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Chacra Farming, Peasant Livelihood Portfolios and Identities in the Peruvian Andes

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CHACRA FARMING, PEASANT LIVELIHOOD PORTFOLIOS AND IDENTITIES IN THE PERUVIAN ANDES

Photo by author



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ABSTRACT:

Nearly fifty years after land reform in Peru, and in the face of dramatic climatic and social change, small-scale, high-altitude agriculture and the livelihoods of peasant households have fundamentally changed. Nonetheless, low-input subsistence agriculture, known as *chacra* agriculture, remains a prominent feature in Andean landscapes and peasant livelihoods. Drawing on research conducted in two agro-pastoral communities in the Ancash region of Peru, this thesis seeks to show how and why households in these communities continue to rely on the *chacra* as part of their livelihood strategies. While seeking to understand the role of the *chacra* in peasant livelihood portfolios, I consider the ways in which the *chacra* is meaningful beyond its purely subsistence value. Findings show that agricultural and pastoral activities are largely inseparable within these communities: household resource use, labor and incomes are intrinsically shaped by this agro-pastoral system, even as livelihood strategies have diversified. Moreover, while it is evident that the *chacra* remains consequential in the subsistence of peasant households, it is closely tied to Andean and peasant identities, representing a connection to the landscape, secure access to land, and the ability to feed and maintain wellbeing in the family. This research suggests that a more holistic understanding of Andean *chacra* agriculture as part of a larger agro-pastoral system, a diversified livelihood portfolio and a broader value system, would help to explain the persistence of the *chacra* while also improving our ability to respond to the mounting challenges to high-altitude, subsistence agriculture.

Keywords: Peru; Andes; subsistence agriculture; peasant livelihoods; identity

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CHAPTER 1: INTRODUCTION

“The chacra gives us life, to the people in this area.” As the mayor of Huaripampa, Ricardo understood the reality of life for the people he represents. Like most of the households living in his town, he is a member of Comunidad Campesina Canray Grande and, notwithstanding his position as mayor, Ricardo cultivates a number of *chacras* himself and on behalf of his elderly mother. Almost every household in the community cultivates small agricultural plots that are used to feed their household and for sale at market. Simply, it is what households do in these communities, how they provide for themselves. As mayor, Ricardo has no illusions that the various levels of government are looking out for the households in Canray Grande. Yet agriculture in his community faces limitations. There is not a way to irrigate plots, and no money to build a canal that would let households cultivate more crops over a longer growing period. Children are leaving the community because there are not employment opportunities. Livelihoods are getting harder to base on small-scale agriculture, but this is the community he is from and in this community you cultivate a *chacra*. The *chacra* is how households subsist and part of what it means to be Andean, Quechua and from the highlands.

Agriculture in the highlands is still overwhelmingly small in scale and often characterized as having limited productivity and export potential (Crabtree, 2002). Highland agriculture, like that found in C.C. Cordillera Blanca, is referred to as *chacra* agriculture, though also referred to as “small” (Escobal and Caverro, 2012) “small-scale” (Crabtree, 2002; Brush and Guillet, 1985), “traditional” (Brush et al., 1981) or “peasant” (Brush and Guillet, 1985) agriculture. These plots are cultivated to feed the household that works them, with surplus sold in local markets. Staple foods, such as potatoes or grains, rather than cash crops or vegetables are usually grown, distinguishing *chacra* agriculture from commercially

oriented agriculture found in the coast and jungle and kitchen gardens, or *huertas*.

In Peru, family farmers make up 80 percent of producers in the agricultural sector, 87 percent of who are subsistence farmers (CEPES and Oxfam, 2015, 5,7). The cultivation of small agricultural plots for household subsistence has been a feature of Andean landscapes and societies predating the Spanish conquest (Murra, 1984). The survival of small-scale agriculture is in part attributable to the existence of *Comunidades Campesinas* (C.C.), or Peasant Communities¹, which provide many poor, rural farmers secure access to land throughout the country and especially in the highlands. With over 5,000 titled communities (CEPES, 2016, 6-7), Peasant Communities are a prominent feature in highland Andean landscapes. However, while Peasant Communities have protected peasants' access to land, there are mounting pressures on rural Andean livelihoods and Peasant Communities are in a moment of transition. As the rural Andes become increasingly tied to urban centers, households need money to purchase new goods and services that their *chacras* are unable to provide. Productivity constraints on these plots, including altitude (Bianco and Sachs, 1998), water scarcity (Bury et al., 2013) and poor (and worsening) soil quality, impede market orientation and thus the profitability of the *chacra*, especially in a market system that prioritizes large producers (Escobal and Cavero, 2012). Significant outmigration of young people who consequently do not see a future for themselves in their communities has led to aging community and doubts as to whether and how the *chacra* will persist in the future.

The particulars of this uncertainty in *chacra* agriculture and peasant livelihoods may be specific to Andean communities. The climate factors and geographic landscapes in the Andes, and particularly in the Cordillera Blanca, pose unique challenges to farmers, and the agrobiodiversity sets Andean agriculture apart. Nonetheless, this narrative is common not

¹ 'Community' refers both to the often social community of households that has worked that area of land and to the physical land that is collectively titled to that social community.

only throughout Latin America, but across smallholder farming communities in Asia, Africa, and even, though in different ways, in Europe. Nearly half of the world's population remains rural, and agriculture, largely family agriculture, employs over a quarter of the world (FAOSTAT(b)). The number of livelihoods that remain reliant on smallholder agriculture makes it critically important that we understand the current and future viability of these livelihoods, both at the community level and at a global scale. Local case studies can provide insights into specific livelihood stresses and strategies, and can inform these broader analyses of peasant futures. This thesis provides a glimpse into the significance of the *chacra* in how peasant livelihoods are constructed in two communities in the high Peruvian Andes, and contribute a current account of the ways in which the *chacra* persists.

The remainder of this chapter introduces the reader to the two Peasant Communities in which the research for this honors thesis was conducted. The second chapter will situate this discussion of peasant livelihoods, *chacra* agriculture, and practice and identities within the broader conversations in Geography, Anthropology and Peasant Studies in particular. The following chapter expands on the history of how land has been organized in the Peruvian highlands, and how the Agrarian Reform in particular has shaped how land is currently held and managed. The next two chapters detail the results of my fieldwork. The first explains the household structure and the dominant activities, or livelihood portfolios, of households in these communities. The second is an in-depth look at the *chacra* itself; how land is accessed, how the *chacra* is managed, which crops are grown, how the harvest is allocated and finally how the *chacra* is significant to the lives of those living in these communities. This is followed by a discussion that explores some of the values of the *chacra* in order to better understand the persistence of this livelihood strategy in the context of changing Andean livelihoods and landscapes. The thesis ends with a short reflection on how different bodies of

literature contribute to our understanding of why the *chacra* has remained central to peasant livelihood portfolios.

DEFINITION OF TERMS

Before getting too far into this thesis, I think it is necessary to define and justify my use of two terms - ‘peasant’ and ‘Indian’ - since both can have derogatory implications in English. I have chosen to use ‘peasant’ rather than ‘farmer’ specifically because unlike ‘farmer,’ the term acknowledges other sources of income, including crafts, fishing, mining, and, critically for my use, pastoralism. At its broadest, ‘peasant’ refers to “people of the countryside” (Edelman, 2013, 10). The Spanish term *campesino*, which translates as ‘peasant,’ takes this view, referring to rural and generally poor members of society without offending. Indeed, since the Peruvian agrarian reform, its use has been widespread and many rural farmer and herders self-identify as *campesinos*. Moreover, in Peru, *campesinidad* is often associated with secure access to land through membership to a Peasant Community.

I have also chosen to use the term ‘Indian,’ rather than indigenous, native Andean or other phrases to refer to this racial category in Peruvian society. Indian is the closest translation of *indio*, which is used in Spanish to (self-)identify the rural, agro-pastoral population in the Peruvian highlands. This is quite distinct from the category of ‘indigenous,’ which is more often used to describe groups and communities that live in the Peruvian jungle (M. Scurrah, personal communication, April 24th 2017). While this was something I kept in mind during my fieldwork, I was nonetheless surprised when a friend, who had grown up in a highland Peasant Community, corrected me when I asked about whether people in the community identified as indigenous, saying that ‘no, *indigenas* are from the jungle.’ Therefore, while I recognize that, especially in the West, the use of Indian is often derogatory

when describing native communities, I choose to use it given the complex racial and geographic implications of racial terms in Peru, as other authors have before me (see Orlove, 1998; Weismantel and Eisenman, 1998; de la Cadena, 2001).

STUDY AREA

The fieldwork for this thesis was conducted in two adjacent communities, C.C. Cordillera Blanca and C.C. Canray Grande, in the Cordillera Blanca mountain range in the Peruvian Andes. These communities are in the rain-shadow of the Amazonian air masses, situated on the Western slopes of the Cordillera Blanca mountain range, which is the most extensively glaciated mountain range in the tropics (Bury et al., 2011; Mark et al., 2010). The communities extend between 11,400 ft. and 14,800 ft., and sit above the Callejón de Huaylas, the agricultural valley between the Cordillera Blanca and Cordillera Negra, along which runs the Santa River. *Puna* or high altitude grasslands characterize the landscape. The region has clear rainy and dry seasons, and gets about 80 percent of its annual precipitation between November and April (Mark et al., 2010, 795). During the extended dry season, peatlands formed by natural glacial runoff become critical for pasturing animals.

Given the extensive tropical glaciers, and the high and unique biodiversity associated with this environment, the upper altitudes of the Cordillera Blanca were established as the Huascarán National Park (HNP) in 1975, and as a UNESCO Biosphere Reserve in 1977. The creation of HNP and the agrarian reform overlapped, resulting in contested boundaries and uncertain access to natural resources for Peasant Communities whose lands extended into the park. Currently, HNP, working with pasture-user groups, allows Peasant Communities to graze within the park boundaries.

Both communities are located 3 km off of the main road to Lima, approximately 25



Map 1: Field Sites

established as a Peasant Community in 1982 and currently has title to 3,835.31 hectares (TMI, 2016). Land at lower altitudes, between 11,500 ft. and 13,000 ft., are used for agriculture, and the upper grasslands for pasturing livestock. Nearly 75 percent of the community is pastures (TMI, 2017). The majority of land within the community is managed at the household level, though areas are also used for communal agriculture, pastures for communal livestock and planted eucalyptus forests. There are 320 registered community members, 195 of whom are active and not excused from communal obligations due to old age or illness (TMI, 2017). Some community members live within the community, but many live

km south of Huaraz, the departmental capital of Ancash and a city of 120,000 residents. Olleros, the district capital for both C.C. Cordillera Blanca and C.C. Canray Grande, sits between the main villages for each community and houses key services including schools, small shops and local government offices.

C.C. Canray Grande was initially

in Huaripampa, the *centro poblado* or village just below the community.

C.C. Cordillera Blanca became a Peasant Community in 1991, which included a large expanse of pastures that fell within HNP, and the community gained title to the non-HNP land in 1994. The community currently has title to 3,236.73 hectares of land, which does not include the pastures within HNP that the community legally accesses (TMI, 2016). Pastures account for nearly 92% of land in C.C. Cordillera Blanca, including pasture for communal livestock, as well as communal agriculture and planted eucalyptus forests (TMI, 2017). Most land is managed at the household or *manada*² level. C.C. Cordillera Blanca is smaller than C.C. Canray Grande, with 96 registered community members, and only 60 active *comuneros* (TMI, 2017). Families do not live within the community, but in two *centros poblados* that lie below the community – Achic and Canray Chico.

METHODOLOGY

This project is inevitably influenced by the extensive research on Peruvian agriculture that has recognized the immense diversity in potato varieties and celebrated the traditional



Image 1: High altitude (*puna*) pastures in CCCB
photo by author

indigenous knowledge that allowed Andean farmers to produce in a particularly challenging agricultural environment. Yet this literature was written in the 1970s, 80s and 90s. Rural livelihoods are

² *Manadas* are a way of organizing areas of pasture by grouping together households that use the same pasture. This arrangement facilitates the rotation of herders and allows herders to return to their homes. Households grouped together are often related, but not necessarily.

not ‘timeless’ or ‘changeless’ (Richards, 1985, 83). The political, social and economic landscape of Peru is, today, fundamentally different, as are actual Andean landscapes as they weather the effects of climate change. In the context of these changes, this research seeks to understand why the *chacra* has persisted as a practice for peasant households in two communities in the Peruvian High Andes. In order to ask this larger question, I asked, first, what role does the *chacra* play in subsistence livelihood portfolios, especially when households engage in multiple livelihood activities? Secondly, what is the relationship between the *chacra* and Andean and peasant identity and practices in these communities? With these questions I hoped to capture not just the subsistence value of the *chacra*, but also its cultural value, and therefore recognize that the *chacra* has a broader significance for many peasant households. In order to begin to answer these questions I reviewed the literature on peasant livelihoods and Andean agriculture, in addition to conducting fieldwork in two communities in the Cordillera Blanca mountain range, C.C. Canray Grande and C.C. Cordillera Blanca. I highlight that while my findings reflect dynamics in these two specific communities, there is also heterogeneity across the Peruvian Andes.

THEORETICAL FRAMEWORK

Political ecology, as well as aspects of cultural ecology, has informed my approach to this research. The emphasis in political ecology on situating the local within a broader and power-laden system is critical to begin to understand how rural livelihoods in the Peruvian Andes are simultaneously persisting within and adapting to their natural, social, political and economic environments. In particular, the “constantly shifting dialectic between society and land-based recourses, and also within classes and groups within society itself” (Blaikie and Brookfield, 1987, 17) that political ecology grapples with allows me to take into account the

multiple ways in which the *chacra* is a site for this dialectic that constitutes rural and peasant livelihoods and identities. Nonetheless, cultural ecology adds depth to this analysis. Cultural ecology's attention to the logic of livelihood strategies serves to highlight the features of small-scale producers that that begin to explain why the *chacra* enables these communities to persist in the face of and adapt to these dramatic changes to Andean landscapes. Together, cultural and political ecology provide a lens through which to analyze the past, and often anthropological, research on Andean peasant agriculture that I review in the next chapter. Moreover, this framework helps to explain changes observed in peasant communities and smallholder agriculture since this literature was published.

FIELDWORK

I conducted fieldwork that informed this project over the course of two trips to Huaraz, Peru in 2017 and 2018. I worked as an intern at The Mountain Institute's (TMI) Huaraz office for ten weeks between May and August 2017. TMI is an NGO working to preserve mountain ecosystems and foster resilience in these communities, and works in the Andes, Himalayas and Appalachia. During this time I helped to organize, participated in and analyzed data collected from a weeklong field research trip to C.C. Cordillera Blanca and another community north of Huaraz. Interviews conducted during this fieldwork, though focused on pastoralism practices and peatlands, formed the basis of my research questions. This internship additionally allowed me to attend and participate in a few informal community meetings and workshops in both C.C. Cordillera Blanca and C.C. Canray Grande, and establish connections with key figures in both communities, as well as establish a close working relationship with researchers at TMI. I returned to Huaraz for seven weeks, followed by a week in Lima, between June and August in 2018 to conduct interviews in both C.C.

Cordillera Blanca and C.C. Canray Grande. Once again I worked with and through The Mountain Institute's Huaraz office, which allowed me to attend community workshops and events, and facilitated renewing my contacts within the communities. Over the course of both summers, I was also able to sit in on meetings and have many informal conversations with researchers from TMI. I also conducted four interviews, as well as a number of informal conversations, with leading researchers at universities and think tanks in Lima.

In 2018, I hired two research assistants to guide me around the communities, introduce me to potential interview subjects and help to translate into Quechua where needed. Both of my research assistants lived in the community we worked in, and were relatively prominent members of the community. Researchers at TMI played an important role in identifying potential research assistants.

Interview participants were chosen through a mix of criterion sampling, maximum variation sampling, opportunistic sampling and convenience sampling (Hay, 2005, 72). All interview participants belonged to one of the communities, either as a community member or because a household member was a community member. Moreover, all interview participants had a *chacra*, though some no longer worked the land themselves. Otherwise, participants were interviewed regardless of age, gender, wealth or the location of their primary residence. Given that this fieldwork was conducted in the middle of the harvest, prearranging interviews was complicated. My research assistants were therefore critical in identifying most participants, taking me to different parts of the communities in order to find people in their homes or fields. In C.C. Cordillera Blanca, in particular, my research assistant was able to visit potential participants in the morning to ask them to stay in their homes long enough for me to interview them.

Prior to this fieldwork, I underwent the Social Science Institutional Review Board

(SSIRB) in order to ensure that there was minimal risk to participants. Consequently, all names in this thesis are pseudonyms, though other participant details are factual. At the beginning of all interviews the project was first introduced by my research assistants, and then explained by myself, emphasizing that participation was voluntary, and that all information would be kept confidential. Participants were then asked for their consent to be interviewed, recorded and photographed. Given some illiteracy within both communities, consent was verbal rather than written.

All recorded interviews were transcribed, and all transcriptions and notes for the non-recorded interviews were coded using ATLAS.ti coding software. The transcripts were re-read and coded using descriptive codes, which catalogued obvious themes raised in interviews and varied in specificity, and analytic codes, which emerged from patterns in the descriptive codes (Hay, 2005, 224-5). Coding the interviews allowed me to identify central themes within and across interviews and gave me a sense of how widespread or unique certain responses were.

Ultimately, I conducted fifty-one interviews, twenty-five in C.C. Cordillera Blanca and twenty-six in C.C. Canray Grande. Women accounted for approximately half of the interviews in each community; thirteen in C.C. Canray Grande and twelve in C.C. Cordillera Blanca. The youngest participant was 18, and the eldest was 88, and approximately half of the participants were over the age of 60.

The interviews were semi-structured (see Appendix 1 for the list of questions), and lasted between ten minutes and forty-five minutes. The majority of interviews were conducted in Spanish, though my research assistants helped to translate into Quechua when questions needed to be clarified and where interview subjects, especially older women, felt more comfortable speaking in Quechua. The interviews conducted in Quechua tended to be

less extensive than those in Spanish, as details were inevitably lost in translation, limiting follow-up questions, and interview subjects gave shorter answers. While most interviews were recorded, some community members (six in C.C. Cordillera Blanca and nine in C.C. Canray Grande chose) chose not to be recorded. The qualitative data collected for these interviews is therefore less detailed. Moreover, since interviews were conducted in Spanish, which is neither my first language, nor the first language of many participants, details and clarity were inevitably lost.

