FOOD SECURITY AND GENDERED PARTICIPATION

IN INDIGENOUS ANDEAN HIGHLAND COMMUNITIES

by

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Abstract

Today, much of the agricultural production and food security (FS) in developing countries relies on women. They play critical roles in the availability, access and utilization of food at household and community levels. Women's roles, however, are underestimated and constrained by restricted access to resources, services and labour market opportunities. Despite their fundamental position in global FS, the majority of undernourished people are women and girls. Failing to recognize the existence of gender exclusion and unequal gender dynamics perpetuates the current status of women and increases the risk of food insecurity. Thus, it is crucial to acknowledge that households and communities are gendered entities. This research aims to improve the understanding of gender participation in FS at the household and community levels in agricultural indigenous communities in the South Andean highlands. These communities are part of the indigenous *campesinos* (peasants) population that meaningfully contributes to produce food in Peru and other Latin American regions. The research focuses on women's physical and decision-making tasks regarding production, accessibility and utilization of food for their families and communities. This case study centers on two Quechua agricultural communities in the Cusco Region, Peru, and used qualitative mixed methods for data collection and analysis. The results suggest that in these communities FS is mainly a household and not a community matter. At the community level, communities are more organized to perform civil, rather than agricultural work. They produce food mostly to generate income to cover administrative expenses. Women head labour and decision-making regarding household FS, but have not relevant role at the community level; they are more involved in lower levels of participation in community political and labour structure. The egalitarian farming is the prevalent system in the household: women and men provide labour and control decision-making. In the community, the prevalent farming system is patriarchal: both genders provide labour but men control decision-making. Addressing FS in these communities requires acknowledging inequalities and strengthening ancient gender relations and agricultural practices.

Preface

This thesis is the original, unpublished work of the author. It was conducted as part of a project funded by the International Development Research Centre (IDRC), "Ecological and Socio-Economic Intensification for Food Security in Smallholder Agriculture in the Andes" (AGROECO), co-led by Dr. Eduardo Jovel and Dr. Andrew Riseman (both Associate Professors, Faculty of Land and Food Systems, the University of British Columbia); Dr. Roberto Ugas, Professor, Universidad Nacional Agraria La Molina, Peru; and Manuel Ruiz, Director of the Peruvian Society for Environmental Law (SPDA).

The thesis research is a contribution to the AGROECO project, and was designed and executed under the supervision of Dr. Eduardo Jovel, and with the support and guidance of the committee members Professors Dr. Hannah Wittman and Dr. Alejandro Rojas. In 2012, I provided fieldwork support to the AGROECO interdisciplinary research team working in selected agricultural indigenous communities in the Sacred Valley, Cusco Region, Peru. Part of the data I collected at that time is reported in my thesis. In 2014, I returned to the field to conduct my thesis research in two of the communities I had previously worked with, Huamanchoque and Poques; the community participants were already familiar with my research topic methodologies and procedures. Before collecting any data and implementing any thesis related fieldwork, the research collaborators were informed about the specific study focus and procedures. Every collaborator in any research activity was asked to sign an Informed Consent Form, according to the requirements established by The Behavioral Research Ethic Board (REB) of The University of British Columbia Office Research Services and Administration, under the Certificate Number H12-02420. I also obtained the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans Course on Research Ethics (TCP2: CORE certificate).

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List of Abbreviations

ADB: Asian Development Bank

FAO: Food and Agriculture Organization

FS: Food Security

INEI: Instituto Nacional de Estadísticas e Informática (National Institute of Statistics and

              Informatic)

INS: Instituto Nacional de Salud (National Institute of Health)

REB: Behavioral Research Ethic Board of The University of British Columbia Office Research

              Services and Administration

IDFA: International Fund for Agricultural Development

PNUD: Programa de las Naciones Unidas para el Desarrollo (United Nations Development

              Programme)

WFP: World Food Program

KAP: Knowledge, Attitude and Perception

Glossary

Ama Llulla: Do not lie.

Ama Quella: Do not be lazy.

Ama Suwa: Do not steal.

Apus: Spirits or deities that inhabit the mountains.

Asnapas: Aromatic herbs and vegetables to boost meal's flavor.

Ayni: Work in exchange calculated on length or type of work.

Ayllu: The basic unit of Andean society.

Ayuda: Help (among neighbors and family members).

