic vision, agroecological food contains ancestry, the struggle for native seeds, peasant dignity, the connection with the other.

The AFNs that are emerging as alternatives to meet the food needs of the inhabitants of the Bogotá-Region show potential to lead profound political and social changes. However, each experience, acting independently, has a limit in its capacity to transform,

but together, as in the case of RMABR, and other networks of networks, they may be building an alternative model to address the food problems of the region and the country. In the same way, people in cities and rural environments might be more independent from the commercialization logic of the world food system, to the extent that families, communities and social groups in the city get more involved in changing food dynamics through agroecological production, fair exchange and respect for nature. Thus, AFNs promote not just responsible consumption and support of agroecological forms of farming, but they are also cultivating an idea of self-sustainability that involves and makes various sectors responsible within the city and the countryside.

Likewise, the study showed that personal transformations continue to be crucial to support political actions and influence practical actions that seek strategies and solutions to rethink the food system. The latter responds to what authors such as O'Brien and Sygna (2013) and Gosnell et al. (2019) argue for the understanding transformation from the interactions of the three spheres and the different sustainability outcomes they produce. This chapter shows how agroecology is a paradigm shift that is based not only on a more sustainable practice of doing agriculture but also on rethinking and implementing new forms of well-being based on the diverse paradigm of good living. Furthermore, amid hierarchical and imposed spaces, those who live in the countryside also question and subvert that assigned place. A permanent and sometimes imperceptible movement of rural people, marked by contentious actions, organizational dynamics, and diverse practices, allows us to corroborate their validity as concrete political actors to the extent that from particular and everyday places they are transforming their territories.

Table 7.1. Alternative Food Networks and Initiatives in the Bogotá-Region

		Alternative food (purc	Alternative food (purchase/provisioning) initiatives	
Category	Agrosolidaria Bogotá (ASB)	Sembrande Cenfianza (SC)	Mercado Campesino de Guasca (MCG)	La Canasta (La Canasta)
Self- description	"Consumption Associative Group that we seek to bring consumers and producers in an affective way through food and ecological and solidarity products, taking a first step towards building communities of buen vivic."	"Participatory network of producers, consumers, and institutions working for a food system that is fair, healthy, and respectful of the planet."	Peasant market	"Network of trust formed by different actors of an inclusive, short and conscious agri-food cycle, which begins in the producers and closes in the comensales (consumers)."
Type of initiative (enterprise)	Solidarity Purchase Group, managed by an association of prosumers	Solidarity Purchase Group, managed by an NGO	Farmers' market, Fair Style, managed by the municipality government with farmers' participation	Solidarity Purchase Group, managed by a group of consumers
Initiative Origins	ASB was born as a group of consumers, inhabitants of the neighborhood of Engativa in Bogotá, interested in the democratization of the access to healthy food, and in the creation of buen vivic communities in Bogotá.	SB was born as a program of the NGO Proyectar Sin Fronteras (PSF) with the purpose of distribute the produce of beneficiaries from another project of urban huertas in a marginalized neighborhood in Bogotá	MCG was born as the result of farmers' mobilization, the municipal government as a response opened a market space on Sundays.	La Canasta was born with the interest of three friends in getting access to healthy food and just prices and generate a model of alternative food distribution.
Level of operation	National	Regional	Local	Regional

Aims	Solidarity economy Responsible consumption Strengthen agroecological production Provide just prices for producers and consumers Buen vivic.	Strengthen Organic periurban and urban agriculture Promote human-scale agriculture Local food, reducing food miles Responsible consumption Strengthen farmers' social fabric Create opportunities for the most vulnerable	Promote local farmers Support local agriculture Promote agroecological production Promote local consumption Boost agroecotoutism	Build just relationships between producers and consumers Coherence and traceability of organic and agroecological agriculture Support to producers Educate consumers Agroecology Responsible and conscious consumption Social and solidarity economy Buen Vivie.
Producer- consumer interaction	Subscription membership schemes through on-line platform	Subscription membership schemes through on-line platform Activities as farm walks, cooking clubs, program of being a peasant one day	Direct selling	Subscription membership schemes through on-line platform
Interaction with other actors/ networks	RMABR	RMABR	CorpoGuavio, Local Municipality, Campaña Llevo el campo colombiano	RMABR
Economic transactions	Food sourced directly and distributed by the members of ASB (Home delivery)	Food sourced directly and distributed by the volunteers of SC and PSF (Home delivery and pick up)	Food sourced directly from farmers in the peasant market	Food sourced directly and distributed by La Canasta workers (Home delivery and pick up).

 Waged labor Alternative Paid Labor Unpaid Labor 	Reach a point in balance, they have not yet reached a point of balance where the model is sustainable. Strengthen the distribution model of La Canasta, and then replicate it. More collaborative work with other organizations is required, including other projects of this kind. Require more commitment from consumers.
Waged labor: market logistics coordinator Alternative Paid Labor: income that farmers get from their products Unpaid Labor: participation in committees	Build other networks with other peasant markets in the region and make exchanges. Open up space for other producers in areas of the region that are in other altitudes to diversify market products. Have a more effective communication strategy to attract more consumers from different parts and at the same time, educate them in responsible consumption, and the support of small and medium producers. Strengthen Guassea's local consumers.
Waged labor Alternative Paid Labor: interns Unpaid Labor: volunteers, interns	Expand the network of producers, to include other products, and thus diversify the offer, without generating competition among producers. Involve more consumers in the activities of SC
 Waged labor Alternative Paid Labor Unpaid Labor 	Become a cooperative instead of an association, in which both, consumers and producers, are part of the cooperative Create co-production projects, in which consumers can be more than mere consumers Motivate more the associates to support ASB with organizational and logistic tasks on voluntary basis, or alternative exchanges. Strengthen associates' commitment Lowering transport and logistics costs Strengthen the way the associates are organized
Labor	Aspirations / Challenges

Chapter 8. Conclusions

We live in an interrelated world, in which new crises and challenges demand of us to rethink our relationship with our planet. These crises call for collective awakening and profound transformation, that should include a radical change of our habits, priorities, and ways of being, doing and inhabiting the world. The Covid-19 pandemic has forced us to acknowledge the world's systemic nature, by revealing how human, animal and ecological health are deeply intertwined. Agroecology in the Bogotá-Region of Colombia can be seen as a path to transformative possibility that is showing material and sustainable results through the practice of care.