Given the important presence of TMI projects in both communities, I recognize that my working relationship with TMI may have influenced conversations I had with participants. Similarly, since I relied heavily on my research assistants to facilitate interviews, I understand that their presence may have influenced participants and this research. I recognize that as a student of Geography in the United States, I hold certain ideas and biases that favor and perhaps romanticize smallholder, subsistence farming and ‘traditional’ Andean livelihoods, and I have worked to limit their influence in this work. Finally, my position as an outsider in these communities as an obvious *gringa*, notwithstanding my relationship with TMI, inevitably colored how questions were asked and answered, how participants described their livelihoods and how I moved through both communities.

CHAPTER 2: PEASANT LIVELIHOODS, CHACRA, PRACTICE AND IDENTITY IN THE LITERATURE

This thesis grows out of a number of traditions in Geography, Anthropology and Peasant Studies, and ultimately I seek to demonstrate how these often loosely related literatures can provide a more significant holistic reading of why and in what ways the *chacra* is significant in peasant livelihoods. The *chacra* has been a feature of research in the Andes since at least the 1960s, over which time the literature, like the *chacra* itself, has evolved. In order to understand the persistence of the *chacra* as a practice and feature of peasant livelihood portfolios, I begin this literature with a review of peasant livelihoods, broadly reviewing Peasant Studies literature, before focusing on the literature on specifically Andean livelihoods. While this scholarly work clearly grows out of Peasant Studies, these frameworks specifically reflect the limitations of Andean environments. I then briefly review the literature on New Rurality, which provides an explanation of ways in which rural landscapes and society are dynamic and reflect global economic, social and political change. Next I engage the literature on the *chacra*, and the main foci of that research: traditional management strategies, the relationship between subsistence, market sale and barter and the agro-biodiversity of crops found in the *chacra*. I briefly review how identities can be held in smallholder agricultural spaces, before engaging the literature on Andean racial identities. I end with a very brief synthesis of these literatures, demonstrating that while they come from different academic traditions, they do build upon each other.

MODELS OF PEASANT LIVELIHOODS

During the mid-twentieth century, the interdisciplinary field of peasant studies

emerged from both history and anthropology, seeking to understand the structures and cultures of peasant societies in North America and Europe, as well as the Global South. For much of history, it was assumed that peasants would disappear as societies modernized. Yet as the world rapidly urbanized and industrialized, academics sought to understand why the peasantry persisted (Bernstein et al., 2018). These peasant societies continue to exist, partially integrated into society and the capitalist economy but still removed and seeking to defend their livelihoods from pressures to change (Smith, 1991; Bernstein et al., 2018).

The peasant household is distinct from simple commodity producers because labor, which is provided by the family, is not sold at market value (Smith, 1991; Wolf, 1955). The reliance on family labor consequently limits the peasant's ability to increase productivity by contracting more labor. This interferes with the development of capitalism since peasant agriculture, unlike other forms of agriculture, will not produce surplus labor, surplus food, a household that purchases from the market or a source of income to finance further industrial developments (Basole, 2016).

Yet this limit on productivity does not represent a limit for the peasant household, which as a unit of production and consumption aims to produce enough to provide subsistence to the household (Edelman, 2013; de Janvry, 1981). The peasant household will only increase productivity until it is outweighed by the drudgery of the increased labor, a calculation that is contrary to capitalist logic. Similarly illogical to capitalists is that the peasant household, in an effort to reproduce, is willing to produce for no profit, especially during times of economic hardship, since production is critical to the reproduction of the household (Mayer, 2002; De Janvry, 1981). In this way, the household is still removed from the market and retains a high degree of self-sufficiency (Ellis, 1988; Smith, 1991; Crabtree, 2002). This separation additionally limits households' dependence on market uncertainties

(Escobal and Ponce, 2012).

The existence of the peasantry outside of the capitalist economy represents a particular problem for Marxist scholars and their longstanding concern with the Agrarian Questions. The peasantry is often seen as an impediment to social revolution and the adoption of Socialism since rather than identifying with a class across the rural-urban divide, the peasantry is unified by the rural-urban duality. Combined with the peasant's emphasis on preserving private property the peasant stands in the way of collectivization and social class revolution sought by Marxists (Basole, 2016). Chayanov, an early scholar of the Russian peasantry, was a dissenting voice and argued that the peasantry had a role to play in the future Soviet state, if they were modernized and collectivized through cooperatives.

More recently, the emphasis in peasant studies has shifted to focus on the role of peasant agriculture in the future (Bernstein et al., 2018), not its disappearance. Smallholder agriculture is widely recognized for its high productivity, relative to other forms of agriculture, and features prominently in discussions of food sovereignty and agro-ecology (Chappell, 2018; Altieri et al., 2012). Moreover, diversity within the peasantry has been recognized, particularly by global peasant organizations.

ANDEAN LIVELIHOOD FRAMEWORKS

Beginning in the 1930s (Murra, 1984), researchers working in indigenous and peasant communities in the Andes have sought to characterize the livelihoods of their subjects. Brush and Guillet (1985) outlined three frameworks for understanding social organization and production in Andean agro-pastoral communities; the Adaptationist Model, the Political Economy Model, and the Cultural Model. While the Adaptationist Model is featured most prominently in the literature, many authors show the influence from both the Political

Economy and Cultural Models. The Political Economy Model draws on dependency and neo-Marxist literature, and suggests that since colonial reforms, local populations are exploited by local elites that are tied, indirectly, to the larger global economy. Alternatively, in the Cultural Model, contemporary social processes are the result of pre-Columbian social patterns, such as cultural rituals and identities.³ Moreover, the relationship between the household and the community, and the governance of community spaces are influenced by the persistence of the *ayllu*, a “kinship and social unit” (Mayer, 2002, 333) determines the organization of land and resources.

The Adaptationist Model was the most widely adopted by scholars of the region, beginning with the historical and anthropological work of John Murra in the 1950s. The Adaptationist Model reflects the peasant’s adaptation of livelihood strategies in response to an environment that is recognized as challenging, especially by outsiders (Murra, 1984). Livelihoods strategies are adapted as a form of risk management for the survival of the households (Murra, 1984), without becoming reliant on external subsidies (Brush and Guillet, 1985). Adaptations include having a deep knowledge of local conditions and the selection of diverse and appropriate crops and animals. The best known adaptation is the idea of verticality and “ecological floors” in which a “group [controls]... several geographically dispersed ecological tiers” in order to meet the community’s needs.

Verticality, however, was not adopted wholeheartedly. Scholars challenged both the overuse of the term, as well as its limited and “rigid view of the environment and its management” (Shimada, 1985, xiii), including Murra himself (1985). Within this post-Adaptationist framework, some authors have sought to replace ‘verticality’ with ‘ecological

³ Brush and Guillet (1985) give the example of the use of *chicha*’s, or maize beer, use in a number of rituals, including Pago a la Tierra, which is performed key agricultural events. Since maize can only be grown at lower altitudes, communities must continue to either access land at lower altitudes to grow maize themselves, or engage in bartering with communities at lower altitudes to make *chicha*.

complementarity,' which acknowledges the vertical and horizontal diversity in micro-climates (Shimada, 1985). Others find that rather than addressing the shortcomings of verticality, ecological complementarity reinforces the narrative that environment singularly drives agro-pastoral land use (Zimmerer, 1996). Watts (1983) additionally expressed concern that the lens of adaptation views human-environment interactions in a biological, at times neo-Darwinian way. This critique does not suggest that the Andean landscape and environment do not influence land use and crop choice. Rather, it argues that decisions about production and peasant livelihoods may be the result of any number of social, environmental, political or economic factors, especially given the heterogeneity of geographies that Peruvian peasants engage with (Crabtree, 2002). Moreover, this approach, while focusing on how landscapes shape peasant livelihoods, ignores the ways in which livelihoods cumulatively and fundamentally alter landscapes (Bebbington, 2008). Finally, adaptation is an imperfect framework for understanding livelihoods because it fails to clearly distinguish between the macro-scale (the culture or system) and the micro-scale (the household or community) in identifying adaptation (Denevan, 1983)

Though Brush and Guillet (1985) differentiated between the Adaptationist, the Political Economy and the Cultural models, it is unreasonable to assume that there is not room for concurrence between these frameworks. Indeed, Zimmerer's (1991) use of Political Ecology to bring together "the ideas of structuration, a politics of place, and production ecology in order to examine the ecological and social relations" (443) in Andean agriculture captures the (co-)existence of political economic structures, the culture and identity engrained within a place and the ecological organization of production.

NEW RURALITY

Rural communities increasingly feel the effects of both urbanization and globalization, as cities draw migrants, dominate commercial activity, and the effects of financial shocks and changes in demand are no longer localized. The discourse around the ‘new rurality’ seeks to highlight that global events influence and layer onto existing relations and meanings in rural societies, ultimately changing, if not replacing, rural livelihoods (Pini and Leach, 2011). Phrases such as the “urbanization of the countryside” (De Grammont, 2004) and “globalizing the countryside” (McCarthy, 2008) reflect that rural areas are being produced through urban and globalized relationships.

Much of this literature initially emerged from the Global North, and examines how family farms increasingly no longer derive most of their income from agriculture, either as subsistence is no longer feasible or when family members choose to work off of the farm (Moxnes Jervell, 2002). As households are increasingly a part of urban centers, the dualism that historically characterized urban-rural linkages has become blurred (Reis et al., 1990).

The increased rural-urban linkages in the Global South in particular are often the result of outmigration, both domestic and transnational. For agricultural communities this outmigration could either mean that households are unable to meet the labor demands of household activities, or that remittances will be invested into agricultural systems to overcome labor shortages (Jokisch, 2002). Jokisch (2002) found that for smallholders in Ecuador agriculture persisted as a risk-averse activity, though he recognizes that the non-abandonment of agriculture in these communities may be geographically specific and attributable to factors outside of migration. Notably, remittances were not invested into agriculture, but rather into more permanent infrastructure that has changed the landscape of the community. In Bolivia, Yarnall and Price (2010) note that remittances have led some

rural communities to become materially better off than surrounding towns, creating novel rural landscapes.

Rural households throughout Latin America continue to engage in agricultural activities, for consumption and sale to local markets, while also receiving a significant portion of their incomes from non-farm activities (De Grammont, 2004), beyond remittances. This marks a shift away from subsistence livelihoods towards more nuanced semi-subsistence livelihoods (Bebbington, 2008). Ellis (1998) argues that this income diversification implies an improvement in household security, though the ability to diversify is often influenced by the number and quality of the assets that a household holds (J. Escobal, personal communication, August 8th 2018). Specifically, diversification becomes a subsistence strategy for the poorest households that cannot sustain themselves from agriculture alone. Finally, it should be noted that while this literature has been applied to Latin America as a region, it has not been widely used to understand or explain changing rural livelihoods in the Andes (Escobal, 2001).

THE CHACRA

As communities gained access to land from agrarian reforms, researchers became particularly interested in the peasant agricultural practices that were emerging in the countryside. Agricultural ethnographies sought to explore the management strategies and agricultural rationales of Andean peasant farmers, and this literature ultimately helped to designate the Andes as a site of unique agro-biodiversity. The literature on *chacras* in the Andes has focused on three main themes. Most prominent has been the forms of plot management, often focusing on traditional practices. There has also been an interesting discussion around the role of the *chacra* in household subsistence and its degree of market

orientation. Finally, given the rich crop diversity in the Andes, an interest in quantifying and conserving agro-biodiversity in the *chacra* has remained an important current in this literature.

TRADITIONAL MANAGEMENT

Influenced by the Adaptationist model, researchers engaged with the ways in which agricultural practices were adapted to the environment and climate in the region (Bianco and Sachs, 1998). Land characteristics, such as soil and water sources, seasonal weather patterns, as well as altitude more generally, have influenced the organization of *chacra* agriculture (Bianco and Sachs, 1998; Brush and Guillet, 1985; Gade, 1975), though Mayer (2002) cautions that “village organization is not a pale reflection of verticality” (264). Both Brush and co-authors (1981) and Mayer (2002) have demonstrated how potato agriculture in particular is governed by the altitudes of a farmer’s fields, with little variation across the Andes.

While agricultural practices are adapted to the harsh mountain environments, risk nonetheless underlies these livelihoods. The literature addresses both the ways in which risk is inherent in the environment (Brush and Guillet, 1985; Rhoades and Bebbington, 1990) and how farmers are constantly working to manage that risk (Mayer, 2002; Bianco and Sachs, 1998; Bellon et al., 2015; Rhoades and Bebbington, 1990; Boillat and Berkes, 2013; Brush and Guillet, 1985; Apffel-Marglin, 1998; Zimmerer, 1996). Given the constant threat of an unpredictable yield due to disease, pests, rain patterns and frosts, among other concerns, peasant farmers make risk averse management decisions that make them more resilient to shocks or stresses (Boillat and Berkes, 2013). Just as Murra (1984) had previously argued, peasants are continuously adapting their livelihoods to their environment and attempting to

avoid crop failure and hunger. Risk-averse management practices include the cultivation of diverse crops and crop variations (Bianco and Sachs, 1998; Bellon et al., 2015; Rhoades and Bebbington, 1990), breeding and experimenting with new crop varieties (Mayer, 2002; Bianco and Sachs, 1998), intercropping (Gade, 1975; Brush et al., 1981; Bianco and Sachs, 1998), and having a staggered planting schedule (Apffel-Marglin, 1998; Rhoades and Bebbington, 1990; Zimmerer, 1996).

Though the potato has been the focus of the *chacra* literature, the research recognizes the diversity of crops grown, including other tubers, grains, maize, quinoa and *tarwi*. They are studied in relation to the crop rotation and fallow systems that are crucial in maintaining the fertility of easily degraded soils. The differences across studies highlight that the nature of rotation depends on the crops grown, and the crops grown depend on the altitude and ecological peculiarities of the community (Bianco and Sachs, 1998; Gade, 1975; Boillat and Berkes, 2013). Nonetheless, Bianco and Sachs (1998) argue potatoes drive that crop rotation, since they are central to both household subsistence and commerce. By ordering crops and fallows so that yields are high without necessitating expensive chemical inputs, crop rotations reflect “an efficient strategy for meeting family needs while using family resources” (Bianco and Sachs, 1998, 273).

Additionally, the community regulates many of the agricultural management decisions made by individual household, since much peasant agriculture occurs within community lands (Bianco and Sachs, 1998). In the past, the community was divided into production zones (Mayer, 2002) or sectors (Orlove and Godoy, 1986), which were units of resource management. Within these production zones, individual households had usufruct rights, but the community made the decisions about how land is managed. Mayer (2002) has recognized that over time production zones have disintegrated as communal controls have

been gradually dismantled and agricultural decision-making has become increasingly individualized in the Peruvian Andes.

Finally, the emphasis on traditional management highlights the importance of traditional and local knowledge that Andean peasants hold, recognizing the vital role such knowledge plays in sustaining Andean agricultural livelihoods (Bianco and Sachs, 1998; Brush et al., 1981; Boillat and Berkes, 2013). Researchers point to indigenous observations and interpretations of climatic phenomena, which have been shown to hold true when compared to scientific observations (Boillat and Berkes, 2013; Orlove et al., 2002). Beyond just recognizing that agricultural practices are locally appropriate, some authors also make the link between agriculture and culture in the Andes, noting that choices of crops and the agricultural calendar are intrinsically linked to religious beliefs and ceremonies (Apffel-Marglin, 1998). Zimmerer (1996, 2012) focuses on the relationship between traditional foods and *kawsay*, which he defines as a “fit or customary livelihood” (1996, 187). However, while authors reflected on the “complex symbiotic relationship between man and plant” (Brush et al., 1981, 85) they also recognized that these relationships were deteriorating as the countryside became increasingly commercialized and genetic diversity has been consequently lost. Interestingly, more recent literature often refers to this kind of knowledge as traditional or indigenous knowledge, implying a certain cultural primordialism. This contradicts the literatures that came before, which highlighted that Andean farming has been characterized by dynamic management strategies that have been able to adapt to social, political and economic changes over time, even while traditional practices endure (Gade, 1992; Brush and Guillet, 1985).

SUBSISTENCE, MARKETS AND BARTER

Much of the literature on *chacras* assumes that they are at least in part oriented towards household consumption and subsistence (Mayer, 2002, Zimmerer, 1996). Since the *chacra* plays a key role in making peasant livelihoods self-sufficient and minimally reliant on external subsidies or purchases (Brush and Guillet, 1985), it would be easy to believe that *chacras* are minimally engaged with markets. It is true that *chacra* agriculture is usually not oriented towards agro-industrial markets, such as buying and processing of potatoes for potato chips (Escobal and Caverro, 2012). This degree of commercialization makes the productive process much more complicated for the peasant producer (Escobal and Caverro, 2012), by requiring farms to be organized on a commercial basis (Zimmerer, 1996; Gade, 1975). These markets can, however, offer higher prices for crops (Escobal and Caverro, 2012) and ensure a safer return on investments in agricultural inputs (Mayer, 2002).

Despite not engaging in agro-industrial markets, many households sell a portion of the harvest at local markets in towns and cities in the region (Escobal and Caverro, 2012; Brush and Guillet, 1985). Households are able to sell smaller amounts and a wider variety of crops, because demand in these markets is also driven by household consumption preferences (Escobal and Caverro, 2012). These small sales provide an income that can be used for household expenditures or invested back into agricultural and pastoral systems, for expensive inputs such as inorganic fertilizers (Brush and Guillet, 1985). While this market engagement discounts such households from the strictest definition of subsistence agriculture, these households are still characterized as engaging in subsistence agriculture because the income that agriculture provides is not substantial enough for these households to accumulate. Finally, Mayer (2002) highlights that home-based resources, specifically labor, subsidize inputs that make commercial production viable.

A third form of transaction is the barter between communities at different altitudes (Murra, 1984; Bianco and Sachs, 1998; Mayer, 2002; Gade, 1975). Mayer (2002) distinguishes barter from reciprocity or buying and selling because it is a system that exists “when goods tend to be repeatedly exchanged with known people at particular times and places” (144), highlighting the informal regulations that underlie this arrangement and ensure standards between communities. Barter serves a dual purpose for Andean households. On the one hand, it is seen as a common practice for high altitude communities to access lower altitude crops, such as fruits, maize and coca, in return for high altitude crops, such as potatoes and other tuber (Mayer, 2002; Bianco and Sachs, 1998). On the other hand, exchange is crucial in ensuring food security for households, especially in times of crisis and failed harvests, especially if only one crop’s harvest has failed (Mayer, 2002; Gade, 1975). Purchasing has largely replaced the role of bartering throughout much of the Andes, which may reduce the diversity in diets that bartering previously provided.