Campesino (s): Peasant(s). In the context of Latin American, by *campesino* I understand: "a man or woman of the land, who has a direct and special relationship with the land and nature through the production of food and/or other agricultural products. Peasants work the land themselves, rely above all on family labor and other small-scale forms of organizing labour. Peasants are traditionally embedded in their local communities and they take care of local landscapes and of agro-ecological systems" (La Via Campesina, 2009, p.5)

Canchón (es): A small and enclosed piece of land used to plant herbs, edible vegetables and flowers, commonly located close to the house.

Comunidades campesinas: Peasant communities.

Comunidades indígenas: Indigenous communities.

Cosmovisión: World vision.

Coya: Inca's wife or sister.

Cuye (s): South American guinea pig.

Chakra (s): A small family garden used to plant herbs, edible vegetables and flowers, commonly located beside the house and managed by women.

Chhalakuy: Bartering.

Chicha: Alcoholic beverage resulting from the fermentation of corn.

Chuño: Small potatoes exposed for five to ten days, without any protection, to night frost and strong sunlight. It has a characteristic black color.

Chuma: Tasteless.

Ch'uspa: A small woven bag containing coca leaves.

Empadronados: Community members formally registered as household heads.

Faena: Communal labour for crop cultivation and civil works.

Family farming: This is a agricultural system characterized by the predominant use of the family work force, limited access to land, water and capital, the strategic of subsistence supported by multiple incomes, and its heterogeneity. Through the family farmer "as well as its multiples art manifestations, institutions, economy and biodiversity, the millenary culture persist and is transmitted" (MINAGRI, 2014, p. 10).

Fiambre: light snack of fruit, cheese, dry meat, tubers.

Food Security: The most common and widely-used definition of food security originated at the World Food Summit in 1996 and states that, "food security exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (FAO, 1996).

Food Insecurity: exists when people do not have adequate physical, social or economic access to food as defined above (FAO, 2003).

Food Sovereignty: "the right of nations and peoples to control their own food systems, including their own markets, production modes, food cultures and environments" (Wiebe and Wipf, 2011, p. 4)

Hacienda: system of large landed state developed as profit-making, economic enterprises linked to regional or international markets imposed during the Colonial period.

Huerto(s): A small garden, enclosed or open, used to plant herbs, edible vegetables and flowers commonly located beside the house and managed by women.

Indigenous: I use the term Indigenous as inclusive of First Peoples globally. With this term, I

mean people with ancestral occupation of a territory, but who currently are considered as a minority or deprived of the rights of citizenship framed by an industrialized nation-state. For more information on this and other relative terminologies at http://indigenousfoundations.arts.ubc.ca

Khaya: Dehydrated *oca* (kind of tuber) of white color.

La Marginal: A highway project of more than 1,000-km-long lead by the Peruvian President Fernando Belaunde.

Laymi: A traditional system to allocate plots on a yearly basis according to need

Lisa (s): Ullukus tuberosus Lozan. Tuberose plant widely used in the Andes.

Lawa: soup.

Marka: Dwelling's rustic second floor or high structure used to store food and other stuff.

Mate: Herbal tea.

Menestras: Stew made with different vegetables and often with small pieces of meat or ham.

Mesoamerica: A region extending south and east from central Mexico to include parts of Guatemala, Belize, Honduras, and Nicaragua. In pre-Columbian times it was inhabited by diverse civilizations, including the Maya and the Olmec.

Mestizaje: Miscegenation.

Minka: Work in exchange for goods like food and others.

Moraya (or chuño blanco): Potatoes subjected to extreme temperatures during night and day, soaked in rivers, compacted by stomping, exposed to the sunlight for several days and finally peeled by hand.

Mulato: A person who is born from one white parent and one black parent, or more broadly, a person of any "mixed" ancestry.

Oca: Oxalis tuberosa (Quechua: oqa). Temporary herbaceous plant of the family of oxalidaceae.

Olluco: Ullucus tuberosus (Quechua: ulluku). This is a plant grown primarily as a root vegetable, secondarily as a leaf vegetable.

Pacha: Local world.

Pachamama: A living being who is mother of all that exists, including human beings.

Peasant(s): see by *campesinos*

Quechua: The name of a people of the central Andes of South America and their language.

Raki: Large clay bowl with flared base and wide mouth used to keep *chicha*.

Revendedoras: Female resellers.

Sancochar: vegetable boiled in water

Sara: Commelina fasciculate R. et P. Graminea wild plant similar to corn.

Tapura: Potato preserved under the soil to alter its consistency. It is similar to what happens to potatoes when they rot for excess of rain.

Ta'que(s): Basic rectangular or cylindrical structure made of flexible, intertwined stems used for storing seeds and vegetables.

Tarwi: Lupinus mutabilis Sweet. Annual plant of the legume family growing in large area of dispersion.