As a transformative possibility, agroecology shows that multi-scalar and multi-dimensional crises cannot only be tackled as technical and managerial challenges, but also as interconnected phenomena with many socio-cultural, political, economic, and subjective dimensions. Originating in the space of the *huerta*, the study shows that agroecology can become a crucial ally for the consolidation of sustainable rural and agri-food territories in the Bogotá-Region by maintaining and protecting soil fertility, water sources, and the connectivity between ecosystems which guarantee livable conditions for animals, plants, birds and insects. All of these are key to improving the quality life of farmers and strengthening cultures of collaboration based on care and connection with the food production cycle. The three spheres of transformation, seen from an agroecology standpoint, are in continue interaction connecting personal motivations and practice with political action, aiming to protect life in its material and symbolic dimensions.

The adoption of agroecology can be understood as a pathway to address global environmental crises. Its principles are intended to take care of the soil and water, to

generate a more productive and functional biodiversity, and to find a dialogue between the ancestral knowledges of food cultivation with modern agricultural innovations. It is important to point out that re-learning in agroecology is not a nostalgic remembrance of an idealized past, and that it does not ignore that many of the previous human-soil and human-nature relationships were unsustainable and detrimental for the soil and the environment. Rather, the agroecological reconfiguration of human-soil and human-nature relations directly addresses the on-going global environmental breakdown (Puig de la Bellacasa, 2015). In critical moments when transformation is needed, agroecology shows how daily actions of food producers are key for understanding, living, and recognizing human's material and discursive interconnection with the wider environment— human and non-human that impel ethical and political responses.

This dissertation demonstrates that everyday spaces of production, distribution and consumption of food, can become spaces that reinvigorate micro-politics. As suggested by Silvia Rivera Cusicanqui (2018), micro-politics are below the radar of politics and work on small collectives, and their actions allow spaces of freedom (in the case spaces of well-being) to flourish. Rivera Cusicanqui talks about the importance of re-politicizing everyday life, whether in the kitchen or in the *huerta*. The latter, to generate spaces where norms and values of coexistence, redistribution, and collective and individual action are defined (Rivera Cusicanqui, 2018). While there will always be the question of scale, it is nonetheless important to value "the small", and the plural which allows actions and solutions that concern many people, that collectively can have a global dimension. As such, this study shows some possible expressions of transformation towards sustainability through the production of agroecological food in the Bogotá-Region.

This study drew on the three spheres model of transformation, introduced by O'Brien & Sygna (2013), with the purpose to study different agroecological experiences and initiatives. Although the research focuses mainly on the personal sphere of transformation, it is impossible to understand the personal sphere isolated from the practical and political ones. It was also important to put the three spheres of transformation to the test through agroecology, since within its principles it promotes radical change that can be dependent on the cultural, socio-ecological, and political environments. Thus, throughout this dissertation it becomes clear that the three spheres of transformation are intertwined, interact among themselves, and are situated in specific places.

8.1 Why agroecology matters for transformation toward sustainability: chapters overview

In Chapters Four, Five, Six, and Seven, I look at agroecology through the lens of the three spheres of transformation. Chapter Four shows how the motivations for adopting agroecology have more to do with a desire to live well and differently, than with the act of producing food. Therefore, motivations seem to be associated with the emotions and feelings that emerge from the possibility of having a better life through agroecology. We can say that the motivations behind the adoption of agroecology are diverse and that they depend on each farmer's particular experiences. These motivations are usually related to working the land, caring for the environment, and finding the path towards a dignified social life. There are also economic motivations and interests, but these are not solely related with market dynamics. Rather, farmers are taking an active role in responding to

the deterioration of the environment and the soil under their feet, looking for a more sustainable and regenerative ways to produce food. Furthermore, when one tries to connect their stories with their experiences, initiatives, achievements, and challenges it is inevitable to feel that their motivations have a lot to do with a deep commitment to life itself (its own life and that of other humans and non-humans).

This commitment to life seems to emerge from the relationships between farmers, huertas, agroecosystems and the environment. These relationships often take place in territories that must be taken care of to re-exist and persist in time, in order to guarantee the well-being of its inhabitants. This is where the agroecological practice that is contained in the practical sphere, connects with the personal dimension of values and worldviews about what good living means in the Bogotá-Region.

Chapter Five focuses mainly on agroecological practices that begin in the *huerta* and generate transformative processes within the socio-natural communities consisting of farmers, plants, soils, animals, fungi, and microbes. Dignified forms of co-existence emerge from a horizontal dialogue between farmers and other living beings that co-exist in their territories. Simultaneously, through constant practice in the *huerta*, farmers build knowledge and obtain a better understanding of plants, soil, and the interactions between the different components of the agroecosystem. *Huertas* become schools of life. *Huertas* become time-spaces where different temporalities come to play: (a) The knowledge of farmers' parents and grandparents; (b) The need for constant innovation to respond to the day-to-day challenges and contingencies; (c) The collective plans for a better future built with other farmers.

Agroecology is the art of food production in connection with everything; it allows the soil to flourish and remain. The most connected farmers generate a link with sustainability, the restoration of their environments, and agrobiodiversity conservation. Once they see the material results of this connection represented in the productivity of their *huerta* and their personal well-being, they start to internalize the connection, as a value worth preserving and as a motivation for building and strengthening agroecological communities. Here I want to revisit the concept of *allelo(em)pathies*, the empathetic relationships that weave agroecological communities in a new way of co-existence. Through these relationships, agroecological practice becomes transformative and transcends the personal sphere, as farmers adopt worldviews grounded on how they inhabit the Earth.

Chapter Five also shows how farmers, when assuming an agroecological practice, have to take care of different processes despite the urgency for results or their economic reality. For example, farmers have to heal the soil first, before thinking about balancing their agroecosystems or obtaining a profit, since vegetation can only be sustained and nourished by soil. This commitment to life is also connected with the emotion that emerges from the relationships between farmers, huertas, agroecosystems and the environment. This illustrates how an economic and productive activity of food growing takes place within a value framework; that is to say, an agroecological practice that is interwoven with the principles associated with this practice, shaping farmers' worldviews and certain values.

Chapter Six focuses on the collective and communitarian processes of agroecology.

The agroecological collectives become spaces of thought and action that contribute to build alternative proposals for agri-food territories and circuits in Bogotá-Region.

Agroecological collectives allow farmers to generate common visions and perspectives about how to order territories around their ecological particularities, thereby satisfying their inhabitants' needs, and constructing a social and environmental fabric based on reciprocity and solidarity. Through this chapter we identified four collectives of farmers where social experiences of transformation can be found in their personal and collective practices of care. By taking care for themselves, others, and their places, they positively transform their relationship with life, the life of others, and their territories.