CROP DIVERSITY

The Andes were a site of crop domestication and continue to have remarkable crop diversity (Bellon et al., 2015). In addition to native species, Old World crops introduced during the conquest that were useful and suitable to the environment are now ubiquitous in Andean *chacras* (Bianco and Sachs, 1998; Gade, 1992). The biodiversity often found in small-scale Andean agriculture, especially potatoes, has been an undercurrent to, if not the focus of, much of the literature on *chacras*. Older literature, especially, approaches diversity as allowing farmers to choose the crops that best fit their needs (Brush and Guillet, 1985; Brush et al., 1981; Bianco and Sachs, 1998; Zimmerer, 1996). More recent literature tends to focus on the conservation of crop diversity and views the *chacra* as a crucial site for that

conservation work (Bellon et al., 2015; Sayre et al., 2017; Walshe and Argumedo, 2016).

The literature that focuses on the relationship between farmer preferences and crop diversity points to the ways in which farmers will make choices about especially potato varieties based on their adaptation to microclimates in the landscape (Bianco and Sachs, 1998; Brush and Guillet, 1985), differences in taste, storage quality and seed viability (Brush et al., 1981) and the use of certain crops that are culturally significant (Zimmerer, 1996; Bianco and Sachs, 1998). A number of researchers have discussed the ways in which local naming practices reflect the strengths, weaknesses and uses of different varieties of native potatoes (Zimmerer, 1996; Apffel-Marglin, 1998; Bianco and Sachs, 1998; Brush et al., 1981). While there is an intentionality often attributed to farmers' maintenance of varietal diversity, Zimmerer (1996) and Gade (1975) suggest that "peasants are casual about plant selection" (47) and relatively unconcerned with genetic purity of varieties given that farmers will often plant multiple varieties of potato together in a single *chacra*.

The literature on biodiversity conservation is notable in that it continues to acknowledge both the role of the farmer in maintaining crop varieties and the importance that crop diversity plays in these communities' capacity to adapt and respond to social, economic and environmental challenges (Bellon et al., 2015). Indeed significant attention has been paid to the importance of this crop diversity with the view of adapting to climate change in the Andes (Bellon et al., 2015; Sayre et al., 2017; Walshe and Argumedo, 2016). In the face of significant genetic erosion, there is a suggestion that in-situ conservation needs to happen more intentionally, through projects that coincide with farmer preferences and that incentivize wider engagement (Bellon et al., 2015).

AGRICULTURAL AND RURAL IDENTITY

In this following section, I want to address two separate, but at moments related, literatures on identities. I will first look at the ways in which identities are often linked to smallholder agricultural spaces, looking at how these spaces can be related to gender, tradition, and subsistence and resistance. The second literature focuses on the complex rural, Indian and peasant identities that underlie and influence rural livelihoods in the Peruvian Andes.

IDENTITY IN AGRICULTURE

Agricultural spaces, in particular those spaces that produce food for household consumption, are closely tied to the identities of those who work them. Spaces that are central to people's livelihoods are inherently linked to their identities, through the place-making practices associated with them. Especially in the Global South, agricultural plots often reinforce gender and traditional identities, as well as larger household identities around subsistence and resistance.

Smallholder plots are often highly gendered spaces. Since women are responsible for household chores across much of the Global South, the cultivation of a house-lot garden is the most straightforward way for a woman to contribute to subsistence production for her family (Howard, 2006; Winklerprins and de Souza, 2009). In fact, gardens often explicitly serve women in their gendered responsibility to feed the family, as home gardens are integrated into spaces for food production and preparation (Christie, 2008; Boserup, 1970). Christie (2008) argues that these spaces are 'women's territory,' because they are spaces that embody gendered knowledge and are governed by a matriarchal tradition (Palchick, 2008). Subsistence plots, typically slightly larger than home gardens, are often predominantly male

spaces. This emerges in the literature on *milpas*⁴ across Mexico and Central America (de Frece and Poole, 2008; Christie, 2008) where “the *milpa* defines the man,” (de Frece and Poole, 2008, 349).

Smallholder plots can also be important spaces in the conservation and reproduction of tradition. For farmers with indigenous heritage, these plots are often a continued embodiment of traditional livelihood strategies that are significant beyond simply producing food. Christie (2008) notes that *milpas* have a highly “symbolic and emotional significance” to men in communities (125), and because being a *milpero* is so embedded in men’s identities (de Frece and Poole, 2008). The same discussion occurs around maintaining women’s traditional identities (Christie, 2008).

Although the dynamics surrounding smallholder cultivation are far more complex, the core motivations addressed in the literature can be summarized as either subsistence or resistance. It is a matter of agency and empowerment in decision-making, whether households decide to engage in cultivation over other alternatives, or whether it is an indispensable livelihood strategy. Small-scale farming is often a necessity for households that have been excluded from other sources of income, specifically from commercial agriculture, due to race (Palchick, 2008; Westmacott, 1992), gender (Schroeder, 1997; Christie, 2008), or financial situation (Palchick, 2008; Birky and Storm, 2013). For other households, however, producing their own food represents a “bottom-up... critique of the dominant neoliberal food system” (Battersby, 2012, 147) and threats to traditional livelihoods. In rural Mexican communities, peasants have resisted agrarian change and development interventions proposed by external actors, even those that may be beneficial, because they are perceived to be attacks on the root of Mayan culture and identity (de Frece and Poole, 2008). In these

⁴ *Milpas* are the traditional Mayan form of subsistence agriculture, where men intercrop maize, legumes and squash for household consumption.

cases, practicing smallholder agriculture is an act of resistance against global economic forces (Isakson, 2009; de Frece and Poole, 2008; Battersby, 2012; Smith, 1991).

INDIAN AND PEASANT IDENTITIES IN PERU

Identities in the rural Andean highlights are, as elsewhere, exceedingly complicated to define, where Indian identities can overlap with social, national and regional identities and defining characteristics have changed over time (Mires, 1991). Mires (1991) identifies three tendencies in ethnographic and anthropological definitions of Indians; the Evolutionary or Historical Tendency, that someone has descended from pre-Columbian cultures, the Cultural tendency, which prioritizes the distinct cultural aspects of Indian society, and the Structural Tendency, in which an Indian id defined according to their place in a determined social and economic structure. Weismantel and Eisenman (1998) highlight that notwithstanding these differences, “the need to systematically displace the causes of oppression onto... their victims” remains central to any system of racial categorization (122).

De la Cadena (2001) traces the contemporary system of racial categorization in Peru back to the *Indigenismo* movement, which while fighting to emancipate Peruvians from race and racism in the early 20th century, ultimately served to reinforce anti-*mestizo*⁵ sentiment. The *Indigenismo* movement sought to reject race as a marker of underdevelopment and poverty, instead linking Peruvians back to a pre-Columbian national identity. Much of this discourse, however, was motivated by the racism directed towards lighter skinned Peruvians from Europeans, and so this “rejection of race [was] to gain access to forms of privilege that are themselves racial” (Weismantel and Eisenman, 1998, 123).

⁵ Mestizo is used to describe people who were of Indian heritage but live in urban settings, and are generally seen as being removed from their Indianness.

Thus emerged a complicated relationship with racial identity in Peru, in which racism is explicitly not based on race, but rather on culture (Mayer, 2002; Orlove, 1998; de la Cadena, 2000; de la Cadena, 2001), education (de la Cadena, 2001) and geography (Gelles, 2002; Jacob 1986). The urban-rural divide in particular serves to clearly distinguish between urban mestizos and rural, agrarian Indians (Orlove, 1998; de la Cadena, 2000). This influence is fundamentally related to culture, specifically markers of culture. Being urban is seen as being more educated, less indigenous or traditional, hardworking and cleaner, in contrast to the stereotype of the dirty, illiterate, lazy Indian (Orlove, 1998; Weismantel and Eisenman, 1998; de la Cadena, 2000). Certain objects and practices, such as chewing coca leaves (Mayer, 2002), feet (Weismantel and Eisenman, 1998), clay cookware (Orlove, 1998), as well as traditional dress are cultural markers of Indianness.

De la Cadena (2000) notes that given the negative stereotypes associated with being Indian, many people with Indian roots, especially young people and urban dwellers, will “shed... markers that indicate the social condition of Indianness” (30) in a process she labels ‘de-Indianization.’ Critically however, this process is not assimilation or renunciation of Indian heritage, but rather a downplaying of that Indianness in certain spaces and moments, a process that de la Cadena (2000; 2001) argues simultaneously contests and reproduces racism in Peruvian society.

Since the Agrarian Reform the term *campesino* or peasant has been adopted to discuss rural highland Peruvians which imposes a class based term on a racial and culturally identified group. Orlove (1998) notes, however, that the shift to *campesino* does not actually represent a full shift to a class based term, since the root *campo* means countryside or field, and as such rural and agricultural connotations persist. These hierarchies remain fraught, highlighted by the intricate hierarchy of terms that are used by both Indian-peasants and non-

Indians to talk to and about each other (Zimmerer, 1996; Montoya, 1986). The use of class-based terms has also influenced social science analyses of Indian social movements. By using class terms, scholars have overlooked and under examined the cultural and ethnic components of these struggles (de la Cadena, 2001; Weismantel and Eisenman, 1998).

Moreover, this class-based language overlooks the indigenous practices and belief systems that many *campesinos* continue to have, notwithstanding not being seen as Indian or indigenous. Researchers have shown that understanding the ways in which Andean populations continue to be indigenous in practice is important because it influences the ways these communities interact with their environments, as well as the broader political and economic landscape (de la Cadena, 2010; Hartmann, 2016; Radcliffe, 2012). De la Cadena's (2010) work explores the indigenous relationship with the landscape, and shows the ways in which the environment is a being of its own ("earth-beings") with which Andeans interact, rather than just a backdrop. This has had significant consequences for Peruvian political movements and indigenous mobilizations. A number of authors have, relatedly, explored the way in which '*Sumak Kawsay*,' '*buen vivir*' or 'living well' has become influential in alternative and post-neoliberal development frameworks, especially around conceptions of wellbeing, health and autonomy (Radcliffe, 2012; Hartmann, 2016; Zimmerer, 2012; Escobar, 2010). While these relationships have been influential in daily life and indigenous mobilizations across the Andes, they are not necessarily present, or equally important in all regions of the Andes.

PRACTICING IDENTITIES

The livelihoods of peasant households in the Andes are continuously challenged by forces of globalization, and social and economic changes. A number of authors argue, then,

that continuing to practice those livelihoods is a choice that resists the structures that influence rural livelihoods and identities (Weismantel, 1992; Smith, 1991; Isakson, 2009; de Frece and Poole, 2008). Weismantel (1992) highlights that “ordinary objects...are used as symbols of ideological conflict not so much in clearly defined political arenas as in everyday debates over mundane questions” and household decisions (7). Subsistence spaces, which are often de-politicized when they are seen as part of traditional livelihoods, are fundamentally political, both by virtue of their intended marginal position in the capitalist economy and for the identities that are contained and reproduced within them. Consequently, any question about the persistence of the *chacra* as a livelihood strategy cannot only look at the details of management and use for household consumption, as much of the older literature on the *chacra* has. Rather, cultivating these agricultural spaces ought to be viewed as a life-making practice and an economic practice, drawing on peasant studies literature (Edelman, 2013; de Janvry, 1981), while taking into account the case-specific identities that the household is reproducing (Weismantel, 1992; Apffel-Marglin, 1998).

CHAPTER 3: THE ORGANIZATION OF AGRICULTURAL LAND IN PERU: LAND REFORM AND PEASANT COMMUNITIES

Every 24th of June, Peasant Communities across Peru celebrate the Day of the Peasant. It is a national holiday that holds particular importance to *campesinos* as a celebration of their livelihoods, having replaced the Day of the Indian. In C.C. Canray Grande, family members from the cities return to celebrate, the community hires a band, and the day is spent giving speeches, eating, drinking and dancing. It is a happy celebration, but for older *comuneros* who remember life on the *haciendas*, it is also deeply significant. One



Image 2: Celebrating Day of the Peasant in CCCG photo by author

older *comunero* emphasized how the agrarian reform gave them their livelihoods, saying that “*we should be having a minute’s silence for Velasco, because without him there would be no Peasant Community, no Day of the Peasant, no Peasant at all.*”

The persistence of small-scale agriculture in the Peruvian Andes is directly linked to the agrarian reforms of the 1970s. These reforms, though in many ways unsuccessful, fundamentally changed how land was accessed throughout the Peruvian coast and highlands, and have continued to shape highland landscapes by giving collective land tenure to communities of *campesinos*. While many national regulations on land ownership have since been weakened, considerable areas of land remain collectively owned by Peasant Communities, like C.C. Cordillera Blanca and C.C. Canray Grande. While these communities are not recognized indigenous communities nor is agriculture organized collectively,

community structures govern how land is accessed and managed. Peasant Communities are critical to *campesino* livelihoods because by providing secure access to land, Peasant Communities protect the asset upon which these livelihoods ultimately depend. This chapter seeks to convey how Peru's agrarian reform shaped highland agriculture and how Cordillera Blanca and Canray Grande are the product of these reforms.

A VERY BRIEF HISTORY OF LAND ORGANIZATION IN PERU

Prior to Spanish colonization land was based on kinship lineages to the land (*ayllus*) that predated the Inca and extended over large altitudinal ranges (Cleaves and Scurrah, 1980, 28). Communities worked individual plots as well as communal lands for work obligations defined by the Inca state, and communities retained a degree of autonomy (Smith, 1991, 47). Following the Spanish conquest in 1532, land became property of the Spanish crown, and this land, along with the Indians living on it, was distributed through land grants called *encomiendas*. Combined with *reducciones*, the forced resettlement of Indian communities, the *encomienda* system put Indian laborers under the control of Spanish landholders in order to link resource extraction to Spanish trade networks. These structures dismantled the critical connection between people and the land that was at the heart of the *ayllu* (Smith, 1991, 48-9; Zimmerer, 1996, 49).

The *haciendas* that characterized rural Peru up until the agrarian reform grew out of the *encomienda* system and the Indian communities that had lived on and worked the *encomienda* continued to be 'inherited' with the *haciendas*. Indeed, the current members of C.C. Canray Grande and C.C. Cordillera Blanca are descendants of the laborers from the multiple *haciendas* that were in the area. Tenants on these *haciendas* paid the landlords from their harvest based on the area of land they used, though elsewhere in the Andes labor on

haciendas was more centralized. The endurance of *haciendas* into the late twentieth century reflects the persistent colonial structures that saw indigenous populations as a labor force, in particular in the highlands.

SETTING THE STAGE FOR REFORMS

The contrast between these large and exploitative *haciendas* and small household landholdings highlighted the extreme inequality in land tenure. In the decade before agrarian reform, 69 percent of arable land was controlled by only 2 percent of the population (Klarén, 1992, 46). Writing in 1928, Mariátegui unequivocally linked the ‘Problem of the Indian,’ that is of rural poverty, to the socio-economic situation in Peru, stating that “this economic system has kept agriculture to a semi-feudal organization that constitutes the heaviest burden on the country’s development” (1971, 18). Such calls for reform were perceived as a threat to the military-oligarchic government that sought to protect its traditional elite privilege (Klarén, 1992, 41). Nonetheless these social reforms retained popularity among the working class. The commitment of the US’s Alliance for Progress land distribution and countering rural radicalism, together with the election of a moderate president, set the political stage for land reforms in the 1960s.

The late 1960s were also a period of economic stagnation for Peru, after decades of relatively strong economic growth. The coast had overwhelmingly benefited from prosperity in the export sector, augmenting the gap between the urbanizing and modernizing coast, and the poor, rural highlands. These tensions were amplified by rapid population growth. Peru’s population nearly doubled between 1900 and 1940, from 3.7 million to 7 million, and again by 1970, to 13.6 million (Klarén, 1992, 46), which exacerbated the landlessness problem in the countryside and motivated rural migration to urban centers and the coast.

Concurrently, the 1950s and 60s saw a series of peasant strikes throughout five highland departments. Ancash and the Cordillera Blanca had no such radical peasant organization. Worried about the political implications of rising peasant radicalism, President Belaúnde instituted an initial land reform in 1964 that recognized the land invasions and served to notify large landowners of the government's intent to expropriate their land, which led to less investment in agricultural production and precipitated the sale of small parcels of land to peasants (de Janvry, 1981). Nonetheless, these reforms were ultimately failed to satisfy a growing demand for significant social and land reforms.

It was in this context of economic stagnation and socio-political discontent that the Revolutionary Government of the Armed Forces (*Gobierno Revolucionario de las Fuerzas Armadas*, GRFA) took control of the government in a bloodless coup on the 3rd of October, 1968. Led by General Juan Velasco Alvarado, the GRFA was guided by the belief that peace in Peru would only come from social reforms addressing the chronic poverty and underdevelopment in the country. Agrarian reform was not a priority of the GRFA or Velasco, though it is seen as their most significant achievement. On the 24th of June 1969, the "Day of the Indian," Velasco announced the Agrarian Reform Law, vowing to address social and economic inequalities and "establish the bases of real national greatness" (Velfort, 1971).

AGRARIAN REFORM

The Agrarian Reform Law promised to be "an instrument of transformation... that contributed to the social and economic development of the Nation... and increases the production and productivity of the agricultural sector" (Gobierno de Peru, 1969). Notwithstanding their inevitable shortcomings, these reforms dismantled and reimaged Peruvian agriculture at the national level and for rural farming communities alike.

EXPROPRIATIONS

Expropriations began two days after Velasco's June 24th speech and formally ended in June 1976 (Mayer, 2009, 20; Caballero, 1977, 146), addressing *haciendas* and absentee landlords, but also targeting smaller farms (Cleaves and Scurrah, 1980, 119). By 1976, 38.8 percent of land in Peru had been impacted by agrarian reform (Caballero and Alvarez, 1980). Landholdings were categorized and 'standardized' in order to account for the different productive capacities and land values across the country (Caballero and Alvarez, 1980, 99) and the government paid former landowners accordingly. Some large landowners not (yet) affected by agrarian reforms chose to sell off parcels of land as a way of outwitting land reforms, which gave wealthier tenants the opportunity to purchase land themselves (Caballero, 1977, 147; Cleaves and Scurrah, 1980). Those households that currently own private *chacras* in Canray Grande and Cordillera Blanca do so because they or their parents purchased land as the *haciendas* were breaking up, and this land makes these households relatively wealthier because they often access more land and are not confined by sharecropping arrangements. Indeed, De Janvry (1981) notes that while this parcelization benefited more established tenants, most were displaced completely.

The new cooperatives were expected to pay the value of the land they received over 20 years, following a 5-year grace period (Cleaves and Scurrah, 1980, 109n). Though many *haciendas* had been undervalued, this debt was nonetheless overwhelming for many cooperatives and communities, and the government cleared remaining agrarian debts in 1979 (Assies, 1987, 510).