Waquiy: Joined by a goal

Zambo: Racial term to identify individuals in the Americas who are of mixed African and Amerindian ancestry.

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Dedication

To you, Isabella, my *Ccoylluror* (Mother Earth's Messenger); my gorgeous little research assistant, master of life and main source of love.

A ti, padre, por tu apoyo incondicional y heredada pasión por aprender.
(To you, father, for your unconditional support and inherited passion for learning).

To you, mother, wherever you are (Yo también te amo).

To all my wonderful friends who supported me unconditionally along this long professional and personal journey. When everything looked cloudy and grey, you all recalled me that the sun always bright at the other side**.**

Perú suyu Andes orqokunapi llapan tiyaq warmi qharikunapaq, Maymantachus paykunaqa yuyarichiwanchis hoq allin pachaqa atikunmi; hinallataq osqhaylla kayqa kananmanta.
Noqayku munaykiku hoqmantan kay pachapi kanaykichistan Ñawpa ayllukuna: nawpaq hina atiyniyoq kanaykichistan munaykiku. (To all those women and men that inhabit the highest peak of the Andes, and from there remind us that another world is possible and urgent. We need you, Indigenous peoples, back; we need you empowered and proud as you were before).

Chapter 1: Introduction

1.1   The Relevance of Indigenous *Campesinos*

This research aims to improve the understanding of gendered participation in household and community decision making in relation to food security in agricultural Indigenous communities in South Andean highlands. It is crucial to acknowledge that communities are gendered entities (Agarwal, 1997a). When communities and households are not acknowledged as gendered, institutions tend to reproduce unequal gender dynamics and gender exclusion (Cornwall, 2003). In Latin America, the peasant or small farm sector[1] population is estimated at 65 million, of which 40-55 million are Indigenous peoples (Toledo, Boege, & Barrera-Bassols, 2010). A decade ago, in the region these small-farms produced 51% of maize, 77% of beans, and 61% of total potatoes consumed in the region (Altieri, 1999; Ortega, 1986). On the continent, the Andes holds the largest Indigenous *campesinos* (peasant) population. They control extended territories in the highlands of Peru, Bolivia and Ecuador, where there are 15 to 20 million Quechua, 3 to 5 million Aymara, and several million are Spanish-speakers with indigenous roots (Gelles, 2002) .

Despite predictions about the world's *campesinado* vanishing, data from 17 countries indicate that in the 1990's the number of small farms increased by 220 million (Altieri & Toledo, 2011; Toledo & Barrera-Bassols, 2008). In Peru, where this study took place, this phenomenon is ongoing (INEI, 2013): between 1994 and 2012, agricultural land area and the number of small agricultural units[2] (up to 5.0 ha) increased 9.5% and 40% respectively. In 2012, mountainous region was reported to contain 57% of the national agricultural land area and 64% of the agricultural units. Perhaps the most remarkable feature of the

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[1] Small farms with average size of 1.8 hectares.
[2] Agricultural unit is a field or set of fields within a district wholly or partly used for agricultural production, managed as an economic unit for the agricultural producer, regardless of size, tenure and status (INEI, 2013).

Peruvian *campesinado*, and especially family farmers[3], is that they feed their country mainly using traditional agricultural practices with minimum financial support (INEI, 2013). Family farmers in Peru produce about 80% of national foodstuffs (MINAGRI, 2014). At the same time, it is estimated that in Peru 42% of the existing agricultural land is not productive in annual basis, since there is always some land under rotation, resting, or otherwise un-workable[4]. Also, 63% of farms are solely rain-fed, only 1 percent have access to electricity, 77% are not mechanized, and 62% use organic fertilizer (manure and others). About 90% of these farmers do not receive any technical assistance, and 92% do not access any financial credit (INEI, 2013).

1.1.1 Agricultural Quechua Communities

In May 2012, as a Master of Science student in Integrated Studies in Land and Food Systems (The University of British Columbia), I was invited to collaborate on the International Development Research Centre (IDRC) project "Ecological and Socio-Economic Intensification for Food Security of Smallholders in the Andes" (AGROECO), under the supervision of Professor Eduardo Jovel. I conducted three months of fieldwork as a member of an interdisciplinary research team working in agricultural Quechua communities located in the Cusco Region, in the Peruvian Andes. This experience gave me first hand exposure to the problems faced by Indigenous communities in the region, as well as their wealth of knowledge and cosmology. In 2014, I returned with a clear research objective for my Master's thesis: to explore gender participation in household and community decision making as related to food security, with special attention to women, in two agricultural Quechua communities in the Peruvian highlands. For this research, I chose to focus on "gender" *versus* "women's" issues. Cornwall (2003), based on what other authors have said, summaries: "gender" is constitutive of "all social relationships and as signifying a relationship of power (Scott, 1989; Wieringa, 1998)" (p. 1326). By necessity, my analysis of women's