Thus, through participation in a collective, the farmers identify that "good living" goes beyond having a lot of money. "Good living" becomes both a discourse and a tangible material way to inhabit the countryside of the Bogotá-Region. Therefore, transformation occurs when farmers, as members of these collectives, assume the commitment to create dignified forms of co-existence. This refers to ways of "living well" in a shared territory and generating favorable conditions so that each being in the territory can enjoy a healthy environment.

Dignified forms of co-existence become visible and show their harmonizing potential in their territories. Therefore, collectives and networks become spaces where, through shared experiences and agroecological practices, non-conventional political action emerges. People are collectively capable of recreating and transforming the institutional incapacity of the State. Drawing on self-reliance, this study shows how people can put aside their expectations about what the State should do for them or provide them with and find new ways in which they can help each other. Farmers and other actors involved in the agroecological movement make possible a configuration of territorial well-being, by promoting societal transformation practices based on the harmonization and dignification

of the relationship between farmers and nature, farmers and the territory, and farmers and the Bogotá-Region through AFNs. Thus, all this re-signify the exercise of politics for life.

Chapter Seven shows how the agroecological approach can go beyond a purely technical perspective for agriculture. The chapter explores the socio-ecological dimensions of rural production and the transformative political role implicit in the dissemination of agroecological practices by AFNs, as an alternative to the conventional agricultural model of the green revolution and the non-sustainable food system that exist in Colombia. The chapter shows how AFNs have played an essential role in the dissemination of agroecology and its political role in the Bogotá-Region.

The AFNs that participated in this study are beginning to transcend the commercial relations of the food supply. They are becoming diverse economic spaces where the mechanisms for the production, distribution and consumption of food, foster alternative relationship between consumers and producers. They are also becoming spaces to transmit knowledge concerning agroecological and environmental issues and responsible consumption. Also, under the umbrella of an ethics of care, AFNs seek to (a) promote among their members values of interdependence, relationality and solidarity, (b) propose other logics of production and consumption - more humane, and, above all, where all those involved retain their dignity; and (c) promote regional development that is not alien to the territorial dynamics, but on the contrary, recognizes the territorial particularities as strengths and intangible added value.

AFNs provide its members, with spaces of participation that focus on making decisions regarding the processes of economic exchange, centered around the construction of objectives and values for the transformation of the agri-food system of the Bogotá-

Region. This transition from a homogenizing agro-industrial system to local and more sustainable agri-food systems is manifested in:

- 1. Deepening the connection with the other and the others.
- Seeking the dignity of each life form that co-exists in and within the agri-food territory of the Bogotá-Region;
- Abandoning unsustainable practices for the preservation of agrotoxic-free ecosystems; and,
- 4. Leaving aside irresponsible consumption and post-consumption habits, replacing them with more conscious and committed ones that are aligned with the generation of healthy environments.

Thus, agroecological initiatives and AFNs in the Bogotá-Region are both individual and collective undertakings that aim at the construction of fairer conditions for humans and non-humans. These initiatives remind us that amid crisis and hopelessness, life always resurfaces.

Therefore, agroecology has a role in articulating social and political processes. Chapters Six and Seven, in particular, explore how acts of food production, distribution, and consumption can be a part of the political sphere of transformation. First, the value of farmers is recognized, through their role in the development of sustainable and dignified agri-food territories. Second, agri-food territories are recovered through agroecological productive practices and the regeneration of its environment. Third, through collectives and networks, farmers and consumers strengthen social ties, rescue a solidarity-based and diverse economy, and promote political actions for well-being mostly through healthy production and responsible consumption habits.

8.2 Agroecological care as a transformative possibility

The High-Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, in its 14th report, stated that:

"A considerable inertia, manifest in public policies, corporate structures, education systems, consumer habits and investment in research, favors the currently dominant model of agriculture and food systems, representing a series of lock-ins. In the dominant model, environmental and social externalities are not properly considered and, therefore, not appropriately factored into decisions influencing the development of food systems." (HLPE, 2019, p. 18)

Agroecology invites us to reverse this model by exalting the knowledge, practices, and principles that dignify and defend life and give new meaning to the human project under guiding principles of cooperation and complementarity with the non-human world.

In the countryside of Bogotá-Region, a new model of agriculture is required that favors the sustainability of the environment while improving the well-being of the communities of producers. Sustainable agriculture, which, as Van der Ploeg et al. (2000) notes, provides opportunities for building a new rural development supported by networks, practices, and regenerative principles. Sustainable agriculture through agroecology is based on the creation of new products or alternative food supply chains. It focuses on building different social configurations with new learning standards, that involve not only technical-productive and economic perspectives but also social, environmental, territorial, and cultural values as well as micro-political actions based on the search for well-being and good living.

Therefore, this study invites to reflect on the ways in which food is produced and land is cultivated, and how these ways can be in harmony with the restoration and

protection of ecosystems, the construction of identities, the protection of the social fabric and collective action, exchanges and markets, and with food habits of consumption that take into account biodiversity and the wellbeing of farmers. Due to its complexity, we need a shared vision that must arise from a horizontal dialogue between the multiple actors involved, both urban and rural. Agroecology can play a leading role in constructing a shared vision for the environmental sustainability of and the food sovereignty of Bogotá.

In this way, we see how transformation towards dignified forms of co-existence in the Bogotá-Region is based on two significant motivations that were identified throughout the study:

- the configuration of an ethic of care, through agroecological practices, solidarity economies, conscious and responsible consumption; and
- 2. the desire for lasting well-being, looking for opportunities and possibilities to inhabit a territory that provides a healthy environment that sustains diverse manifestations of life.

Edgar Morin, a French philosopher, would say that to live truly is to live with understanding, solidarity, and compassion, without being exploited, insulted, or despised (Hessel & Morin, 2012; Morin, 2006). In other words, the idea of connection and coexistence recognizes our relationship with all beings, based on the principles of cooperation, co-responsibility, cohabitation, and complementarity. This idea of joint construction allows transformation, changing the conditions that are not so favorable within territories and environments.