LAND DISTRIBUTION AND THE FORMATION OF COOPERATIVES

Rather than redistributing the expropriated land, Peru's agrarian reform emphasized the creation of larger-scale agricultural units that were communally or cooperatively managed (Assies, 1987). Indeed, while Canray Grande was a single *hacienda*, the cooperative associated with Cordillera Blanca brought together at least four *haciendas*. This model facilitated the distribution process by allowing the government to expropriate an *hacienda* and essentially turn that same land over to the peasant community that had previously been tenants. This additionally enabled tenants to remain on land they often had pre-colonial claims to (Cleaves and Scurrah, 1980, 30). Larger scale agricultural units were also believed to help maintain technological efficiency (Mayer, 2009, 20-22) and facilitated government agricultural extension projects, which served the governments intention to modernize Peru's agricultural sector. The recipients of land were categorized as either 'corporate' or 'not corporate.' Corporate forms of landholding were worker-managed cooperatives, while non-corporate landholdings were controlled by communities and individuals (see table 1).

The CAPs and SAISes were the most significant recipients of land in the agrarian reform, receiving nearly two-thirds of all expropriated land (Caballero and Alvarez, 1980, 25-7). By 1977 the reform had distributed two-thirds of the 7.2 million hectares of expropriated land to 521 CAPs and 58 SAISes (Cleaves and Scurrah, 1980, 221). CAPs were created predominantly along the coast from *haciendas* that had been engaged in commercial agriculture for export, and were controlled by the wage laborers that had previously worked the farms. These cooperatives were legally defined as "indivisible production units in which the ownership of all assets is collective" (de Janvry, 1981, 137); work was to be done collectively and profits were split between members.

Category of landholding	Type of landholding	Proportion of expropriated land (Caballero and Alvarez, 1980, 26)	Key features
Corporate	CAP Agrarian Production Cooperatives	26.1%	Primarily agricultural land, often coastal
	SAIS Agrarian Social Interest Companies	34.7%	Primarily pasture, very large, often poor quality land in the highlands
	EPS Social Property Companies	3.1%	-
Non-corporate	CC Peasant Communities	10.5%	Existed pre-reform, communal land title but individual labor
	GC Peasant Groups	21.0%	Brought together distinct small communities
	Individuals	4.3%	-

Table 1: Types of landholdings in Peru's agrarian reform

SAISes, on the other hand, were more common in the highlands, where the government would consolidate multiple *haciendas* to create large areas for livestock pasturing. The SAISes were less oriented towards profitability and exports than the CAPs, and individual members were expected to sustain their households with *chacras* on marginal land within the cooperative. Even where small profits were made, they were immediately consumed and not reinvested in technology, further limiting the productivity of these cooperatives (Cleaves and Scurrah, 1980, 231).

While most *haciendas* were only collectivized following the agrarian reforms, a number of the *haciendas* in the area around what are now Canray Grande and Cordillera Blanca formed the Utcuyacu Agricultural Society (SAGUL), a livestock enterprise (TMI, 2017, 8). Following the reforms, the SAGUL was divided into SAIS Atusparia and SAIS Sucre, which was much smaller and made up of only the land that is now Canray Grande.

Therefore, the communities in these areas were repeatedly brought together and divided during this time, and many households in one community have relatives in the neighboring communities.

The expropriated land that was not earmarked for CAPs and SAISes was divided between Peasant Communities (10.5%), Peasant Groups (21%) and individuals (4.3%) (Caballero and Alvarez, 1980, 26). Peasant Communities, known as Indigenous Communities before the reforms⁶, pre-dated the agrarian reform. High costs and bureaucracy, however, had prevented many communities from gaining land titles. Peasant Communities persisted through the twentieth century, bringing together communal pasture management, community infrastructure and local self-governance structures, as well as farming at the level of the household. Those communities that received land as part of the reforms were not allowed to divide up the land, and the government, through extension workers, encouraged communities to collectively engage improved technologies and become more market oriented (Mayer, 2009, 29). Those peasants that were neither tied to an *hacienda* nor members of a peasant community were organized into Peasant Groups with the expectation of organizing into a cooperative structure or become a recognized Peasant Community (Mayer, 2009, 20).

Large CAPs and SAISes, as well as Peasant Groups, often brought together different groups of workers, creating artificial communities and expecting of communal self-management.⁷ Consequently, the management of these cooperatives was often complicated and brought out tensions between members and laborers. Indeed, these tensions, which were later deliberately stoked by the violence of Sendero Luminoso⁸, contributed to the dissolution

⁶ Currently both Peasant Communities and Indigenous Communities exist, and are distinct legal designations.

⁷ Mayer (2009, 20) highlights the how agrarian reform concentrated and collectivized land, creating 1,708 cooperatives from 15,000 expropriated units.

⁸ Sendero Luminoso is intrinsically linked to the story of Agrarian reform in the highlands, in opposition to the GRFA in the 1980s. Led by Abimael Guzmán, the group adopted extreme Maoist ideologies and used violent guerrilla tactics, including intimidation and real violence, specifically the executions of community leaders, to destabilize what they perceived as the old order. Highland SAISes were a particular target. In the 1990s,

of these cooperatives in the 1980s. Such conflicts were particularly harmful in SAIS Atusparia, which gradually dissolved to form two communities – Cordillera Blanca and Los Andes de Recuay. These conflicts have continued to plague communal governance in Los Andes de Recuay, though do not continue to impact Cordillera Blanca in a noticeable way.

Moreover, Sendero Luminoso has a minimal presence in Ancash, and no presence in these communities. Sendero therefore did not contribute to the dissolution of the SAISes in these communities as it did in the Southern Peruvian Andes. The threat of Sendero Luminoso, however, was nonetheless present and remembered by community members.

“FROM HACIENDA TO COMMUNITY”

By the 1990s, barely 20 years after the first expropriations, large cooperatives were no longer prominent in rural agricultural landscapes. As seen in land reform elsewhere, few cooperatives had been profitable; they were riddled by internal conflicts, and without continued government support and subsidization they were no longer seen as a viable form of agricultural production. Simultaneously, as Peru’s export revenues stagnated in the late 70s, the government adopted austerity measures, as well as IMF guidelines, and promoted the non-traditional exports that cooperatives were unequipped to produce (Assies, 1987, 511). By the 1980s, and under the influence of neoliberal thinking, government policy also began to encourage the breakup of the cooperatives. Nearly five decades after agrarian reform was introduced in Peru, “small-scale, household-based rural peasant economies have become the predominant units of production in the countryside (Mayer, 2009, 33).

During the 1980s many cooperatives became private landholdings as the members voted to break up the cooperative (Sheahan, 1992, 184). The parcelization of the cooperatives

Fujimori placed highland communities at the center of this conflict by arming the *rondas campesinas* that defended the communities’ animals from theft. Even in regions and communities not directly impacted by Sendero Luminoso, the intimidation and violence remain part of the national memory, especially in rural areas.

was especially prominent in the coastal CAPs that were heavily in debt, and struggled with decreasing production (Mayer, 2009, 31-2). While this marks a failure in the agrarian reform, the result of the break-up of the cooperatives was still more equitable than land tenure before the reforms and where the land was divided among the members, Assies (1987) notes that certain cooperative structures remained in place. Moreover, this distribution of land gave *campesinos* that belonged to these communities more autonomy than they had had either while working on the *hacienda* or the cooperatives. Each household was now the main decision maker about how their land would be managed and their harvest distributed, rather than simply being laborers for someone else's economic benefit. Especially given that the land reform did not, ultimately, redistribute any considerable area of land to each household, the autonomy and decision-making power each household gained from this agrarian reform process marked an important change in rural livelihoods.

In the dissolution of the cooperatives, many former SAISes transitioned into Peasant Communities. The number of recognized communities doubled from 2,228 when Velasco first took power, and 4,792 in 1991 (Trivelli, 1992, 24; Mayer, 2009, 29). In the face of national economic crisis in the 1980s, the adoption of neoliberal policies, as well as the rise of Sendero Luminoso, the communal structure and support networks provided by Peasant Communities were a mechanism of self-defense and resilience. Communities continue to be recognized and titled today. Currently over 5,000 communities are titled and between 6,000 and 7,000 are recognized⁹ (CEPES, 2016, 6-7). Moreover, this legal recognition gives the community the right to self-governance, to define rules, rights and obligations within the community (Smith, 1991, 8). Mayer (2009) ultimately sees these Peasant Communities as undeniably being the clearest beneficiaries of the agrarian reform in the highlands.

⁹ The 2016 directory of Peasant Communities (CEPES, 2016) demonstrates the different numbers of both titled and recognized communities collected by various government ministries.

Cordillera Blanca and Canray Grande are two such communities. In 1982, Canray Grande was the first community to become recognized, and it was not until 1992 that Los Andes de Recuay and Cordillera Blanca became recognized as communities. The transition from cooperatives to Peasant Communities, however, was not as straightforward as in other communities. Contested land claims emerged from the repeated bringing together and breaking up of communities, between Cordillera Blanca and Canray Grande and between Cordillera Blanca and Los Andes de Recuay. Moreover, when the Huascarán National Park was created in 1975, the park boundary cut through the higher pastures belonging to SAIS Atusparia and later Cordillera Blanca. When Cordillera Blanca was finally titled as a community, it did not include the pastures within the park, though the community did retain access and usufruct rights.

SHORTCOMINGS OF THE AGRARIAN REFORM

While Peru's agrarian reform is considered among the most extensive land reforms in Latin America (Klarén, 1992; Mayer, 2009), especially for its success in dismantling the rural social hierarchies and the power of the *haciendas*, the reforms were unsuccessful on a number of fronts. These failures were not only due to issues with the reform process, but can also be attributed to the broader political and economic context in which the cooperatives were operating. The creation of cooperative agriculture failed to increase production and modernize the agricultural sector. Instead, Peru lost its sugar and cotton export industries, and ultimately increased the amount of food being imported (Mayer, 2009, 23), a loss felt particularly by the CAPS and coastal farmers. There is also a general consensus that the reforms resulted in the proletarianization of the peasant class, as they were forced to augment incomes from agricultural production with wage labor (Assies, 1987, 510; Mayer, 2009, 26;

Caballero, 1977, 149; De Janvry, 1981, 138-9).

Though it has not impacted the experience of *campesinos* in Peasant Communities today, the largest failure of the agrarian form cannot be overlooked. The reforms did not address issue of landlessness for millions of rural laborers. Official estimates claim that only 38 percent of households engaged in agriculture and herding benefited from the reforms, though Caballero (1977) disputes this claim, suggesting that in fact only 22 percent of agricultural workers were able to find a permanent source of work that paid enough to meet basic household needs. De Janvry (198) contextualizes the scale of this shortcoming; the reform process ignored approximately three million landless laborers, or a quarter of Peru's population (138).

Presently, community assemblies govern both Cordillera Blanca and Canray Grande. Community leaders are democratically elected every two years and make community-wide decisions about how land is managed and distributed. Land use in each community reflects historical land use – Canray Grande historically had and continues to have agricultural land, whereas Cordillera Blanca does not. How land is managed, however, is in stark contrast to the cooperatives. Rather than collective production, individual households work the land assigned to them, as was the custom in *ayllus*. While these communities were created through the process of agrarian reform, land and labor management rationales do not reflect those promoted by the GRFA.

CHAPTER 4: HOUSEHOLD ACTIVITIES IN C.C. CANRAY GRANDE AND C.C. CORDILLERA BLANCA

Getting onto the *combi* in Huaraz, I got more than a few funny looks. In all fairness I am indisputably *gringa* and I was getting the bus to Huaripampa, a small town where most of the *comuneros* of the Canray Grande Peasant Community and their families lived. While some of the more adventurous or frugal tourists in Huaraz will take *combis* to stunning and less popular hikes outside of the city, Huaripampa was not the start of any such hike. I eased myself into a spot next to an older woman, who was wearing a colorful skirt and beautiful cream hat that few Andean women continue to wear, and tried not to bump her with what now felt like my oversized backpack in the small minibuss. She looked at me, and asked where a *gringuita* like me was going. As we waited for the *combi* to fill up with passengers, I explained that I was on my way to Huaripampa to do interviews about how people in the community farm and use their *chacras*, and how people lived more generally.

It struck this woman that I would choose Canray Grande for these interviews. The community has not often been the site of research projects, and certainly not projects like this, that focus on household agriculture. Most of academic work on rural Peruvian livelihoods has focused on the south of Peru, in and around the departments of Cusco and Puno, and while the Cordillera Blanca have recently become of more interest to researchers, this work centers on the impacts of climate change on tropical glaciers and hydrological systems. Though this research makes references to the livelihoods in this region, it only further complicates the question of why peasant agriculture persists within this changing landscape.

This and the following chapter detail my key findings from time spent and interviews conducted in both C.C. Canray Grande and C.C. Cordillera Blanca. Here, I begin by

describing the main characteristics of households in both communities, and look at how the household is distributed between the *puna*, the village and the city. I then examine how households combine small-scale agriculture, herding and, oftentimes, daily wage labor to meet their families' needs. I end with a look at how household and hired labor are organized for the *chacra*, and a brief summary of the kinds of animals raised in these communities.

HOUSEHOLD CHARACTERISTICS

The landscape very quickly becomes agricultural leaving Huaraz. The bus follows the main highway that runs along the Callejón de las Huaylas. On either side of the Santa River are fields growing vegetables, maize and cereals. At the turn off for Huaripampa, the *combi* quickly climbs 1000 feet and the river gets further away. The street at the center of Huaripampa is paved, but soon become dirt roads as I walk to my research assistant's house just off the main street. I knock on the door of her parents' house and wait for her to get her

things before we start our walk up into the community.



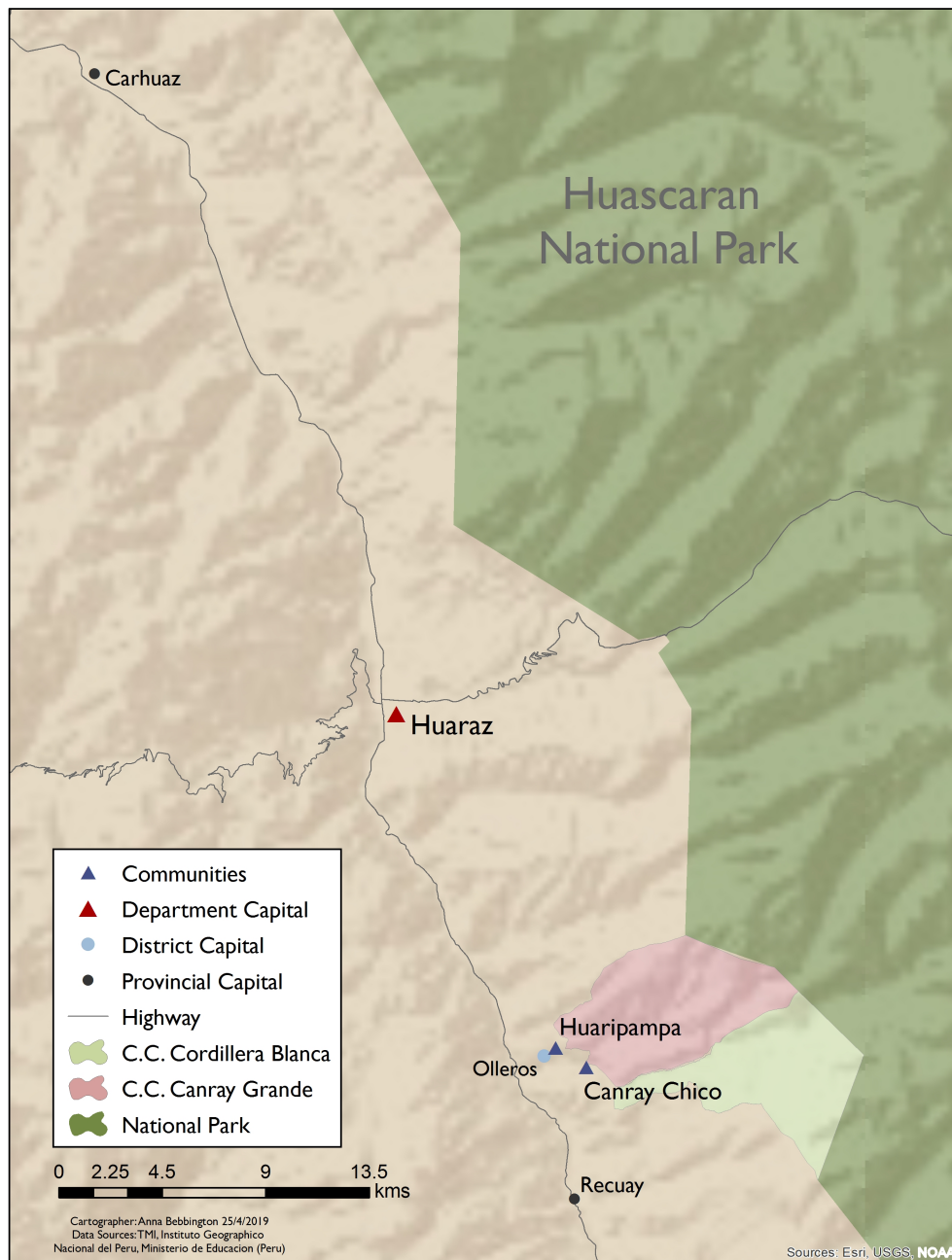
Image 3: Main plaza of Huaripampa
photo by author

Most families that belong to the Canray Grande community live in Huaripampa, though some do live inside the community, either in *caseríos*, which are small clusters of houses along the road, or in Canraypampa, the *centro poblado*, or small village around the community buildings. Only

Huaripampa, though, has a primary school, soccer fields, churches and a number of small shops that sell bread, meat and fizzy drinks, in addition to a direct bus route to Huaraz, all of

which makes it the commercial center for the community. Given all of these services, a number of families that are not *comuneros* in Canray Grande also live in Huaripampa.

Unlike in Canray Grande, the Cordillera Blanca Peasant Community does not have a main commercial town where *comuneros* live. The majority of *comuneros* live either in *centro poblado* Canray Chico, which is along the road that links Olleros to the community



Map 2: Research Communities

buildings and communal fields in Acocancha, or in *centro poblado* Achic, which is smaller and the main agricultural sector outside of the community. Unlike in Huaripampa, there are no permanent dwellings within the community, though it is not clear why this is the case. Neither of these *centros poblados* have any significant commercial activity or services. Canray Chico only has a church and a couple of very small shops selling a limited number of items, such as toilet paper and beer, and children are sent to Olleros for school. As such, households that are not linked to the community do not live in either *centro poblado*.

While the majority of households live in the *centro poblados*, or towns, households that herd their animals in the *puna*, the highland pastures, will usually have a *choza*, or hut, in their *manada*, the area where they herd their animals. This allows the herder to sleep near the animals to protect them from theft or predators. In Cordillera Blanca in particular, it is common for one family member, usually the women of the household, to live in the *puna* for weeks at a time while the rest of the household lives in town so that children can go to school and men can work in the *chacra* or at odd jobs.