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[3] In Peru, family farmers (or *campesinos*) represent over 80% of the total 2 million 230 thousand agricultural units (MINAGRI, 2014).
[4] Land is unworkable due to lack of water, workforce and limited financial support (INEI, 2013).

participation in their communities and larger society requires consideration of the roles and relations of both women and men: these social groupings are mixed gender, where the relationship of women and men are deeply intertwined - one in the lives of the other, and vice versa. For instance, Agricultural censuses and household surveys tend to collect data about farms by interviewing mostly male landholders (Twyman, Useche, & Deere, 2015). The underlying assumption is that man is the principal farmer and the only decision maker regarding field production (Twyman et al., 2015). Consequently, women's participation in agricultural production including decision-making processes usually remains unreported in these surveys (Deere & León de Leal, 1982; Dixon, 1982; Kleysen & Campillo, 1996; Twyman et al., 2015).

Material poverty and social and economic inequality in Peruvian Andean communities are severe and, poverty is a root cause of hunger (OECD, 2015; Soubbotina, 2004) and food insecurity. Poverty affects 34.7% of the population in mountainous (Andean high altitude) regions and 52.9% of mountainous rural areas (INEI, 2015). These are also regions with the highest percentage of extreme poverty –10.5% and 19% respectively– (INEI, 2015) in the country. According to Bourque, Warren, and Phillips (as cited in Radcliffe, Laurie, & Andolina, 2004), unequal capitalist development and marginalization of *campesinos* and Indigenous livelihoods forces Andean peoples into a minimum income through utilizing a strategic combination of subsistence and market agriculture, migration, and local labor and production markets. However, in spite of the socio-economic issues, Spaniard conquest, various waves of colonization and acculturation, these Quechua communities remain an invaluable source of wisdom and ancient knowledge. They exhibit respect for the *Pachamama* (a living being who is the mother of all that exists) that provides the land and resources where men and women see the results of their efforts and endless work grow (Rengifo, 2012). In this document, I endeavor to reflect and partially weave the complex and rich agricultural world of Quechua communities, working with the voices of Quechua women and men*, cosmología Andina*, existing literature, and my own journey.

1.1.2 Andean Gender: Complementarity vs. Inequality

My fieldwork (2012, 2014) took place mainly in two Quechua communities located in the Department of Cusco (3,800 m.a.s.l.), in the Cusco Region, Peru: Huamanchoque and Sapaccto village in the Community of Poques. Wernke (2013) suggests, "communities are socially constructed arrangements that structure and are structured by supra-household interactions…[which]…create and emerge from a sense of common interest and affiliation – a sense of shared identity" (p. 23). In these communities, the Indigenous are subsistence *campesinos* and their first language is Quechua. Communal labour is organized by gender, as well as age: there are household and agricultural activities carried out by men, and others by women, boys, and girls (Field observations, 2012). This division of activities is embedded in the Andean concept of gender complementarity (Hernández Astete, 2002; Murra, 1980; Radcliffe et al., 2004; Rengifo, 2012), which shows the interdependence of men and women to successfully perform differentiated tasks for the maintenance of the household and the *ayllu* (community). Men usually work on the land, participate actively in social and political events, and often work seasonally outside the community. Women work in agriculture, tend livestock, and engage in income-generating activities, representing as much as 80% of a family's labour force (IFAD, 2013). At the household, women have a primary role in the production, and purchase decision-making, preparation, and distribution of food (MINAGRI, 2013). Andean social reproduction is the purview of women, to raise children and transmit values, identity and language. As such, women have roles that contribute to the cultural continuity of their communities and to the subsistence economy; but in the Andean region women are at an economic and socio-political disadvantage; most rural women are poor or extremely poor, particularly in Peru (Radcliffe et al., 2004). In the country, only 57.8% of women who speak a native language and live in rural areas, access secondary school, while 66% of men do (INEI, 2010). Specifically in the Department of Cusco, 18% of women (and 4.7% of men) 15-year-old-and-older are illiterate (INEI, 2013), and 70% of women living with a male partner have been victim of domestic violence (INEI, 2015).