This idea of connection and co-existence based on mutual care has implications for the understanding of "individual and collective capacities to deliberately transform systems and structures in a manner that is both ethical and sustainable" (O'Brien, 2012, p. 667). In that sense, this understanding emerged throughout the journey from the *huerta* to the heart of each actor that is a member of the agroecological food networks in the Bogotá-Region. Overall, the findings of this study suggest that:

- 1. The adoption of agroecology as a transformational possibility can be initiated by different motivations (external and internal), but the interest of having a good living is one of the main motivations for both farmers and consumers to adopt agroecology. This motivation has a strong subjective component and is associated with the change of values and mindsets, allowing to introduce new ways of relating and knowing with life as well as new value systems (Lam et al., 2020)
- 2. Agroecological practices are labor-intensive, require time, and a strong commitment with an ethic of care. Thus, agroecological practices also shape farmers' values and mindsets, and this changing of values and mindsets are key to think about the fertile ground of transformation, particularly when practices are shared and spread. That is why collectivity allow to build communities of practice and collaboration promoting transformation, and this will stabilize the existence of processes of transformation through agroecology.
- 3. A range of social, personal, environmental, and territorial factors can influence the continuity of agroecological processes, but overall, collectivities and networks are fundamental to guarantee the existence of agroecology and to build alliances to foster transformative change (Lam et al., 2020). Agroecological collectivities are platforms for social learning that enable the

construction of particular collective identities and engage in political action towards the protection of life and the well-being of farmers, consumers, and the more-than-humans that are part of the agroecological networks.

4. Agroecological networks and other AFNs support the amplification of agroecology. Also, they are a means for sharing values, food, principles, and political engagement.

In terms of the personal, practical, and political spheres of transformation, across the different agroecology elements, the three spheres interact and are constituted between them. Within the practical sphere of transformation, we have the decisions of farmers, communities, consumers and other actors to adopt alternative practices of growing, distributing and consuming food. Also practices that foster collective action towards improving the decision-making processes. It is also noteworthy that the practical sphere is influenced by and influences the personal sphere of agroecology. The transition towards agroecology happens at the farm level when farmers' beliefs and worldviews allow farmers to consider more-than-productive and more-than-economic narratives about the purposes for their *huertas* and farms. Also, within AFNs, consumers' beliefs and worldviews are pivotal to build narratives and practices of transformation towards a more sustainable food system. Both practical and personal spheres interact allow farmers, consumers, markets promoters to increase their power to transform through the join of forces activating the political potential of individual and collective action towards more sustainable dignified ways of life.

However, it is important to note that the transformation heuristic model of the three spheres require to include scale, or models of amplifications. Through this study we can

conclude that transformation can be complex, non-linear, context-specific, and a placebased process.

8.3 Challenges for agroecology and transformation

This study explores experiences that have lasted over time and have consolidated thanks to enabling conditions such as land tenure, the geopolitical situation, farmers' will, and commitment. However, there are still barriers, and some conditions are required to broaden the scope of agroecology. The pressures faced by farmers are diverse and multidimensional. This research identifies particularly barriers in the political sphere. First, Colombia still prioritizes extractive and industrial agriculture based on monocultures, also Colombian regulations on agriculture promote the use of transgenic seeds, the imposition of seed certification rules, that is seen by many as the "privatization" of seeds and as a way to discourage traditional and local peasant agricultural practices. Second, Colombia's free trade agreements have had negative effects on small-scale farmers. Third, there is still a persistent concentration of land ownership that is accentuated by land grabbing and dispossession practices.

Widespread agroecological production would require of minimum conditions and must be based on structural aspects that correspond to the political sphere of transformation, such as a public policy, legal, and institutional frameworks that favor family and peasant agricultural production and protect peasant territories, forms of production, and livelihoods that care about biological and cultural diversity. For instance, agroecological deployment in territorial contexts should go beyond farms, to incorporate the protection of the biodiversity associated with the production and serving as a support

for fundamental ecological processes. Also, access to land would give farmers the option to live more dignified lives in the countryside. Additionally, the transformation of the political and institutional frameworks could guarantee farmers' and peasants' fundamental rights, cultural identity, and consolidation as political subjects with broader participation on the issues that affect their lives.

Finally, there are also conditions within the personal and practical spheres that would help to spread agroecology. This would be the case of a constant dialogue of knowledge that respects traditional and local knowledge and interacts with scientific knowledge focused on sustainability. Also, a pivotal point for agroecology and solidarity economies would be the profound transformation of consumption patterns and economic models that privilege products with higher ecological value and generate a deep footprint in the peasant livelihoods and rural territories that sustain life in the cities. Hence, the political and personal spheres interact complexly, and to spread agroecology, interventions are needed across the spheres, e.g., effective policy instruments for agroecology, incentives, and support to local markets and solidarity economies, as well as education on responsible consumption.

8.4 A pathway of hope

Despite there are many challenges that need to be tackled before thinking about a broader propagation of agroecology, I believe that the examples presented in this study, while not perfect, are consolidated first steps that show the way to other possible worlds. There are spores of hope for sowing transformation in the rural territories of Colombia, where dignity, good living, ethics of care, connection, and dignified co-existence are the

means to improve the conditions of rural being and doing. On the other hand, it is relevant to assume that a policy focused on well-being requires us to abandon paradigms that are threatening life on earth (Hessel & Morin, 2012). Agroecology is the art of cultivating in connection with everything; it allows the land and plants to flourish and thrive. That is why it is urgent to call for a *sentipensar* (thinking-feeling) with the Earth (Escobar, 2014). It is not enough to feel the pain and nostalgia of the split. There is an urgent need for reconciliation, the creation of resistance and re-existence (Maldonado, 2017).

8.5 Why the local matters?

Since this study focuses on small-scale experiences of transformation through agroecology at the local level, it is logical to wonder about the scalability and possible impacts of these experiences. Gibson–Graham (2003) state that the local matters in the way local examples come up with new thoughts on how to inhabit and live in this world, and help us recognize plausible pathways to think about plausible political and economic transitions, in a world that is conceived by multiple sites, practices and knowledges. The examples presented in this study open up a new world of political and economic possibilities for the global food system, which means to recover "the local as a site of significant practices that have the potential to upset the 'capitalocentric discourse of globalization" (Marston et al., 2005, p. 26).

In Latin America and Colombia, agro-industrial systems co-exist with movements that stand up for fair and sustainable food systems. Local and micro-political action focused on agroecology, and sustainable agriculture, food sovereignty, food justice, urban agriculture, local food policy, solidarity economies are expanding. This study compiles

transformative narratives that Colombia, Latin America, and the world need. Researchers could become experts that open possibilities and recognize differences (Gibson-Graham, 2003), by being able to develop projects that engage with transformative practices and processes, looking to undermine the universal in order to bring to the table the pluralization of more local and sustainable food systems.

This research adds to the body of knowledge of agroecological and food alternative processes in Colombia and Latin America, that require of more significant documentation. I believe that research such as this one, shows the horizons of social and political possibility for creating an agri-food system that refers to a more economic, political, ethical, and ecological system of food production, distribution, and consumption, that is based on principles that reaffirm food sovereignty and environmental sustainability. In this framework, it is critical to consider the plurality of experiences and how they can fit in a world of many worlds.