Image 4: Multigenerational family outside their home in CCCB photo by author

Many households in Cordillera Blanca and Canray Grande have family members living in Huaraz, Lima and other cities in coastal Ancash. As is the case across the Andes, these communities are strongly influenced by outmigration. Children that are studying at university will often live in Lima or Huaraz with the financial support of their families. It is not unusual for most or all adult children in a household to no longer live in the community.

“I have five daughters, but they’re no longer by my side. They’ve gone to Lima...with my husband, it’s just us now” [Carolina, age 68, CCCG]

“Only the two of us live here, our kids have gone now. They’re in Huaraz, some have gone further away, others are just up here.” [Carmen, age 48, CCCB]

Younger people, especially those who have not yet inherited member-status from their parents and therefore do not have access to agricultural land or pastures, have limited opportunities if they stay in the communities. While parents would prefer that their children stay in the community, children are often eager to move on. My research assistant in Canray Grande, Andrea, explained this tension from her own experience. She had graduated from high school the year before, and had spent her time since helping her mother herd their sheep in the *puna*. It was hard work, and she could not imagine herding in the future. She was interested in cosmetology and wanted to study psychology at university, which she could not do in Huaraz or in Huaripampa. When we began working together, she said she was planning on going to Lima for a couple of weeks to visit her grandmother, but her mother worried she would end up staying on much longer. And her mother was not wrong, because nine months later, Andrea was still in Lima, working and studying. Community members are aware that the incentives to leave are particularly acute if children are educated and have professional jobs or training.

“If there are job opportunities for the kids that are already studying in Huaraz, they migrate. And maybe in the future all of this will be deserted because no one wants it, the kids are going forward, they always aim for their studies, to be professionals, and there aren’t job opportunities for professional here.” [César, age 61, CCCB]

As Huaraz has grown as a city, and as educational and employment opportunities have grown, children are able to remain closer by. But young people leave and the community is impacted nonetheless. Those who stay in the community are ultimately those families that have access to land, as well as school-age children and single mothers that have come back to live with their families.

“We are six. But of the six, one is already out of the family, two are studying at university, and I have the youngest in first grade here in Canray. So we are three that are here right now.” [David, age 47, CCCB]

This outmigration has left Canray Grande and Cordillera Blanca with aging populations – only 7 percent and 10 percent of *comuneros* are under 35, respectively – that are increasingly unable to engage in agriculture and herding themselves.

In the past, this outmigration has not always been permanent. A number of older men in their fifties and sixties, as well as one younger *campesino*, I spoke to had left their communities for work in the cities when they were younger, only to return either when they inherited land or started their families. It is unclear, however, how many *campesinos* return compared to how leave their communities permanently. Moreover, as cities offer more opportunities, it is not apparent that those who leave will return to farm and herd in their communities. Finally, some *comuneros* will live in Huaraz, or even Lima, and return to the community periodically to meet their community obligations and cultivate their *chacras*, though this is not common.

While kinship networks and large intergenerational households often characterize Andean communities, the household in these communities is smaller and often analogous with the nuclear family. The household includes those who live together under the same roof. This may include an elderly parent, and often does include single mothers. However, once a child moves out, even if they stay within the community, they are referred to as being

“outside of the household.” Notwithstanding the emphasis on the nuclear family, there are certain practices, such as herding arrangements and gifting harvest, that do reflect more extended familial networks, and can include family members that both live within the community and in the city.

HOUSEHOLD ACTIVITIES

Households in Canray Grande and Cordillera Blanca engage in three principal economic activities: cultivating their *chacras*, raising livestock, and doing day labor. Almost all households in both communities have a *chacra* that they plant every year, though the number of crops grown, the amount of land cultivated, and the proportion of the harvest that is sold at market varies both between households and between the two communities. That the *chacra* is critical to their households’ subsistence is indisputable. For most families, their *chacras* are their main source of food and the idea of not cultivating a *chacra* is completely unthinkable in part because

“well, it is the custom here, to sow”

[Octavio, age 20, CCCG]

but also because

“the chacra gives us life, for those of us from this region. If we didn’t have a chacra, what would we feed ourselves with? There wouldn’t be grass for the animals. There wouldn’t be agricultural production for human beings. It is the best, thanks to the Lord who has given us life” [Ricardo, age 69, CCCG]

The *chacra* has long been part of the



Image 5: Female herder milking her cow photo by author

livelihood strategies of households in these communities, to feed themselves and to have a small income. Those that do not cultivate their own *chacra*, usually because of old age, will either hire day laborers or family to work on a very small plot. If they have children in the community, their children will give their elderly parent a portion of their own harvest.

Yet livelihood strategies are not solely based on agriculture. Both Canray Grande and Cordillera Blanca are herding communities, meaning that a large portion of the community is pastureland, and *comuneros* are expected to raise livestock, primarily sheep and cows. Animals are raised under different herding arrangements, either in the *puna* if they have larger herds, or in their *chacras* if they only have a few animals. Sheep and cows are a source of income, from their meat and wool, a source of food, from their meat and milk, a source of fertilizer and labor, in the case of bulls. Many *campesinos* also have horses or donkeys for transport and use in the *chacra*. Women will additionally raise smaller, domestic animals, including guinea pigs, chickens, and pigs, as sources of protein.

Finally, men will also engage in day labor as an additional source of income. Typically, this means working in someone's *chacra*, either because it is a physically demanding task like plowing, or because the owner of the *chacra* are not able to work themselves. Other sources of wage labor include herding other people's animals, herding the communal livestock, working with tourists, doing woodwork and construction, or working on municipal projects, though there are more limited opportunities for these jobs. Only a few *comuneros* work in Huaraz, sometimes doing a few days of labor, or driving taxis. This wage-based work is an important source of income and allows households to purchase agricultural inputs, pay for laborers themselves, pay the bus fare to Huaraz, and buy additional food.

While each activity serves its own purpose, together they form a larger productive

agro-pastoral system and, ultimately, part of a larger livelihood strategy for households in these communities.

“we maintain ourselves from all of it. Now, in the chacra there isn't money, from livestock there is some [money] for other things, like sugar, like rice, for those things we sell, and with that [money] we buy. Instead of working, we sell [animals] and buy other things, necessities.” [Marco, age 61, CCCB]

“in the chacra, we sow, and with livestock in the puna, we breed sheep that cover the gaps we have... to sell them to be able to buy some mineral fertilizer, for the chacra. And from the chacra, you take some of your product, your potato, and take it to the puna so you can eat in the puna. And that is basically the exchange. You take from your chacra, eat in the puna, take your animal, sell it and invest it in your chacra” [David, age 47, CCCB]

Households report that the *chacra* is their principal source of food, which allows them to raise livestock, which does not generate a regular income. The income from selling livestock is, in turn, critical to buying fertilizer and insecticide for the *chacra*, in order for the *chacra* to produce enough for the household to eat from. Neither the *chacra* nor livestock is a sustainable activity on its own, but together they sustain each other when all goes to plan. Given the risk inherent in the environment and the poverty in these communities, however, this cycle of productive resources is quite vulnerable.

In addition to these three main economic activities, *campesinos* must meet monthly community obligations, such as attending community meetings and *faenas*, where *comuneros* work together on community infrastructure or communal agriculture. The *campesinos* I talked to stressed that they were in control of their own time and not beholden to the nine-to-five workday in the city.

AGRICULTURAL LABOR

Chacra agriculture in these communities, especially compared to coastal export agriculture, is low input. Fertilizer, insecticide and renting a tractor constitute the main expenses. Labor, therefore, is the largest input in the *chacra*. Rather than being a monetary



Image 6: Husband and wife harvesting potatoes together *photo by author*

expense, however, the cost is absorbed by the *campesino* because it is largely household labor. During key moments in the agricultural calendar (see figure 1), when the *chacra* is being sowed or harvested, the entire family may be brought in, including family members that live in Huaraz.

Campesinos in both communities told me that everyone that could works in the *chacra*. However, over the course of conversations it became clear that for certain agricultural tasks there is a definite gendered division of labor. Women cannot plow by hand. Women cannot *aporcar*, or mound soil around young plants.

“The only thing I need women for is for sowing potatoes, just that” [Rafael, age 54, CCCB]

Pablo was quick to explain, however, that while women do not do much physical labor in the *chacra*, they are part of a larger system of household cooperation.

“I prepare the land with my tractor. And my wife prepares lunch. We’re evaluating how we are both working for this harvest, her with the lunch and me in the chacra... we’re working equally, dividing the work. And I evaluate, when my wife is cooking, I help her cooking as well, or I look for firewood. That is the commitment of life with my wife.”

Moreover, women are often the main herder for livestock in the *puna*. Chores such as gathering firewood, are typically a man's job, and childcare, processing crops and selling crops at market, are often the responsibility of women.

Hired Farmhands

Since women are deemed unable to help with the most physically demanding agricultural tasks, it is common to hire day laborers. This is a particularly necessary form of labor if the *campesino* is unable to do any labor himself due to illness or old age. Day laborers are hired from within the community, and the terms of day labor are clearly defined. The laborer is paid s/. 30 (approximately \$9) for his days work, in addition to being given breakfast, lunch, a soda or beer, and coca leaf. Day labor is an important source of income for many households, since it can be used to buy additional food items or pay day laborers themselves.

Hiring labor, however, is expensive, since the *campesino* usually has to hire more than one worker, and provide all of their food and drinks. This expense can be particularly prohibitive for poorer households. Many *campesinos*, especially in Cordillera Blanca, therefore rely on *rantin*, or a mutual exchange of labor, to complete large agricultural tasks.

“sometimes a group of us will get together, what we call rantin, which means one day in mine [chacra], one day in yours, the other day in his, like that. In Quechua we call that rantin” [David, age 47, CCCB]

While *rantin* provides a less expensive option for many *campesinos*, it is not an option for women and older *campesinos*, since they are not considered to be able to work as well. While *rantin* remains important younger laborers are increasingly not interested in reciprocal labor, and prefer to be paid.

LIVESTOCK AND OTHER ANIMALS

In Cordillera Blanca and Canray Grande, there are three main categories of animals, and each play an important role in *campesinos* livelihoods. Livestock are usually raised in the highland pastures within the community. There are also domestic animals that are raised in and around the *chacra*, and are for household consumption. Finally, horses and donkeys are used by the household and in the *chacra*, and move between the *puna* and the *chacra* as needed.

Cows and sheep are raised in the pastures each *comunero* is allocated by the community. Typically, herds are kept in the *puna* until they are ready to be sold, though some *campesinos* will bring young animals to the *chacra* to protect them from the cold. Bulls may be brought down to plow the *chacras* as well as to be fattened up before being sold, and milk cows are kept in the *chacra* so that they can be milked. Some *comuneros* with fewer animals will keep their animals in the *chacra* year-round, and have them graze in fallow pastures. This also facilitates the collection of sheep manure to be put on the *chacra*, though many *campesinos* will collect manure from the *puna* and transport it to the *chacra*. In the past, *campesinos* would do a *majada*, in which their animals would sleep in the *chacra*, therefore naturally fertilizing it over a long period of time. This tradition has largely been lost because of a rise in animal theft, making it necessary to constantly watch the animals and keep them close to the herder and watchdogs at night.

Domestic animals, such as guinea pigs, chickens and pigs, are an important source of protein for the household, though are not eaten daily. They additionally provide manure for the *chacra*. Though not common, two different *campesinos* in Cordillera Blanca explained that they were raising guinea pigs for the market, since they do not require a lot of pasture and can provide an additional source of income. Chickens provide the household with regular

protein from eggs, and sometimes chicken itself, and pigs are infrequently slaughtered for their meat.

Though most households only own a couple horses and donkeys, they are particularly important to *campesinos*. Very few households have a vehicle, which makes horses and donkeys the main form of transportation for humans within the community, for manure and the harvest. In the absence of bulls *campesinos* may use their donkeys and horses to plow, making them indispensable.

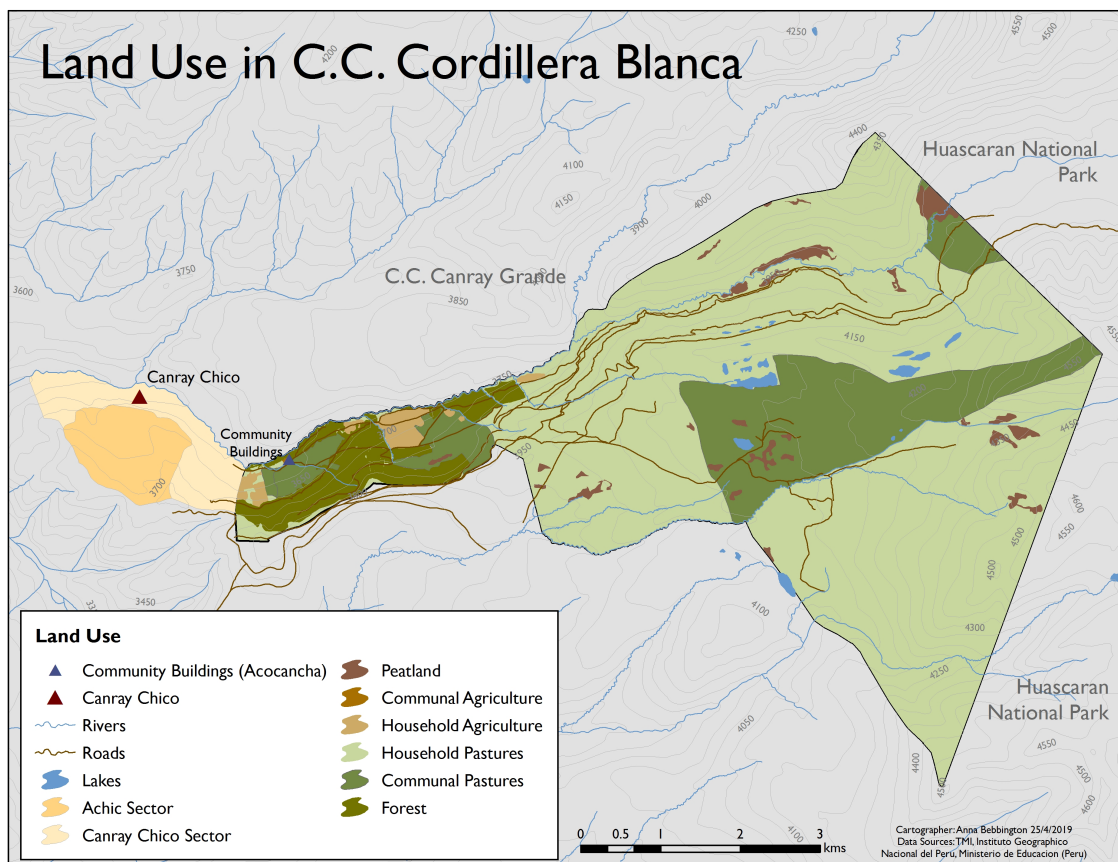
CHAPTER 5: THE *CHACRA*: A SOURCE OF FOOD, A SOURCE OF LIVELIHOOD

I asked Aldo why the *chacra* is important to him. Leaning against a wall along the road through Canray Chico, he laughed and said, “*to live! Of course, we sow to live.*” My interest in the *chacra* seemed silly to a lot of the people I talked to. To them, the *chacra* is simply part of life, a constant in their week, their livelihood portfolio and their community. It is important, but not noteworthy. From the conversations that I had in both communities, however, it is clear that the *chacra* is neither simple nor uniform across households. Rather, households are constantly making decisions about how to piece together land, how to manage their different plots, which crops to grow when and why, and how to manage their harvest; decisions that make the *chacra* deeply significant to those who work it. These decisions, strategies and significances highlight that working the *chacra* cannot and should not be simplified by outside analyses.

The following section examines many features of the *chacras* in these communities, including how different households piece together agricultural land through different tenancy arrangements, the seasonal nature of agriculture and evolving strategies for managing fields. I also include a detailed account of the crops commonly grown in both communities, as well as a shorter section on how each household makes calculations about how the harvest will be consumed, sold and gifted. I end with a section that seeks to step back from the quotidian nature of *chacra* management, and highlight the larger significance of the *chacra* in the lives and livelihoods of peasants in these communities.

ACCESSING AGRICULTURAL LAND

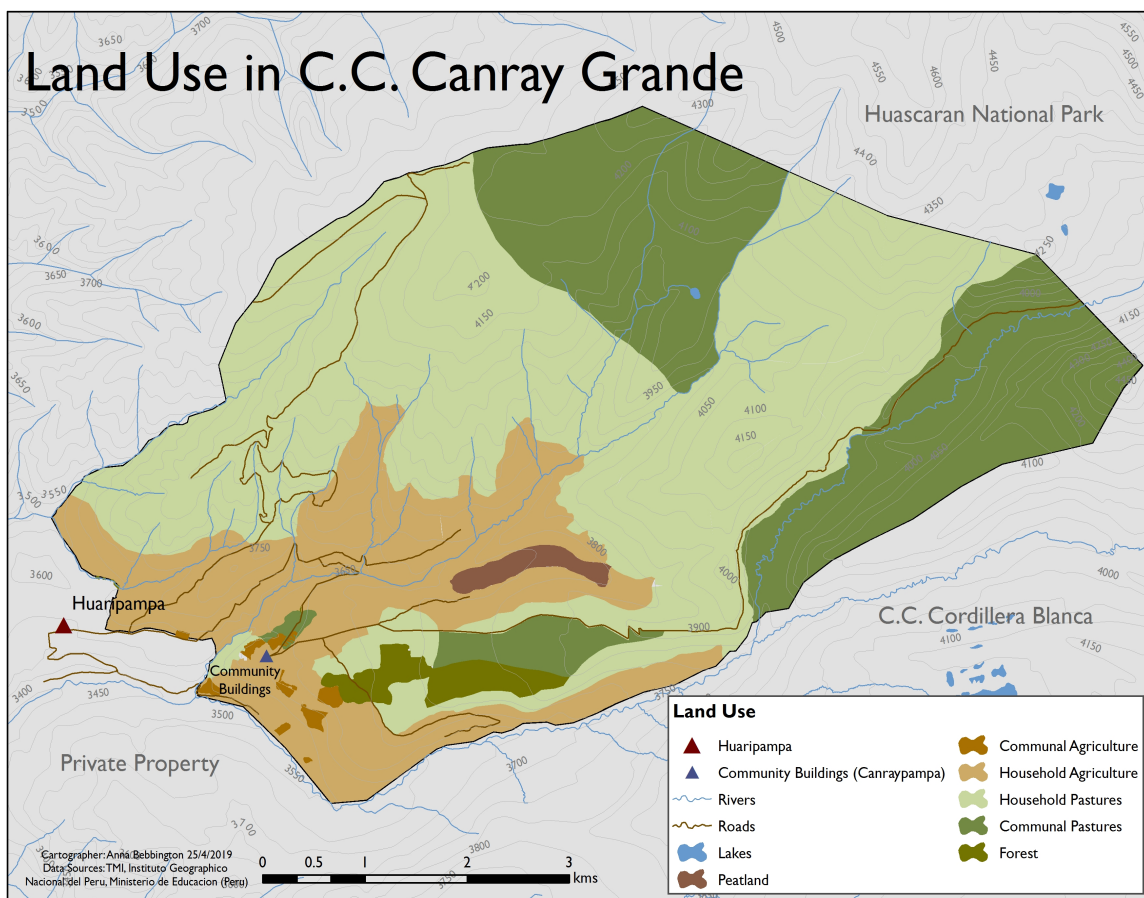
The Peruvian agrarian reform promised ‘land for those who work it,’ and the creation of Peasant Communities has given many communities a communal title to land, which provides community members secure land tenure. Since both Canray Grande and Cordillera Blanca are registered Peasant Communities, I went into this research with the understanding that the *comuneros* had secure land access and individual usufruct rights. Over the course of my fieldwork in both communities, however, it became increasingly clear that accessing agricultural land was much more complicated than I understood. In reality, households access agricultural land inside and outside of the community, and might access the land directly (through inheritance or purchase), indirectly (through family) or through sharecropping agreements.