8.6 Contribution to literature

By trying to better understand the interactions between agroecological production and the commercialization of products under schemes of solidarity economy, responsible consumption and just markets in Bogota-Region, this study aims to contribute to the literatures of agroecology, diverse economies and deliberate transformation.

8.6.1 Agroecology as a transformative paradigm

As science, practice, and public policy, agriculture has been one of the most significant drivers of homogenization in history. And an homogeneous and homogenizing

agriculture without context has brought us environmental problems, habitat destruction, irreversible changes in the nitrogen and phosphorus cycles, global warming, and multiple social crises.

It is in this sense that the conceptual contributions of agroecology allow us to think different about agriculture. This study aims to contribute to better understanding the transformative role of agroecology, within the frame of the three spheres of deliberate transformation. Through the stories of the producers telling their experiences of growing their *huertas*, this study identifies that agroecology has become a practice that aims to create good living for producers, distributors and consumers. By focusing on the personal sphere of transformation, this study contributes to show how agroecological practices are associated with a constant exercise of recreating life within an ethical system of values, capable of inspiring a "policy for life and not for death," as one of the producers mentioned in an interview (Julio - Subachoque, personal communication, 2018).

Additionally, while much of the literature on agroecology focuses on the biophysical, technical, social, and political aspects of agroecology at the farm, few scholars explore agroecology from the perspective of the food supply chain (Furman et al., 2013; Lim-Camacho et al., 2014, 2016). Thus, this study focuses on the entire trajectory of agroecological food, from its production at the farm to the consumer's table, and the networks and principles that promote alternative food supply chains. It is in this sense, that this study contributes to connect the literature on agroecology with that of diverse economies and alternative food networks.

8.6.2 Diverse economies and solidarity economies in Latin America

The diverse economies literature was useful to explore the different economic practices within agroecology from a framework that posits that many of the interactions in our society are not capital or market-based. Instead, they may occur, for example, due to a honest concern for our fellow human beings or the environment (Gibson-Graham, 2006). This study also relies on the concept of "matters of care". Puig de la Bellacasa (2011, 2017) notes that care is "a signifier of necessary yet mostly dismissed labors of everyday maintenance of life"

Through this research, it was possible to understand that agroecological processes and their associated economic activities are intertwined as an entanglement constituted by capitalist and non-capitalist elements. This entanglement also includes a range of productive and reproductive activities, transactions, and forms of remunerating (or not) work. It also includes different relationships, emotions, values, and ontologies that cannot be easily separated and continuously negotiated. This multiplicity allows us to recognize the existence of "a thin veneer of capitalist economic activity underlain by a thick mesh of traditional practices and relationships of gifting, sharing, borrowing, volunteering, and reciprocated individual and collective work." (Gibson-Graham, 2005, p. 16).

This study recognizes that solidarity economies are not separated from market economies, rather they are inseparable and co-constitute particular, changing and negotiated economic articulations through constant processes of adjustment and creativity. Thus, this research makes an effort to present a more detailed and plural understanding of the alternative food economies of the Bogotá-Region. Particularly, I would like to highlight how the essence of solidarity economies in the Bogotá-Region are collective and situated

in a common territory, in which economic diversity was also expressed in how the exercise of conservation and recovery of the commons takes shape. The commons identified in this study were: the agri-food territory and the ecosystem such as the páramo characteristic of the Bogotá-Region, the native seeds, and the knowledge and practices associated with a peasant heritage.

8.6.3 The three spheres of transformation

This study contributes to work on deliberate transformation by focusing on agroecology and solidarity economies as transformative paradigms in Latin America. By bringing the three spheres approach to an understanding of the agroecological movement in the Bogotá-Region, this research highlights how the (personal sphere) narratives about agroecology intersect with the material and symbolic influence of agricultural practices based on care and connection that determine alternative pathways to live in the countryside.

The approach of the three spheres of transformation provides a new perspective to understand transformative processes within agroecology and local food systems, especially by focusing on how farmers' and other actors' motivations, worldviews, and values influence the practices of food production and consumption in the agri-food territories of the Bogotá-Region. The latter gave a new perspective, more personal, of agroecology as a transformative paradigm. However, it is noteworthy that we cannot see the spheres' influence within each of them from a linear and causal perspective. The three spheres interact complexly, and they shape each other. It becomes clear that transformation in one sphere cannot happen without changes in the other two.

In turn, this study has contributed to the approach of the three spheres. (a) The three spheres of transformation respond to a heuristic model. However, in this project, the stories of the *huertas* and their relationship with the AFN in the Bogotá-Region allow us to understand the three spheres in empirical examples, allowing us to build narratives of transformation situated in specific places. (b) Regarding the pluralization of transformation (Blythe et al., 2018), this study has brought plurality to the environmental sustainability discourse, exploring situated processes of transformation, making space for different options that can guide the practice of transformation. (c) This research project also has contributed to the understanding that transformative processes are political, and this politicization occurs at different scales. In this study, micropolitical actions of transformation occur in the personal and collective dimensions, allowing new relations with others' existence and co-existence practices.

8.7 Recommendations for future research

This study aims to answer three main research questions: (a) Why do farmers adopt agroecology and what motivates them to undertake agroecological projects? (b) What are the practical enabling factors and farmers' actions that support and facilitate agroecology, and to what extent agroecological practices foster transformation in the Bogotá-Region? And (c) How do farmers' and other actors' motivations and practices around agroecology contribute to wider political change?

In order to answer these questions, I went from the narratives of transformation that began in the agroecological *huertas*, to the transformative narratives of consumers and other actors of the AFNs that participated in this study. I argue about the importance of

micropolitics of everyday that become political spaces outside the traditional political structures and systems, allowing the emergence of transformation in the local and personal spheres. However, regarding the urgency of transformation across scales, it is necessary to study the possibility of spreading agroecology and solidarity economies as alternative pathways to tackle the environmental, social, and health problems generated by the conventional food system.

Thus, I consider that the third question of this research can be further studied. Also, there is room for many other questions about the impact of agroecology and solidarity economies could have in Colombia's public policies (and in those of other countries): what has been achieved and what is needed? Public policies can find new frameworks for action, drawing on initiatives that have been promoted as alternatives while committed to the social, economic, and environmental dimensions of food production, distribution, and consumption (Jarosz, 2008).

These alternative food initiatives redistribute value in opposition to the conventional and traditional food systems, reinstall trust between producers and consumers, and articulate new forms of political association and governance for the market (Jarosz, 2008).

The significant challenge to scale up alternative food initiatives aims at providing the people with the opportunity to interact with healthy, sustainable, and equitable food systems. How do we move forward in implementing the principles of caring for life and connection to ensure a dignified co-existence within food systems? It is a question that requires reflection from the social, political, and academic sectors committed to search for

new ways of action to guarantee food sovereignty and the sustainability for the planet, by promoting a food system that is based on the protection of life.

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Interviews

Interview to Adolfo, Collective B, Subachoque, 2018

Interview to Agrosolidaria's Coordinator, 2018

Interview to Alberto, Collective B, Subachoque, 2017

Interview to Alejandro, Collective B, Subachoque, 2018

Interview to Alicia, non-affiliation, Guasca, 2018

Interview to Ana, Collective C, Sumapaz, 2017

Interview to Armando, Collective B, Subachoque, 2017

Interview to Arnulfo, Collective B, Subachoque, 2017

Interview to Aurelia, Collective A, Guasca, 2018

Interview to Carola, Collective D, Guasca, 2018

Interview to Constanza, Collective B, Subachoque, 2017

Interview to Cristina, Collective D, Guasca, 2017

Interview to David, Collective A, Guasca, 2017

Interview to Dora, Collective C, Sumapaz, 2017

Interview to Eliana, Collective A, Guasca, 2017

Interview to Evangelina, Collective C, Sumapaz, 2017

Interview to Hernando, Consumer of Agrosolidaria, Bogotá, 2019

Interview to Juliana, Consumer of Agrosolidaria, Bogotá, 2019

Interview to Julio, Collective B, Subachoque, 2017

Interview to Julio, Collective B, Subachoque, 2018

Interview to La Canasta's Coordinator, 2018

Interview to Lina, Consumer of Mercado Campesino de Guasca, Guasca, 2018

Interview to Lucerito, Collective A, Guasca, 2017

Interview to Mauricio, Collective B, Subachoque, 2017

Interview to Miguel, Collective A, Guasca, 2018

Interview to Nubia, Collective C, Sumapaz, 2017

Interview to Omar, Collective A, Guasca, 2017

Interview to Paola, Consumer of Sembrando Confianza, Bogotá, 2018

Interview to Pilar, Collective B, Subachoque, 2018

Interview to Sandra, Consumer of La Canasta, 2017

Interview to Sebastián, Collective B, Subachoque, 2017

Interview to the Sembrando Confianza's Coordinator, Bogotá, 2017

Interview to Yolanda, Consumer of Mercado Campesino Guasca, Guasca, 2018

Appendix A: IRB Research Approval

RUTGERS

Office of Research and Regulatory Affairs Arts and Sciences IRB Rutgers, The State University of New Jersey 335 George Street / Liberty Plaza / Suite 3200 New Brunswick, NJ 08901

orra.rutgers.edu/artsci

732-235-9806

July 29, 2016

Ana-Maria Mahecha-Groot Geography 54 Joyce Kilmer Drive Piscataway NJ 08854

P.I. Name: Mahecha-Groot Protocol #: E17-021

Dear Ana-Maria Mahecha-Groot:

This project identified below has been approved for exemption under one of the six categories noted in 45 CFR 46, and as noted below:

Protocol Title: "Climate Adaptation and Different Economic Agri-Food Futures in the Capital-Region of Bogota"

Exemption Date:

7/19/2016

Exempt Category:

This exemption is based on the following assumptions:

- This Approval The research will be conducted according to the most recent version of the protocol that was submitted.
- Reporting -- ORSP must be immediately informed of any injuries to subjects that occur and/or problems that arise, in the course of your research;
- . Modifications -- Any proposed changes MUST be submitted to the IRB as an amendment for review and approval prior to implementation;
- Consent Form (s) Each person who signs a consent document will be given a copy of that document, if you are using such documents in your research. The Principal Investigator must retain all signed documents for at least three years after the conclusion of the research;

Additional Notes:

HSCP Certification will no longer be accepted after 7/1/15 (including for anyone previously grandfathered). CITI becomes effective on July 1, 2015 for all Rutgers faculty/staff/students engaged in human subject research.

Failure to comply with these conditions will result in withdrawal of this approval.

Please note that the IRB has the authority to observe, or have a third party observe, the consent process or the research itself. The Federal-wide Assurance (FWA) number for the Rutgers University IRB is FWA00003913; this number may be requested on funding applications or by collaborators.

Sincerely yours,

Acting For--

Mulelle Wetterne Beverly Tepper, Ph.D.

Professor, Department of Food Science

IRB Chair, Arts and Sciences Institutional Review Board

Rutgers, The State University of New Jersey

cc: Dr. Robin Leichenko (MW:hb)

Appendix B: Interview Consent Form with Audio/Visual Recording (English)

Interview Consent Form with Audio/Visual Recording

I am a PhD Student in the department of Geography at Rutgers University, and I am conducting interviews for my dissertation research. I am studying the relation between climate change and economic change in the Capital – Region of Bogotá and Cundinamarca (Colombia – South America), particularly in the corridor of Chingaza-Sumapáz-Guerrero. Through this interview the study will trace perceptions and motivations of the different actors (farmers, traders, NGOs) that are behind the participation in agri-food networks with fair trade and agroecological intentions.

During this study, I will be talking to approximately 55 individuals who are either involved in agroecological projects onfarm in the buffer area of the corridor, and/or individuals that are involved in food networks, which products come from the same corridor. Thus, you will be asked to answer some questions regarding your perceptions and experiences in producing, selling or buying agroecological products and their relationship with climate change. This interview was designed to be approximately an hour in length. However, please feel free to expand on the topic or talk about related ideas. Also, if there are any questions you would rather not answer or that you do not feel comfortable answering, please say so and we will stop the interview or move on to the next question, whichever you prefer.

This research is confidential. Confidential means that the research records will include some information about you and this information will be stored in such a manner that some linkage between your identity and the response in the research exists. Some of the information collected about you may include your gender, occupation, or town of residence. Please note that I will keep this information confidential by saving the research data in a password protected file in a secure location. The data gathered in this study are confidential with respect to your personal identity unless you specify otherwise.

The research team and the Institutional Review Board at Rutgers University are the only parties that will be allowed to see the data, except as may be required by law. If a report of this study is published, or the results are presented at a professional conference, only group results will be stated.

You are aware that your participation in this interview is voluntary. You understand the intent and purpose of this research. If, for any reason, at any time, you wish to stop the interview, you may do so without having to give an explanation.

There are no foreseeable risks to participating in this study. Expected benefits include gaining a better understanding of perceived and expected effects of climate and economic change in the buffer area of the conservation corridor Chingaza – Sumapaz – Guerrero in the Capital Region of Bogotá and Cundinamarca as well as disseminating climate change adaptation and economic resilience strategies. However, you may receive no direct benefit from taking part in this study.