Map 3: Land Use in C.C. Cordillera Blanca

Land in Cordillera Blanca is almost entirely dedicated to pastoralism. Agriculture is only allowed at the entrance to the community, which also happens to be the lowest altitude in the community making it more suited to agriculture. There are a few communal fields around the community buildings that are used for communal agriculture only. The harvest from these fields is either consumed during community events, such as *faenas*, or is sold and that income used for community expenses. Every community member is also given a small plot in this area that they are allowed to cultivate. Most households choose to use these plots for grazing animals closer to their homes, either because the soil quality is not good or because their plots have peatlands that ensure good pasture year-round.

In Canray Grande, however, nearly 20 percent of land in the community is dedicated



Map 4: Land Use in C.C. Canray Grande

to individual agriculture. Every household is entitled to agricultural plots within the community. The distribution of the plots is regulated by the Agricultural Committee, which uses a land register to track what land has become available as *comuneros* stop working the land or pass away. However, the land register has not been kept up to date, meaning that land is currently not being distributed. Though the *comuneros* do not own the land they work within the community, they do have exclusive usufruct rights, and children can inherit land when parents transfer their member-status to their children.

Most households also cultivate private land that they own themselves. While some *campesinos* have bought *chacras*, the majority have inherited their *chacras* from their parents or through marriage. Rarely, parents will give their children plots of land to work, rent-free. Private *chacras* tend to be relatively close to the towns or *centros poblados*, and it is not uncommon for these plots to not be contiguous.

Finally, those who do not inherit any substantial amount of land and are not able to access communal land enter into sharecropping arrangements. *Campesinos* describe the arrangement as cultivating *al medias* or *al partir*, and call themselves *medianeros*, which comes from the harvest being split evenly between the *chacra's* owner and the laborer. The owner is expected to provide all of the inputs, including seeds, fertilizer, insecticide and the tractor, therefore absorbing the monetary costs. The laborer in turn is expected to do all of the physical labor. While this arrangement means that the financial risk is on the owner, it also means that the harvest that the household receives is much smaller, limiting their ability to store or sell surplus crops. These households consume most of the harvest.

“It’s all for consumption, nothing else. The thing is that when you divide [the harvest], it isn’t a lot, [it’s] a little” [Lina, age 28, CCCB]

This is a particular problem when there is a bad harvest, when both the owner and laborer can be left with only a few sacks of potatoes, not even enough to see the

household through until the next harvest. *Medianeros* are also at risk of losing access to the land at the whim of the owner. *Chacras* that are cultivated *al medias*, while present in Canray Grande, are very common in Cordillera Blanca, marking a key difference in agriculture between the two communities.

Some *campesinos* access all of their land in a single way, either it is all community land, or all private, or all sharecropped. More often, however, households piece together their *chacras*, from community and private land in Canray Grande, and from private land and sharecropping arrangements in Cordillera Blanca.

“I cultivate al medias... and another part is my father’s, the inheritance from my father, and another part is from my father-in-law. My father-in-law gave me a plot, he gave me a kind of loan, because it isn’t an inheritance or anything. ‘Cultivate it, the product is yours.’ So I maintain that plot. And one part is from my father, since he passed away, between siblings I’ve said I will be cultivating it. And another part I cultivate al medias.” [Manuel, age 35, CCCB]

Since there is no one way land is accessed, the amount of land that a household cultivates varies widely within both communities. It also complicates accurately accounting for the amount of land each household cultivates, especially given the informality in these arrangements. Based on estimates from the community censuses and interviews, households might formally access as little as half a hectare and as much as ten hectares, though most households seem to have formal access to between two and four hectares. It is also very likely that those households that have formal access to less land supplement it with sharecropping. The way that households access agricultural land, and the obligations that come with that access, therefore constrain the decisions the household can make about how the *chacra* is managed.

CHACRA MANAGEMENT

I stopped to catch my breath as we climbed up to the ridge that marked the extent of Pablo's *chacra*. "You have a spectacular view of Huantsán." The snow-capped peak stood in contrast to the clear blue July sky. It was the dry season; barely a cloud in the sky and the community was in *plena cosecha*, the height of the harvest. The *comuneros* had mostly finished harvesting their potatoes and were in the middle of the cereal harvest, before they would begin to prepare their *chacras* for planting in October and November.

Agriculture in Cordillera Blanca and Canray Grande is dictated by the seasons: the dry season and the rainy season. Almost all agriculture is rain-fed, so there is a single harvest per year (see figure 1). The *chacra* is planted at the beginning of the rainy season, between October and December, or sometimes as late as January, when the rain will water the young crops, night temperatures do not drop and there is less risk of frost. *Campesinos* begin harvesting their *chacras* in May through until August, depending on the crop, when it was planted, and the altitude of the *chacra*.

"The story is that we begin preparing in March, in order to sow in October, November. First we cultivate with the barreta or with a machine, where it can get into the chacra. Then we break up the earth. Then we sow in October, up until November. That's the cultivation plan for potatoes. If it is cereal, then in November until December" [Ricardo, age 69, CCCB]



Image 7: Harvesting high altitude potatoes *photo by author*

Even though all households grow at least one cereal, the agricultural calendar revolves around the potato, likely because it is the most labor-intensive crop and expensive crop to grow. When Ricardo sows his *chacra* with potatoes, he knows he has to use mixed fertilizer, both manure from his animals and chemical fertilizer. He has to fumigate his *chacra*, more than once, to protect the potatoes from insects and potato blight. He knows he will have to *aporcar*, or mound soil around the stem of the plant to help it form roots and protect it from the soil, which can only be done by hand. He has to do the first *aporque*, and then fumigate, when the plant is only small, and repeat this process twice more as the potato plant grows. Finally, once his *chacra* is ready for harvest at the beginning of the dry season, he will harvest the *chacra* by hand, using a *pico* to break up the soil and roots so he can pull out the potatoes. In contrast, cereals and broad beans are only weeded between planting and

harvesting, and the harvest is much less back breaking.

Potatoes also ultimately decide the rotation of crops in a *chacra*. Potatoes require good quality soil and so are planted directly after a *chacra* has been fallowed and there is the most organic material in the soil, though even then they require fertilizer. The year after potato is harvested is called *callpar*, because the soil is still rich in nutrients and organic material from the fallow. Most *campesinos* will grow cereals – wheat, barley or oats – depending on the altitude of the *chacra* and household preference. The cereal harvest is followed either with broad beans or a second year of cereals. Some households cultivate for a fourth year, planting cereals after broad beans. Planting cereals for more than one cycle is slightly more common in Cordillera Blanca. The *chacra* is then left fallow.

The above crop rotation cycle is the most basic rotation since most households grow potatoes, wheat and broad beans. *Oca*, *olluco* and peas are all commonly grown and fit into the above crop rotation. *Oca* and *Olluco*, like potato, require good quality soil, so they might be grown in place of potato, or more commonly in the year after the potato, in *callpar*. Peas are typically grown in place of or after broad beans. Quinoa, *chocho* and maize, the other fairly common crops, do not enter into this rotation. Quinoa and *chocho* are usually grown along the sides of the *chacra*, in small quantities. Maize, on the other hand, is grown for multiple years in a row in the same *chacra*, because maize must be grown at relatively low altitudes.

Chacras are left fallow as part of the crop rotation, though the length of the fallow varies considerably within communities and even between *chacras* held by the same family. The length of the fallow can depend on the quality of the soil, how long the *chacra* has been cultivated, whether the *campesino* can afford fertilizer and how much land they have access to. As Pablo walked me through his *chacras* he explained that because he had enough land,

he can leave his *chacras* fallow for five to six years. But he recognizes that some other *comuneros* who do not have much land are only able to fallow their *chacras* for a year, if at all. Juan reflects on how their limited access to land dictates how long they can fallow their *chacra*:

“well, sometimes [we rest the chacra for] 2 years, 3 years. Since we only have a little bit [of land], sometimes only 2 years, because otherwise where would we go?” [Juan, age 60, CCCG]

Not being able to leave their *chacras* in fallow for long enough, however, hurts the soil quality and subsequent productivity when *campesinos* are already complaining about soil quality. *Campesinos* compensate with chemical fertilizers, increasing expenses.

It is notable that while chemical inputs have been widely adopted, the *campesinos* in both Cordillera Blanca and Canray Grande do not like using fertilizer or insecticides. They are expensive and *campesinos* claim that they change the flavor and texture of potatoes, making them watery. On the other hand, not using chemical inputs is not seen as an option, because “*without it, there isn't a harvest mamita.*” Manure alone does not ensure a good harvest because

“this plot is used to [fertilizer], it doesn't produce with manure anymore. It's only chemicals now. If you don't fumigate, the insects eat everything as well. Yes, it doesn't produce anymore.” [Luis, age 58, CCCG]

Comuneros therefore feel trapped in a cycle of needing to buy expensive chemical fertilizers and insecticides in Huaraz. At between s/. 100 and s/. 200 (\$30-60) a bag for both fertilizer or insecticide, where *campesinos* need to buy a bag for each sack of potatoes they plant, agrochemicals represent a huge cost for all households, even those that are relatively better off. Only the poorest households will not buy chemical fertilizers, though not necessarily out of choice. The cost of these inputs ultimately makes sharecropping arrangements somewhat more appealing, since the owner covers the cost.

Agricultural Calendar

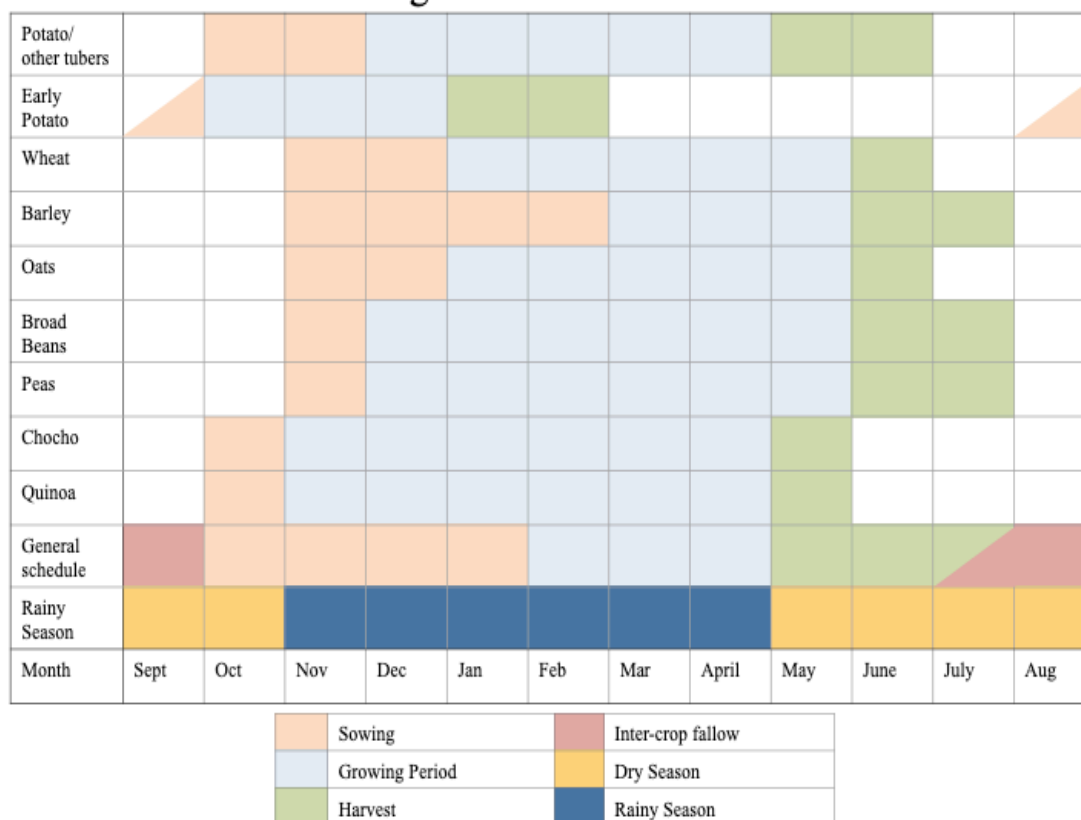


Figure 1: Agricultural Calendar for C.C. Canray Grande and C.C. Cordillera Blanca

The widespread adoption of chemical inputs is puzzling, given that potato agriculture flourished throughout the region for centuries before the advent of agrochemicals. It seems that *campesinos* in these communities initially used guano fertilizer from the coast, and by the 1970s certain families began using chemical fertilizers and insecticides such as Aldrin, which has since been identified as a persistent organic pollutant and a health hazard. The timing of the introduction of chemical inputs overlaps with the Green Revolution and a period of increased influence from the private sector in agricultural extension programs. In the decades since, both communities have moved away from traditional intensive fertilizing (*majada*), and chemical fertilizers have come to replace this practice. While agrochemicals are widely used in both communities, households do not buy seeds. Instead, households will save a portion of the harvest for seeds for the following year in the case of all crops. Only

when a harvest is completely lost, or a farmer wants to grow a new crop, will *campesinos* buy seeds, given the expense.

The use of machinery, specifically tractors, represents a significant shift in how *chacras* in both communities are being managed and a new expense for many households. *Comuneros* are increasingly choosing to plow their *chacras*, especially those that have been in fallow, using a tractor rather than with a *barreta* or with yoke as they have in the past. Breaking up a fallow *chacra* is backbreaking work, even for the youngest *comuneros*, and takes all day with additional laborers, or last several days if done alone. The tractor, on the other hand, can plow a *chacra* in as little as an hour. For some *comuneros*, hiring a tractor seems like an unnecessary expense, but Pablo explained his rationale, that it is ultimately cheaper to rent a tractor than hire additional laborers. Pointing to a *chacra* that had recently been plowed he said,

“this only took an hour, so it cost me [the equivalent of] four sacks of potatoes. So it makes more sense than going in with a barreta because with a barreta I need ten people, so it adds up. Their daily wage, their soda, their coca, everything. With the tractor, however, its only for the driver”

Given the growing popularity of using tractors, Cordillera Blanca bought a communal tractor to lower the cost for the *comuneros*. The tractor broke down some time ago, however, and has not been fixed, seemingly due to a lack of community funds and poor organization by the community assembly. *Campesinos* in both communities, therefore, have to rent tractors from outside of the community. A group of *campesinos* will often hire a tractor together, going from one person's *chacra* to the next in order to share some of the costs. There are, however, many *chacras* that cannot be plowed by tractor, either because the tractor cannot reach the *chacra* or because the slope of the *chacra* is too steep.

WATER

Water, and the lack of water, pose serious limitations on how *campesinos* are able to manage their *chacras*. Currently, agriculture in both communities is largely rain-fed and the rainy season defines the growing season (see figure 1). Irrigation would allow *campesinos* to extend their growing season, as well as protect their crops from frosts. Moreover, irrigated *chacras* would allow *campesinos* to grow different crops, specifically pastures for their animals and vegetables. Both communities recognize that the lack of water for irrigation is a major limitation to their agriculture.

Each community faces unique challenges when it comes to water. Canray Grande has potable water¹⁰ that is piped down from the highest altitudes of the community, on the border with the HNP. This water, however, is intended for household use, watering house garden plants and domestic animals. Standing in Jorge's *chacra* planted with mix of alfalfa, crab grass, and rye grass for his sheep, he says he feels like he can get away with irrigating one



Image 8: Irrigation canal running along the road in Achic, CCCB photo by author

¹⁰ In Peru *agua potable* or potable water does not mean water that is safe to drink. Rather, it just means that the water is not contaminated and can be used safely for household tasks.

chacra with potable water. However he acknowledged that he would not be able to plant another *chacra* with pasture because he would get in trouble for irrigating, but that limits his ability to feed his animals. Other *campesinos* also stress that since they cannot irrigate, they cannot institute many of the things they have learnt in agricultural extension workshops.

While Cordillera Blanca does have a steady source of water from Rio Negro, the water has been very contaminated with a high mineral content since the 1970s, which kills plants and makes animals and people sick. Community members connect the contamination with the devastating earthquake in 1970, though the Mountain Institute attributes this high mineral content to glacial recession, which has exposed rocks with high mineral content (TMI, 2017, 11). With The Mountain Institute, the community built a bio-remediation plant that makes the water usable for animals and agricultural irrigation. A canal directs this treated water up to Achic, where the majority of *chacras* are located, and this canal has allowed *campesinos* to irrigate *chacras* planted with grasses or early potato crops. *Chacras* around Canray Chico, however, do not have access to the treated water.

CROPS

“Without potato, there is no food.” [Jorge, CCCG]

There is no question that the potato is important. Everyone I talked to in Canray Grande and Cordillera Blanca grew potatoes. Every time I had eaten in the communities, I had been served potatoes. Potatoes are practically synonymous with Andean agriculture and Peruvian food, but I wanted to understand why the *campesinos* I was talking to continued to grow potatoes even though they were more labor-intensive and required expensive inputs to grow compared with their other main crops. For Jorge the answer was simple, *“in the diet of the Andean man, it is the basis... if you haven't eaten potato, you're fasting.”* Potato is easily

eaten every day, in soups and stews, as the main course, as *chuño*, as *papa seca* and as *mazamorra de tocosh*, all which are forms of drying and preserving potatoes.

In most of the conversations I had, the *comuneros* said they grew potatoes. Very few distinguished between the two main types of potatoes that you find in the Andes: *papa blanca* and *papa nativa*. These ‘types’ do not refer to single varieties of potatoes, but rather categories of potatoes. *Papa blanca* or white potatoes are generally improved potato varieties. They are less



Image 9: *Papas nativas* photo by author

susceptible to fungi, have higher yields, are nice and round, and fry well, which makes them popular in urban areas. For the *campesinos*, *papas blancas* can also be grown in any kind of soil. Along with urban demand, this makes *papas blancas* a safe choice to grow.