This interview will be tape recorded. The recording(s) will be used for analysis as part of dissertation research. If you say anything that you believe at a later point may be hurtful and/or damage your reputation, then you can ask to delete such information OR you can ask that certain text to be removed from the transcripts. The recording(s) will be stored in a password protected file on an external hard drive and linked with a code to your identity. All recordings and study data will be destroyed upon publication of study results. Per Federal Regulations data must be saved for at least three years.

If you have any questions about the study or study procedures, you may contact myself at:

Ana Maria Mahecha Groot Ph.D. Student, Department of Geography Lucy Stone Hall 54 Joyce Kilmer Ave Piscataway, NJ 08854 Phone: (347) 633-7701

Email: ana.mahecha@rutgers.edu

You may also contact my faculty advisor Professor Robin Leichenko at (848) 445-4106 or robin.leichenko@rutgers.edu

If you have any questions about your rights as a research participant, you can contact the Institutional Review Board at Rutgers (which is a committee that reviews research studies in order to protect research participants).

Institutional Review Board Rutgers University, the State University of New Jersey Liberty Plaza / Suite 3200 335 George Street, 3rd Floor New Brunswick, NJ 08901

Phone: 732-235-9806

Email: humansubjects@orsp.rutgers.edu

You will be offered a copy of this consent form that you may keep for your own reference.

Once you have read the above form and, with the understanding that you can withdraw at any time and for whatever reason, you need to let me know your decision to participate in today's interview.

Your signature on this form grants the investigator named above permission to record you as described above during participation in the above-referenced study. The investigator will not use the recording(s) for any other reason than that/those stated in the consent form without your written permission.

Subject (Print)	
Subject Signature	Date
Principal Investigator Signature	Date

By participating in the above stated procedures, then you agree to participation in this study.

Appendix C: Interview Consent Form with Audio/Visual Recording (Spanish)

Formato de consentimiento informado para entrevista grabada en audio o video

Yo soy estudiante de doctorado del departamento de Geografía de la Universidad de Rutgers, y estoy realizando entrevistas para mi tesis doctoral. Estoy estudiando la relación entre los cambios climático y económicos en la Capital - Región de Bogotá y Cundinamarca (Colombia - América del Sur), particularmente en el corredor de los páramos Chingaza-Sumapáz-Guerrero. A través de esta entrevista quiero explorar las percepciones y motivaciones de los diferentes actores (agricultores, comerciantes, intermediarios, ONG) alrededor de su participación en redes agroalimentarias basadas en comercio justo y principios agroecológicos.

Durante este estudio, voy a estar entrevistando aproximadamente 55 personas que están involucradas en proyectos agroecológicos en la zona de amortiguamiento del corredor, y/o personas que hacen parte de las redes agroalimentarias, cuyos productos provienen del mismo corredor. Por lo tanto, le voy a pedir que conteste algunas preguntas acerca de sus percepciones y experiencias en la producción, la comercialización o la compra de productos agroecológicos y su relación con el cambio climático. Esta entrevista fue diseñada para que dure una hora aproximadamente. Sin embargo, no dude en ampliar alguno de los temas o ideas si Usted lo cree necesario. Igualmente, si hay alguna pregunta que prefiere no contestar o que usted no se siente cómodo respondiendo, por favor hágamelo saber, detendremos la entrevista o pasaremos a la siguiente pregunta, lo que usted prefiera.

Esta investigación es confidencial, lo cual significa que los registros de la investigación incluirán alguna información acerca de usted y esta información será almacenada de tal manera que exista algún vínculo entre su identidad y la respuesta en la investigación. Parte de la información recopilada sobre usted puede incluir su género, ocupación, o ciudad de residencia. Tenga en cuenta que voy a mantener esta información de manera confidencial guardando los datos de la investigación en un archivo protegido con contraseña en un lugar seguro. Los datos recogidos en este estudio son confidenciales con respecto a su identidad personal, a menos que se especifique lo contrario.

El equipo de investigación y el Consejo de Revisión Institucional de la Universidad de Rutgers son las únicas partes que están autorizadas para ver los datos, con excepción a otras personas que por ley se les permita. Si se publica un informe de este estudio, o los resultados se presentan en una conferencia profesional, sólo se presentarán los resultados en grupo.

Usted es consciente que su participación en esta entrevista es voluntaria. Usted entiende la intención y el propósito de esta investigación. Si por cualquier motivo, en cualquier momento desea detener la entrevista, puede hacerlo sin tener que dar una explicación.

No hay riesgos previsibles para participar en este estudio. Los beneficios previstos incluyen la obtención de una mejor comprensión de los efectos percibidos y esperados de los cambios climático y económico de la zona de amortiguación del corredor de conservación Chingaza - Sumapaz - Guerrero en la Región Capital de Bogotá y Cundinamarca, así como las estrategias de difusión de adaptación al cambio climático y la capacidad de recuperación económica. Sin embargo, no va a recibir ningún beneficio directo de la participación en este estudio.

Esta entrevista será grabada. La grabación se utilizará para el análisis de la investigación parte de la disertación doctoral. Si Usted dice algo que usted cree que en un momento posterior puede ser dañino y/o dañar su reputación, entonces Usted puede solicitar la eliminación de esta información o puede pedir que un texto determinado sea removido de las transcripciones. La grabación se almacenará en un archivo protegido con contraseña en un disco duro externo y vinculado con un código para su identidad. Todas las grabaciones y datos del estudio serán destruidos una vez se publiquen los resultados del estudio. Por regulaciones federales de los Estados Unidos, los datos deben ser guardados por un mínimo de tres años.

Si usted tiene alguna pregunta sobre los procedimientos del estudio o el estudio, puede ponerse en contacto conmigo:

Ana María Groot Mahecha Estudiante Doctoral, Departamento de Geografía Lucy Stone Hall 54 Joyce Kilmer Ave Piscataway, NJ 08854 Teléfono: (347) 633-7701

E-mail: ana.mahecha@rutgers.edu

También puede ponerse en contacto con mi asesor de facultad la profesora Robin Leichenko en el número (848) 445-4106 o robin.leichenko@rutgers.edu

Si usted tiene alguna pregunta sobre sus derechos como participante en la investigación, puede ponerse en contacto con el Consejo de Revisión Institucional de la Universidad de Rutgers (que es un comité que revisa los estudios de investigación con el fin de proteger a los participantes de la investigación).

Institutional Review Board Rutgers University, the State University of New Jersey Liberty Plaza / Suite 3200 335 George Street, 3rd Floor New Brunswick, NJ 08901 Teléfono: 732-235-9806

E-mail: humansubjects@orsp.rutgers.edu

Se le ofrecerá una copia de este formulario de consentimiento para que Usted la guarde para su propia referencia.