Native varieties or *papas nativas*, however, are preferred for household consumption because of their floury texture and richer flavor. They require specific soil and have lower yields than *papa blanca*. Where *campesinos* might harvest sixty sacks of *papa blanca* from their *chacra*, *papa nativa* harvests can be as low as twenty or forty sacks, depending on the soil quality. Given all of this, Jorge clearly told me that

“the blanca is for general use. At a party with a hundred guests you will spend without thought. But when it is exclusively for the family, well then it’s the papa nativa.”

Being given *papas nativas* in these communities is a real treat, and helps to understand the *campesino*’s rationale for growing them. Lastly, there is less diversity in varieties than might be expected based on potato literature. Among those farmers who were more specific about the varieties they grew, they usually grew only one or two native varieties themselves, and

there were six different native potato varieties named across both communities. However, given that many *campesinos* were not explicit, this should not be taken as a true measure of diversity.

In addition to potatoes, every household grows wheat. Wheat is sown in *chacras* at lower altitudes, and required neither fertilizer nor insecticide. The harvest is generally saved for household consumption, since the grain can be kept for up to five or six years without it going bad. Wheat is surprisingly important in people's diet. It is usually toasted and ground into coarse flour called *machica* or often added to soups. For a handful of *campesinos* selling their wheat is a critical income that covers the expenses of growing potatoes.

Barley is only slightly less commonly grown than wheat. Barley complements wheat, as wheat is planted in *chacras* at lower altitudes, and barley is planted at higher altitudes, allowing households to take advantage of their *chacras* at various altitudes. The cultivation of barley is very similar to wheat, though it is somewhat hardier and can be planted as



Image 9: Oat field ready for harvest *photo by author*

late as January. The barley harvest is largely for household consumption. The grains can be stored for multiple years, and are eaten in soups, as whole grains or as *machica*. After the grain has been harvested, *campesinos* will cut and gather the barley stalks, and feed them to cows, sheep and donkeys in the *chacra* when pastures are bad during the dry season.

The final cereal grown in Cordillera Blanca and Canray Grande is oats. Oats are grown similarly to wheat and barley, and are planted at higher altitudes. Few households

grow oats for their own consumption, typically referred to as ‘kwah-ker’ (Quaker). More commonly, especially in Canray Grande, *campesinos* grow oats to feed to milk cows when pastures are bad.

Most households additionally grow broad beans. Though broad beans are legumes, many *campesinos* grouped them with other cereals in our conversations, perhaps because broad beans usually have relatively good harvests, like cereals, or because they are often milled and consumed as flour. Most *campesinos* plant the entire *chacra* with broad beans, though a few people I talked to prefer to intercrop broad beans with barley, since the broad bean harvest can be lost to hail. Broad beans can either be harvested when they are green, in which case they are eaten fresh in stews, soups and *pachamanca*, or the plants are left to dry and the beans are ground into a flour for soup. Once harvested, dried broad beans can be stored for a number of years.

Peas are grown and used by *campesino* households in much the same way as broad beans, though fewer *campesinos* choose to grow them because they are prone to poor harvests. As with broad beans, peas are added to stews and soups, and are dried and ground into flour to add to soup. Interestingly, while both peas and broad beans are legumes, and therefore have nitrogen-fixing potential, this was never



Image 10: Pablo shows me the *chocho* he grows around his *chacra* photo by author

given as a rationale for choosing to plant either crop.

A number of farmers also plant *oca* and *olluco*. However *oca* and *olluco* can be difficult to grow, and since they are not as versatile a food as potatoes, they are only grown in small amounts for household consumption.

There are other crops that are not as commonly cultivated in either community, largely because harvests are unpredictable and therefore dedicating an entire *chacra* to them is not perceived as efficient, especially for those *comuneros* without much land. These crops include maize, quinoa, and *chocho*. Maize does not grow well at high altitudes because it is particularly susceptible to frost and hail, and is more commonly grown in Cordillera Blanca where agriculture extends lower. Since the harvests are not large, maize is for household consumption and can be eaten boiled, in stews and soups or fermented to make *chicha*, similar to a beer or cider, for special occasions. Any quinoa grown is for household consumption. It is generally grown on the borders of *chacras*, and not as a main crop because the plants are very susceptible to frost and hail. *Chocho*, or *tarwi* in Quechua, is a legume that is native to the Andes. However, very few farmers grow it in any quantity because the harvest is not reliable and is often only grown on the edges of fields. While *chocho* is only produced in small amounts for household consumption, there is a significant market for *chocho* in Huaraz, where *cevichocho*, which is prepared like a ceviche where the fish is either replaced or complemented with *chocho*, is a popular street food.

Finally, some *campesinos* grow pasture grasses, often a combination of clover, alfalfa, rye grass, and crab grass as an additional source of food for their animals. However, these pastures require irrigation and are very vulnerable to frosts, meaning that many *campesinos* either choose not to grow them, or cannot grow them. The cost of seeds is an additional barrier for some. These cultivated pastures are somewhat more common in Cordillera Blanca

but are still not widely grown.

EATING, SELLING AND GIFTING FROM THE *CHACRA*

The *chacra* feeds the household that works it. Standing in Julio's *chacra* as he harvested his potatoes he explained, "*this is what we sustain ourselves with.*"



Image 11: Storing the harvest photo by author

Julio and his wife would eat the potatoes he was harvesting every day – on their own, with cheese, in stews and as a main meal – until January or February, when the potatoes started to go bad. Once he harvested his wheat and oats, they would be dried and stored in woven plastic market bags to be eaten this year, or the next. But the *chacra* is also an important source of income.

"Since we're only the two, we save three sacks of [papa nativa], six sacks of papa blanca, just that for the year. The rest we sell for fertilizer, to buy sugar, noodles. With that, we maintain ourselves" [Julio, age 60, CCCB]

Each household makes a different calculation of how much of their harvest they will consume themselves and how much they will sell, depending on how much land they cultivate, whether they are *medianeros*, whether they have animals to sell, and how much their household will consume.

César explained it is a matter of accounting: "*a kilo, we'd eat less than a kilo.*" "*Each month?*" I asked, thinking that was not very much at all. "*No, no, each day. Lets say half a kilo. So each month, fifteen to twenty kilos for the two of us.*" From what is left of the harvest, a portion is put aside to be processed into *chuño*, *papa seca* and *tocosh*. These are all

different forms of freeze-drying and preserving potatoes, giving the potato a longer shelf life and adding diversity into the diet. A portion of the harvest is saved for seed potatoes, around two and a half sacks of potato per *chacra* (a sack of potatoes is 72 kg). Any potatoes that have noticeable blemishes are saved for animal feed, and what remains from the harvest is sold at the market. None go to waste.

Many households will ultimately consume about half their potato harvest, and the other half will be used as seed, as animal food, or sold. Some *campesinos* who have large harvests, especially those whose children have left home, may keep as little as 20 percent of their harvest. Others, especially *medianeros* who take home a much smaller harvest and do not have to buy agricultural inputs, will save almost all of their harvest for household consumption. The large variation in harvest sizes, however, it is hard to compare the proportion consumed by different households.

The proximity of Cordillera Blanca and Canray Grande to Huaraz makes it relatively straightforward for *comuneros* to sell their harvest, even in small amounts. The majority of households choose to sell directly in Huaraz, at a large market as they enter town on Mondays and Thursdays. If it is only a sack or two of potatoes, *campesinos* will take the *combi* that runs between Huaripampa and Huaraz and pay only for the seats their sacks take up. This is slightly more complicated for *comuneros* in Cordillera Blanca, who have to transport their product to Olleros to catch the *combi*.

In the past, merchants have come to Huaripampa to buy directly from *campesinos*, saving them time and the cost of transporting their products. However, many *comuneros* said that merchants had largely stopped coming to Huaripampa since the price of potatoes has been so low. This drop in price has also changed the calculation for selling for a number of *campesinos*. Aldo told me,

“now we only sow a little bit, because there isn't a market [for potatoes]. The price just isn't there...when we sell, since there isn't a good price, we're losing so we prefer to not grow as much.”

Many *campesinos* attribute it to potatoes in the regional market coming from the coast and from the neighboring department of Huánuco, as well as ready-for-frying, frozen potatoes being imported.

At the market, a potato merchant had a different explanation for why he bought potatoes from communities in Huánuco. He said that communities around Huaraz only sold *papas blancas*, not *papas nativas*. In all my conversations in these communities, *campesinos*



Image 12: Potato merchants at the market in Huaraz
photo by author

explained that they only sell the *papa blanca*, that those are what people want to buy. It seems possible, therefore, that there is currently a disconnect between *campesinos* and merchants. *Campesinos* are selling *papas blancas* into a market in which they are already oversupplied and prices are accordingly very low, and ultimately do not recognize the potential profitability of *papas nativas*.

Finally, as the children of many *campesinos* have left the community for Huaraz and Lima, parents will commonly send a portion of their harvest to their children. Children will often take an *arroba*, or 12 kilos, of potatoes when they visit the community, otherwise parents will send the food to Lima on the buses that run daily. As an elderly woman in

Canray Chico said,

“they like food from the chacra. They ate like that as children – potatoes, wheat – and they miss it, so we send some to them.” [Eduardo, age 55, CCCB]

These gifts do not come without certain expectations, as they are often gifted in return for the provisions, money or labor children provide.

A SOURCE OF FOOD, A SOURCE OF LIVELIHOOD AND A TRADITION

“Why is the chacra important?” I asked. To the *campesinos* in Cordillera Blanca and Canray Grande, the answer was obvious, and my question was a bit nonsensical. The *chacra* is inherently important.

“We live from it” [Julio, age 60, CCCG]

“Without the chacra, without sowing, where would we eat from? The street?” [Carla, age 48, CCCB]

The *chacra* gives rural households a degree of self-sufficiency in a local economy where there is not much money to buy food. While neither community is insular, most households’ only economic activities are agriculture and livestock raising. Few *comuneros* have professional jobs, and they generally do not see it as a possibility for themselves, even if it is for their children.

Campesinos also recognize the superiority of the food they grow themselves. Time and time again people told me that *“it’s natural food,”* in contrast to both the produce coming from the coast and processed foods like noodles and rice.

“Here, one feels a bit healthier... the air is clean, the food is also clean. We don’t eat a lot of chemicals, like eating noodles. Well, they’re good, but what things are in it, like preservatives? It has passed through machines, a whole bunch of things. But here, you harvest your wheat, you process it yourself, you make your mote, your mazamorra, your soup, and it’s healthy food. That’s what I think.” [César, age 61, CCCB]

Even though they use fertilizer, they feel that they use fewer chemicals and hormones than producers on the coast, and once they have their product, they process it themselves. Even as households increasingly incorporate processed foods into their diets, such as noodles, rice, oil and sugar, but produce from their *chacras* remains the basis of their diet.

For many *campesinos*, working in the *chacra* is also part of who they are.

“I was born here, and I grew up here, and I’m going to get old here as well.”
[Carmen, age 48, CCCB]

For Carmen and others, ‘here’ does not just mean in the community, but literally means in the *chacra*. They learnt this work from their parents and their grandparents, and many of their decisions are informed by generations of farming. While outmigration of younger people is a concern for the future of these communities, the *campesinos* who have spent a lifetime working their land cannot imagine leaving their *chacras*, their animals and their foods.



Image 13: *Campesina* with her cows, saying she does not want to move to Huaraz or Lima with her daughters *photo by author*

Especially among those men who left their communities when they were young and have returned, they appreciate the livelihoods they have in the communities. César spent twenty years living in Lima, but in comparison to life in the community city life takes a toll.

“I don’t like the big cities. A lot of contamination, delinquency, and you have to be stressed there. You have to wake up at 5, 6 in the morning, go to work, stuck in the bus for hours. I didn’t like all of that”

In Cordillera Blanca, he lives well. Even if life in their community is not without its own hardships, *“you’re not as stressed. Here, we live a little more peacefully.”* Indeed, many other *campesinos* echoed his sentiment. They value living in the fresh air and having control over their work, without anyone supervising their work and an inflexible schedule.

When *campesinos* relate their *campesinidad* to working in the *chacra* and being from the countryside, then, they identify themselves in relation to and in opposition to the city because *“we have a different way of life than the city”* [Ricardo, age 69, CCCB]. It is no coincidence then that being a *campesino* means being from the countryside, working the land, and eating from their *chacras*. For many, being a *campesino* does not mean one single thing. It is a combination of where someone is from and what someone does. Juan explained *“for me it means that I am from the countryside, I cultivate my land with my livestock. That is what it means to be a campesino. I am distinctly a campesino”* Others, especially older *comuneros*, relate their *campesinidad* to the history of their communities and as an evolving identity.

“we are campesinos because we live in the countryside. Before we were indios, but luckily now they have changed the word to campesino. Yes, every 24th of June we celebrated the Day of the Indio but now it is the Day of the Campesino” [Aldo, age 74, CCCG]

For those community members who lived through the *hacienda* and agrarian reform, being a *campesino* is a particular point of pride and dignity.

CHAPTER 6. PERSISTENCE AND ADAPTABILITY: THE *CHACRA*'S CHANGING ROLE IN PEASANT LIVELIHOOD STRATEGIES

The life of a *campesino* in Canray Grande or Cordillera Blanca, today does not look like it did a generation ago. Nor does it resemble the livelihoods in communities in Cusco or Puno that have been extensively portrayed in the research of geographers and anthropologists in the 1970s, 80s and 90s. Livelihoods in the Andes are heterogeneous and dynamic, even while the idea of '*lo Andino*,' an inherently or intrinsically Andean culture, retains a degree of political and popular traction.

How then, should we understand the persistence of *chacras* in these two communities? The *chacra*, as a space of food production for household consumption, has been a critical part of rural livelihood strategies across the Andes for centuries. In a certain sense, its role remains fundamentally the same. These plots are cultivated in order to feed the family. Yet the *campesinos* themselves recognize that the way they manage the *chacra* and the way they feed their households is different from only a generation or two ago. This section, therefore, attempts to not to fall into the narrative trap Richards (1985) critiques, that "food production by small-holders tend[s] to be dismissed as 'subsistence' farming, with the assumption that it is 'traditional', and therefore 'timeless' and 'changeless'" (83). I also recognize that the *chacra* is a livelihood tradition in these communities, and therefore holds certain significances beyond food production that continuously shift as *campesinos* adapt to and oppose local, national and international pressures. The following discussion is organized around three guiding questions about the persistence of the *chacra* and the implications for the role of the *chacra* in household subsistence.

WHAT THREATENS THE CHACRA AS A LIVELIHOOD STRATEGY?

Small-scale agriculture has been a longstanding feature in Peru's highland landscape. Smallholder farmers make up close to 80 percent of farmers in Peru, the majority (64.5%) of who are in the highlands (CEPES and Oxfam, 2015). Highland family farmers, however, only produce as much as farmers on the coast and jungle combined, which highlights the limited agricultural productivity associated with the Peruvian highlands. In Ancash, this has corresponded to a 19 percent decrease in cultivated land between 1972 and 2008, even as commercial- and export-oriented agricultural projects have been developed along the coast (Bury et al., 2013; Casey, 2017), which indicates that households are increasingly giving up their *chacras* in favor of non-farm incomes. C.C. Cordillera Blanca in particular has seen a 20 percent drop in the number of registered community members since it was formed.

The abandonment of the *chacra* and rural, agro-pastoral livelihoods may in part be attributed to the increasingly hard environment in which these households make their livelihoods. Highland Andean environments are marginal environments, subject to poor soil quality, harsh frosts and limited precipitation (Boillat and Berkes, 2013), and in the Cordillera Blanca in particular, these environmental pressures are only exacerbated by



Image 14: Disappearing snow-capped peaks
photo by author

climate change. The impacts of glacial melting on peatlands and water resources have been well documented in this region (Bury et al., 2013; Polk, 2016; Wrathall et al., 2014). The lack of irrigation remains a significant barrier to extending the growing season, protecting their

crops from harsh frosts and adopting new crops. Moreover, changes to seasonal rain patterns have increased the risk of a bad harvest for many *campesinos* whose resilience is limited by poverty and significant reliance on the *chacra*. Members of both communities have a strong awareness of what climate change is, and while they often conflate climate and weather patterns, they recognize it as a threat to their livelihoods (Alata et al., 2018).

In light of these environmental constraints, Bebbington (2008) asserts, “agriculture alone will never sustain many viable livelihoods in these regions” (71), which seems contradictory to the history of the Andes sustaining the Incan empire. Historically, however, Andean agricultural was not limited to a narrow altitudinal range. Communities had access to a diversity of products, either through direct household access to *chacras* at different altitudes or through indirect access from bartering between communities (Murra, 1984; Mayer, 2002). As these forms of access have eroded, *campesino* households increasingly engage with monetized markets and have diversified household income beyond on-farm activities (Escobal, 2001). Trading potatoes for corn along the Callejón de Huaylas is now only a memory for older *comuneros*, replaced by the market in Huaraz.

Campesinos ability to engage in this trade, of product for money and then money for product, is constrained by the low prices for agricultural goods, especially the price of potatoes (Escobal, 2001). Many *campesinos* in these communities feel that the price for a sack of potatoes in local markets has been pushed down as merchants bring in potatoes from elsewhere in Peru, and especially as they have introduced pre-cut and frozen potatoes for French fries for local restaurants, a documented practice by international fast-food chains (Bentley et al., 2001; Scott and Zelada, 2011; Walsh, 1990). Moreover, that households in Canray Grande and Cordillera Blanca are producing primarily for household consumption and selling only the surplus limits their ability to engage in commercially oriented production

chains that might give *campesinos* a regular income (Escobal and Cavero, 2012). Nonetheless, there is a frustration with the government, broadly, that they have not introduced price controls or protected local farmers against imported potatoes.

While small-scale agriculture is noted for its efficiency (Chappell, 2018; Altieri et al., 2012; Winklerprins and de Souza, 2009), given these environmental and market constraints, the *chacra* is not necessarily able to sustain the changing needs of households in Canray Grande and Cordillera Blanca. The considerable outmigration from these communities, and communities like them, demonstrates that many children of *campesinos* do not see a future for themselves in the highlands. As Peru's population has grown 34 percent between 1995 and 2016, the rural population actually decreased by nearly 6 percent (FAOSTAT(a)) and in the Santa River watershed alone the rural population has decreased 10 percent between 1970 and 2000 (Bury et al., 2013). Outmigration has left Canray Grande and Cordillera Blanca with aging populations and without a future labor force. Current structures governing how community membership is inherited have made it complicated for young people to access land if their parents live into old age, which has contributed to the aging *comunero* population (C. Trivelli, personal communication, August 8th 2018). Thus while the community ensures *comuneros* access to land, it is simultaneously limiting would-be *comuneros* access to land. The coming decades will be critical in understanding whether these communities will be able to address the concerns of young *campesinos* who currently do not feel that there is a future in agro-pastoral livelihoods.