Una vez que haya leído el formulario de arriba y, entendiendo que se puede retirar en cualquier momento y por cualquier motivo, es necesario que me haga saber su decisión de participar en la entrevista de hoy.

Su firma en este formulario otorga el investigador nombrado arriba permiso para grabar como se describió anteriormente durante la participación en el estudio anteriormente mencionado. El investigador no va a usar la grabación por cualquier otra razón a lo indicado en este consentimiento informado y sin su permiso por escrito.

Nombre Persona Entrevistada	
Nombre Persona Entrevistada	Fecha
Investigador Principal Firma	Fecha

Appendix D: Oral Consent Form (English)

Oral Consent Form

I am a PhD Student in the department of Geography at Rutgers University, and I am conducting interviews for my dissertation research. I am studying the relation between climate change and economic change in the Capital – Region of Bogotá and Cundinamarca (Colombia – South America). Through this interview the study will trace perceptions and motivations of the different actors (farmers, traders, NGOs) that are behind the participation in agri-food networks with fair trade and agroecological intentions.

During this study, I will be talking to approximately 55 individuals who are either involved in agroecological projects onfarm in the buffer area of the corridor and/or individuals that are involved in food networks, which products come from the same corridor. Thus, you will be asked to answer some questions regarding your perceptions and experiences in producing, selling or buying agroecological products and their relationship with climate change. This interview was designed to be approximately an hour in length. However, please feel free to expand on the topic or talk about related ideas. Also, if there are any questions you would rather not answer or that you do not feel comfortable answering, please say so and we will stop the interview or move on to the next question, whichever you prefer.

There are no foreseeable risks to participating in this study. Expected benefits include gaining a better understanding of perceived and expected effects of climate and economic change in the buffer area of the conservation corridor Chingaza – Sumapaz – Guerrero in the Capital Region of Bogotá and Cundinamarca as well as disseminating climate change adaptation and economic resilience strategies. However, you may receive no direct benefit from taking part in this study.

Some of the information collected about you may include your gender, occupation, or town of residence. I will keep this information confidential by saving the research data in a password protected file in a secure location. The data gathered in this study are confidential with respect to your personal identity unless you specify otherwise. If a report of this study is published, or the results are presented at a professional conference, only group results and/or anonymous quotes will be stated.

If you have any questions about the study or study procedures, you may contact myself by phone at +1-347-633-7701 (US) - +57-320-302-7920 or by email at ana.mahecha@rutgers.edu. You may also contact my faculty advisor, Professor Robin Leichenko at +1-848-445-4106 or robin.leichenko@rutgers.edu.

If you have any questions about your rights as a research participant, you can contact the Institutional Review Board at Rutgers (which is a committee that reviews research studies in order to protect research participants).

Institutional Review Board Rutgers University, the State University of New Jersey Liberty Plaza / Suite 3200 335 George Street, 3rd Floor New Brunswick, NJ 08901 Phone: 732-235-9806

Email: humansubjects@orsp.rutgers.edu

Do you agree to participate in this study?

Appendix E: Oral Consent Form (Spanish)

Consentimiento Informado Oral

Yo soy estudiante de doctorado del departamento de Geografía de la Universidad de Rutgers, y estoy realizando entrevistas para mi tesis doctoral. Estoy estudiando la relación entre los cambios climático y económicos en la Capital - Región de Bogotá y Cundinamarca (Colombia - América del Sur), particularmente en el corredor de los páramos Chingaza-Sumapáz-Guerrero. A través de esta entrevista quiero explorar las percepciones y motivaciones de los diferentes actores (agricultores, comerciantes, intermediarios, ONG) alrededor de su participación en redes agroalimentarias basadas en comercio justo y principios agroecológicos.

Durante este estudio, voy a estar entrevistando aproximadamente 55 personas que están involucradas en proyectos agroecológicos en la zona de amortiguamiento del corredor, y/o personas que hacen parte de las redes agroalimentarias, cuyos productos provienen del mismo corredor. Por lo tanto, le voy a pedir que conteste algunas preguntas acerca de sus percepciones y experiencias en la producción, la comercialización o la compra de productos agroecológicos y su relación con el cambio climático. Esta entrevista fue diseñada para que dure una hora aproximadamente. Sin embargo, no dude en ampliar alguno de los temas o ideas si Usted lo cree necesario. Igualmente, si hay alguna pregunta que prefiere no contestar o que usted no se siente cómodo respondiendo, por favor hágamelo saber, detendremos la entrevista o pasaremos a la siguiente pregunta, lo que usted prefiera.

No hay riesgos previsibles para participar en este estudio. Los beneficios previstos incluyen la obtención de una mejor comprensión de los efectos percibidos y esperados de los cambios climático y económico de la zona de amortiguación del corredor de conservación Chingaza - Sumapaz - Guerrero en la Región Capital de Bogotá y Cundinamarca, así como las estrategias de difusión de adaptación al cambio climático y la capacidad de recuperación económica. Sin embargo, no va a recibir ningún beneficio directo de la participación en este estudio.

Parte de la información recopilada sobre usted puede incluir su género, ocupación, o ciudad de residencia. Tenga en cuenta que voy a mantener esta información de manera confidencial guardando los datos de la investigación en un archivo protegido con contraseña en un lugar seguro. Los datos recogidos en este estudio son confidenciales con respecto a su identidad personal, a menos que se especifique lo contrario. Si se publica un informe de este estudio, o los resultados se presentan en una conferencia profesional, sólo se presentarán los resultados en grupo y/o se harán citas anónimas.

Si usted tiene alguna pregunta sobre los procedimientos del estudio o el estudio, puede ponerse en contacto conmigo en el siguiente número +1-347-633-7701 o por correo - +57-320-302-7920 or by email at ana.mahecha@rutgers.edu. También puede ponerse en contacto con mi asesor de facultad la profesora Robin Leichenko en el número (848) 445-4106 o robin.leichenko@rutgers.edu

Si usted tiene alguna pregunta sobre sus derechos como participante en la investigación, puede ponerse en contacto con el Consejo de Revisión Institucional de la Universidad de Rutgers (que es un comité que revisa los estudios de investigación con el fin de proteger a los participantes de la investigación).

Institutional Review Board Rutgers University, the State University of New Jersey Liberty Plaza / Suite 3200 335 George Street, 3rd Floor New Brunswick, NJ 08901 Phone: 732-235-9806

Email: humansubjects@orsp.rutgers.edu

Está de acuerdo en participar en este studio?