DOES THE CHACRA PROVIDE SUBSISTENCE FOR THE HOUSEHOLD?

Like many forms of small-scale agriculture that produce for household consumption, the *chacra* is often considered subsistence agriculture. Critical, then, is the question of whether the *chacra* is fulfilling its role of providing subsistence to the household. On the one hand, interviews in both communities indicated that yes, the *chacra* continues to be the main source of food for almost all of the households I interviewed; only those whose primary residence is urban bought the majority of their food. As discussed in the previous chapter, households store their surplus grains in preparation for future poor harvests and manage the harvest so that it can sustain the family.

As households purchase more food, however, the way the *chacra* meets household needs has changed. During the period between January and the early potato harvest, many households will purchase potatoes from the market in Huaraz. In the past, the pre-harvest period was weathered



Image 15: *Campesina* in her shop in CCCB
photo by author

by relying on the early potato planting (Zimmerer, 1996) and bartering (Zimmerer 1996; Mayer, 2002). Through barter, goods produced in the household's *chacra* were then traded for another good, allowing the household to meet their needs (Mayer, 2002). Now that Canray Grande and Cordillera Blanca are connected to the market in Huaraz trade and barter have been replaced by buying and selling, exchanges that rely on money. Though the *chacra*,

through the surplus harvest it produces, remains central to this exchange, there is yet another step in how the *chacra* is producing for household consumption.

Changes in diet and tastes in these communities reflect evolving needs of the household. Households regularly buy sugar, oil, salt, bread, rice and noodles to “complement” the food from the *chacra* and satisfy the increasingly urban palates of young adults and children. Simultaneously, as Zimmerer (1996) noted twenty years ago, *papas nativas* are eaten less and less frequently. *Campesino* diets are quite distinct from previous generations. If the role of the *chacra* is to grow crops for household consumption, the *chacra* is unable to perform this role as Andean diets include increasing amounts of processed foods. Models of national potato consumption show that as a country becomes wealthier, potatoes become less of a staple carbohydrate relative to wheat, a trend that has been identified in Peru (Walker et al., 1999). *Papas nativas* appear to be the first casualty of this dietary shift, as *campesinos* dedicate less land to growing fewer varieties. This raises the question of whether these communities will follow a similar trend on a local scale. In such a case, what role would the *chacra* have, given the centrality of potatoes to the *chacra*?

Though households continue to eat from their *chacras*, perhaps the role of the *chacra* is becoming more similar to the role of herding in *campesino* livelihood portfolios. Most households in Canray Grande and Cordillera Blanca herd sheep and cows that provide dairy and meat to *campesino* diets, but are also a source of income for buying items that cannot be produced in the community. As households in these communities replace some of their own produce with purchased foods the *chacra* may increasingly be seen as an additional source of income to buy those foods with, a trend which Mayer (2002) has noted particularly hurts the consumption and sale patterns of poorer households, especially as they seek to increase their income (not profits) by devaluing their product and labor costs. Moreover, Zimmerer (1996)

found that commercial orientation likely changes the crop varieties that are cultivated.

Even as households in these communities become more reliant on markets for their food, the *chacra* allows households to manage some of the risk associated with markets, as well as the marginalization and exclusion *campesinos* often face in the neoliberal economy. In the face of changing food prices, financial crisis and household hardships, the *chacra* provides for the household outside of formal food markets. Even in times of stability and relative prosperity, subsistence agriculture, like the *chacra*, serves to correct gaps in the market (Battersby, 2012; Winklerprins and de Souza, 2009). Notwithstanding the risk inherent in cultivating the *chacra* in such challenging landscapes (Brush and Guillet, 1985; Rhoades and Bebbington, 1990), this risk is currently outweighed by the risk of full market integration given *campesinos* strategies for managing risk in the *chacra* (Mayer, 2002; Bianco and Sachs, 1998; Bellon et al., 2015; Rhoades and Bebbington, 1990; Boillat and Berkes, 2013; Brush and Guillet, 1985; Apffel-Marglin, 1998; Zimmerer, 1996).

HOW IS IDENTITY PRACTICED IN THE CHACRA?

The *chacra* has remained a constant in how *campesinos* construct their livelihoods in Canray Grande and Cordillera Blanca. That is not to say that the *chacra* has gone unchanged. The discussion above highlights that the *chacra* itself has undergone significant adaptations as rural livelihoods have shifted over time. All the while, the *chacra* has been a constant marker of rural Andean identity and a space where Andean and peasant identities are practices and reproduced daily. Farming the *chacra* is a tradition, custom and expectation passed down through generations within the community, and has taken on cultural expressions. For many *comuneros*, having, cultivating and eating from the *chacra* is what it means to be a *campesino*, and is a practice “at the heart of Andean culture...around which all

aspects of life revolve” (Apffel-Marglin, 1998, 51). It is simultaneously an asset and a practice, “both [a] reflection and [a] component of the meaning the person has tried to create through their livelihood strategies,” which inevitably influences subsequent household decisions (Bebbington, 1999, 2022).

Above I say that the *chacra* is a marker of rural Andean identity, as though that is an identity people distinctly hold. There is no single Andean or peasant identity. On the contrary, these identities are particularly complicated in Peru, where markers of identity are performed and shed as rural Andeans, in particular, move through different spaces (Orlove, 1998; de la Cadena, 2000; de la Cadena, 2001). Weismantel (1992) argues that everyday practices like food, clothing and speech highlight the “controversies and contradictions” in *campesino* livelihoods that emerge at the juncture of “being Indian and being subsistence farmers, of assimilating and joining the urban underclass” (4). In communities that have shed markers of Indianness, such as religious agricultural ceremonies or traditional dress, agriculture has not lost its cultural significance or place in local identities.

Chacras in Canray Grande and Cordillera Blanca have shown themselves to be dynamic spaces. Though agriculture in these communities is not modern in the same way as coastal agriculture, *campesino* households have adopted many modern agricultural inputs and rationales. This is most obvious in the use of agro-chemical inputs that were introduced only fifty or sixty years ago and are now seen as critical to potato cultivation. After centuries of growing potatoes with only manure and careful soil care, potato cultivation is now remarkably different and comes at significant financial cost to the household and without clear savings in labor. Similarly, these households prioritize yield and market demand over household tastes and traditional crops by growing *papas blancas*.

These changes could be interpreted as a loss of traditional agricultural knowledge.

Traditional practices have invariably been replaced by modern chemical inputs and new crop varieties, which is a shame at the very least because *papas blancas* cannot hold a candle to the colors, taste and floury texture of *papas nativas*. Yet it is unfair to categorically criticize these changes since they have been adopted as part of a strategy to sustain *chacra* agriculture in response to climate and livelihood pressures, especially when *campesinos* themselves do not dwell on these losses. Zimmerer (1996) argues that the “cultural constancy” that outsiders expect from rural livelihoods is “an inane proposition given peoples’ right to elect change” (8). This focus essentializes *campesinos* into a fixed identity and set of practices that are expected to endure constant shifts in agricultural structures and the national economy. By adopting technologies and agricultural knowledge that was previous now shared with *campesinos* (Bebbington, 1996), peasants take ownership of their relationship with the environment and preserve their agricultural identities.

Indeed, the *chacra* is intrinsic to what it means to be a *campesino* in Canray Grande and Cordillera Blanca. Like other small food producing spaces hold “symbolic and emotional significance” (Christie, 2008, 125). The *chacra* is an embodiment of traditional livelihood strategies that are significant beyond simply producing food because they are deeply embedded into local identities (Christie, 2008, 125; de Frece and Poole, 2008, 342-3). Moreover, like subsistence spaces globally, the *chacra* is an “almost daily ...reminder of the threats to livelihood represented by the loss of land, livestock, market position, and so on” (Smith, 1991, 14-15). The act of cultivating defies the threats to livelihoods in Canray Grande and Cordillera Blanca. The commitment to this practice, and peasant livelihoods more broadly, reflects a resistance to being fully integrated into the neoliberal order at the expense of local culture and identity (de Frece and Poole, 2008; Christie, 2008). Across the Global South subsistence spaces are increasingly being brought into neoliberal markets, through

global land grabs, commercialization and development projects, threatening subsistence livelihoods and community autonomy (de Frece and Poole, 2008; Christie, 2008). For many of these communities, subsistence can be resistance by maintaining control over household consumption.

Indeed, the *chacra* is a space in which the *campesinos* are the authority. The *chacras* where they make their livelihoods are plots these *campesinos* have worked all their lives, and that their parents and grandparents worked before them. *Campesinos* in these communities have generations of knowledge that inform the decisions they make about what to plant, when to plant and any changes they want to implement. Additionally, the *chacra* is a space in which the *campesino* has autonomy over their day and decisions; they decide for themselves when to work, for how long, depending on what their household needs. This autonomy is in direct contrast to what *campesinos* in these communities perceive, or have experienced, life in the city, where the days are dictated by hours of commuting and work schedules. Life in Canray Grande and Cordillera Blanca, and therefore life in the *chacra*, is an alternative to life in the city, and to life on the *hacienda*, for those who remember it.

The significance of the *chacra* in these communities, however, does not appear to extend into the deeper significances that authors like de la Cadena (2010) have explored. From the time spent in these communities, the cultural significance of the *chacra* is the autonomy that comes from working and eating from the land that has been passed through generations. While there is a deep respect for the land and the environment, community members do not see the land, mountains and lakes as “earth-beings,” and practices of giving offerings to the *chacra* or lake are increasingly a thing of the past or a practice in the Southern Andes. My findings, however, should not discount the possibility that such a reciprocal relationship with the land does exist, since it is wholly possible that given the

limited time I spent in the communities, and the fact that I am a *gringuita*, meant that the *campesinos* I spoke to did not want to discuss the details of such a relationship. Moreover, given that this belief system is often perceived as backwards, and has been disparaged by Peruvian presidents (de la Cadena, 2010), community members may have chosen not to discuss these practices for fear of being perceived as Indian and uneducated. It is likely that a fuller understanding of how community members relate to and connect with the land would require prolonged relationships with households in these communities.

The *chacra* is a critical asset for *campesino* households, and without the persistence and safeguarding of this practice, “a principal element of Indian identity will be eroded away, both metaphorically and actually” (Bebbington, 1996, 95). The *chacra* remains a fundamental component of peasant livelihood portfolios in these communities, both in its persistence as a source of food for the household and for its adaptability as livelihood strategies have changed. Moreover, it serves as a space in which *campesino* and Andean identities are reproduced on a daily basis.

CHAPTER 7: CONCLUSION: HOW CAN WE EXPLAIN THE PERSISTENCE OF THE *CHACRA* IN A NEW RURALITY?

Early on in my fieldwork in Huaraz, I was sat watching a World Cup game in a local café, and I began chatting with a couple of local Peace Corps volunteers that were in the last few months of their placement. They were talking about some of their frustrations with the communities they were working in. One volunteer who was working on children's health could not understand why the women in her community continued to work in their *chacras* every day. *"Why wouldn't they go get a job in town, where they would earn money so they could actually buy their children the food that they need? What does the chacra even give them? Just a few potatoes!"*

For this volunteer, it is not logical for the households in her community to organize their livelihoods around the *chacra*. Her community, like C.C. Cordillera Blanca and C.C. Canray Grande, is linked to urban centers with commercial activities and services that provide the households with new opportunities for non-farm income, which in turn would give households the ability to purchase their needs from the market. This logic defines utility as income and links the wellbeing of the family to its assimilation into the capitalist market.

The New Rurality literature centers on changing rural landscapes that increasingly involve non-farm activities and incomes and that have fundamentally changed peasant livelihoods. Indeed, it helps to explain a number of the changes to livelihoods in Cordillera Blanca and Canray Grande, as the children of *campesinos* are educated in Huaraz and migrate to the city. New Rurality, however, does not necessarily help us to understand why subsistence agriculture persists. Its focus on the changing opportunities for rural populations, it pays less attention to the values that are deeply engrained in both peasant livelihoods and

the *chacra* in particular. An exception to this is Jokisch's (2002) work on the impact of remittances on agriculture in the Ecuadoran Andes, where he found that smallholder agriculture is not abandoned when family members migrate and provide another income. Rather, agriculture remains an important "cultural and risk-averse activity, especially for women" (525), even if it is not deemed a good investment of remittances.

In these communities, throughout the Peruvian highlands and across the Global South, smallholder agriculture remains a feature of rural landscapes. As the New Rurality literature examines these novel rural spaces, it ought not overlook or undervalue long-established agricultural livelihood strategies, because in doing so it overlooks the primary economic activity of a quarter of the world. The academic and policy communities need to understand the rationale for rural, agricultural livelihoods that persist *in light of*, not in spite of, the dynamic and globalizing countrysides described by New Rurality literature.

It is the older literature on Andean peasant livelihoods, and the *chacra* in particular, that ultimately provide an insight into how and why the *chacra* has persisted in light of the changing rural landscape. While much of this literature was written over thirty years ago, and Andean landscapes have evolved significantly in that period, many of the findings remain significant. Household livelihood portfolios continue to be intimately related to the environment these communities are able to access (Bebbington, 2008; Crabtree, 2002; Zimmerer 1996, Mayer, 2002), and generational knowledge informs how *campesinos* adapt their livelihoods to these landscapes in order to manage risk (Brush and Guillet, 1985; Murra, 1984). *Campesinos* in these communities are equipped with a skillset that makes agriculture the most viable activity for most households to engage in, even as alternative opportunities arise. Moreover, even as agriculture is now significantly different than "in the time of the grandparents" with the advent of chemical inputs, tractors and the loss of reciprocal labor

exchange, cultivating the *chacra* remains linked to traditional livelihood strategies and ideas about what it is to be a peasant in these communities.

Similarly, the literature on Andean agriculture is based on the idea that the *chacra*'s primary function is to feed the household, recognizing, often implicitly, that the Andean peasant household exists on the margins of capitalist economic structures (Brush and Guillet, 1985; Mayer, 2002, Zimmerer, 1996). Critically, authors do not dismiss the ways in which households are engaged with markets, where they sell a portion of their harvests in order to cover the costs of household expenses (Escobal and Cavero, 2012; Brush and Guillet, 1985; Mayer, 2002). As households have become more integrated into urban spaces and culture, they are increasingly unable to produce everything they consume. Medicine, school supplies, bus fare and processed foods like noodles all have to be bought, which requires that households have some sort of income. Families in these communities are living in a New Rurality that is increasingly monetized, but many of the activities that make up livelihood portfolios reflect traditional *campesino* strategies and values. More research, specifically looking at the way household power and wealth, as well as gender, influence the experiences of these urban-rural linkages, would provide a richer picture of how different households are adapting to these changes and may give insights into what the role of the *chacra* will be in the coming decades.

There is room in the literature, on Peruvian agriculture and subsistence agricultural more broadly, to explore the ways in which these livelihood portfolios reflect traditional peasant strategies and values. In Canray Grande and Cordillera Blanca, cultivating a *chacra* is fundamental to what it means to be a *campesino* and central to their livelihood strategies. Not cultivating a *chacra* at some scale is unthinkable. Even as identities have changed (Orlove, 1998; de la Cadena, 2000), the identities that are reinforced by cultivating the

chacra have endured because they are constantly practiced within these communities (Weismantel, 1992).

These findings, of the relationship between the *chacra* and Andean, peasant identities may not hold true in the same ways across all of Peru. While the Andes are often discussed as a cultural and environmental region, there is significant heterogeneity across the Andes, even within Peru. This research was conducted in two communities in the department of Ancash, in the Central/Northern Peruvian Andes. Ancash, and the Northern Peruvian Andes more generally, are perceived as having less of an Indian culture than the Southern Peruvian Andes. The department is not known for religious syncretism, traditional Andean festivals, traditional dress and other such markers of Indianness. These regional differences may be in part due to the *reducciones* during the colonial period as well as the Agrarian Reforms and the creation of Peasant Communities. Moreover, environmental and historical differences between the regions make it likely that agricultural traditions differ between the regions. That Ancash is different from the Southern Peruvian Andes is important since much of the research on Andean communities has been focused in Cusco and Puno (Zimmerer, 1996; Orlove, 1998; Mayer, 2002; Brush and Guillet, 1985). Additionally, if the cultural identity and the *chacra* change across the Andes, then the nuances in the relationship between the *chacra* and identity likely also changes.

Nonetheless, The Andes do not have a monopoly on place-based identities. Peasant and local identities are reproduced in communities across the Global South, through the assets a household controls, the decisions it makes and daily practices. Households choose to livelihood strategies that diverge from the modernization mindset that continues to inform development policy. In order to better understand the viability of small-scale agriculture in these communities, we need a more holistic picture of smallholder rationales, and the values

and identities associated with farming. The significance of the *chacra* is ultimately larger than the role it plays in feeding the household that works it. That the Peace Corps volunteer says that the *chacra* only provides potatoes to families in her community either overlooks or altogether undervalues the significance of the *chacra* to members of this community. Without accounting for the multiple ways in which the *chacra* reproduces the Andean household, the question of why *campesinos* continue to cultivate the *chacra* is indeed much more unclear.

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APPENDIX 1: INTERVIEW QUESTIONS

(TRANSLATED FROM SPANISH)

What is your name? How old are you? Where do you live?

How many people are in your household? Do you all live together?

How does your household use their time?

Where is your chacra?

How did you receive this land?

How many crops do you grow?

Why have you decided to grow them?

Do you have a crop rotation? Why?

Do you grow pasture grasses for animals?

How much of the harvest does your household consume?

Do you sell a part of the harvest? Where?

Have you ever gifted or exchanged a part of your harvest with family or other community members?

How do you manage your chacra?

Who works in the chacra?

Do you bring your animals to the chacra?

Why is the chacra important?

Why do you maintain your chacra as well as raising livestock and/or doing day labor? (if that is the case)

Where did you learn to manage the chacra?

Do you use inputs in your chacra?

Do you make an offering to the Pachamama or the Sierra?

Do you think that the way you manage the chacra is the same as during the time of your grandparents?

Do you think climate change has impacted your chacra?

Do you identify as a campesino? What does it mean to be a campesino for you?

What does living well mean to you?

What does health mean to you?

Do you think that the chacra is important for maintaining the wellbeing and health of your household?

What does your household eat on a normal day?

Do you eat from the store?

Do you think it is similar to what they ate in the time of your grandparents?

Does the harvest last for the entire year? Or do you have to buy food during certain periods of the year?

(if yes) When do you have to buy food? What kinds of food do you buy?