1.2 Women, Food Security and Decision-making

In global systems of agricultural production, women and men have different roles and hold different socioeconomic positions in relation to those roles (Carr, 2008; Doss, 2015). This characterization is also observable in Peruvian family farmers. The gender differences based on social constructions affect both women and men in diverse ways: the distribution of resources between these groups cause disparity in the access to opportunities and the exercise of civil rights, which also affect directly household's food security and wellbeing (MINAGRI, 2014). Traditionally in Latin America, rural women have often headed biodiversity and field conservation efforts; consequently, they represent a "key source of knowledge about on-farm seed conservation, cultivation, and local crop-based gastronomy in their respective communities" (Altieri, Funes-Monzote, & Petersen, 2011, p. 4). In my first encounters with the two Quechua communities, I noted that women had multiple tasks in the household regarding food availability (production), accessibility, and utilization[5]. Women were in charge of household tasks (housekeeping, childcare, pets care), livestock, weaving and knitting almost exclusively, while both men and women shared some tasks in household and community agricultural production (Field notes, 2012-2014). According to Tapia (2002), for Andean societies, the family is the basic social entity on which the community is built – without family "a person is not considered a whole being" (p. 95). In theory, a family, typically headed by a couple, woman and man, has access to the communal organization, capital and services; however, often this access is restricted by gender. Andean women tend to lack a voice in community decision-making, which some authors attribute to *machismo* (masculine pride) and the muting of women's interests (Radcliffe et al., 2004), rooted in the culture and gender collision resulting from of the imposition of the Spanish regime (Powers, 2005). Similarly, Pape (2008) conducted a study in Andean Quechua communities in Bolivia that supports the notion that the public space (*e.g.* communal

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[5] The four main dimensions of food security established by FAO: availability (quantity, quality and diversity of food supplied through domestic production or imports), accessibility (economic access, and physical access and infrastructure for acquiring appropriate foods for a nutritious diet), utilization (the availability of utilize food through adequate diet, clean water, sanitation and health care to reach nutritional well-being) stability (exposure to food security risk and incidence of shocks), (FAO, 2014; OECD, 2015).

meetings) remains a largely male-only domain; women have no right to participate in decision-making and they are marginalized from this process. In these communities, women are aware of their restrictions in community participation and identify the obstacles to greater participation, and the mechanisms that perpetuate such restrictions (Pape, 2008).

1.2.1 Decision-making as a Gendered vs. Egalitarian Task

Conventional statements about the gendered division of labor in agriculture tend to confine this to physical activities (Doss, 2015; Jha, 2004); however, decision-making is itself a task: it is the main component of the practice of tasks, and certain gender roles involve more decision-making power than others (Jha, 2004). Some authors also recommend distinguishing between patriarchal and egalitarian family farming systems (Deere & León de Leal, 1982; Twyman et al., 2015). In Latin America, particularly in the Andes, where the family farming system is the most common system among smallholders, joint decision-making as a husband and wife is the predominant way to make decisions in a family unit, although this may vary depending on the type of decision or realm to which the decision pertains (Hamilton, 2000; Kleysen & Campillo, 1996; Twyman et al., 2015). In a patriarchal system, the couple provides labor, but men control decision-making regarding food production and distribution; in an egalitarian system, both woman and men are expected to provide labor and share in decision-making, making joint decisions or specializing in some decisions (Deere & León de Leal, 1982; Twyman et al., 2015).

One of my working assumptions is that women from the Peruvian Quechua communities included in this study may have different perspectives than men regarding some activities carried out at household and community levels, ranging from what food to buy, what crops to cultivate, what amount to sell, and how to feed their families so as to contribute better to and ensure food security. In the region, family and community life are strongly integrated (MINAGRI, 2014): Quechua *campesinos* work together for their

household as well as for their community. Community decisions have the potential to affect deeply each family (Tapia, 2006), yet, without women's active participation in decision-making in public and private or household spheres, there is the risk that critical experience and knowledge about food security could be overlooked to the detriment of families and community. For example, in Huamanchoque, when deciding what variety of potato (*Solanum tuberosum*) to cultivate, some men considered market demand, while women decided based on what potato was more versatile and easy to cook in order to feed their families (Field notes, 2012). Gender-based distinctions in decision-making have also been described in studies carried out in rural communities around the world: in Ghana, in an economic-agricultural context similar to this study, Carr (2008) found that in households with low in cash incomes, women tended to engage in subsistence farming, while men tended to focus more on market production. In another study conducted in agricultural Indigenous communities in Mexico, it was found that the maize varieties women preferred were the most nutritious, resistant to the weather, and yielded the highest *tortilla* production (Bee, 2014).

1.3   Research Significance

Gendered and female experiences in subsistence agriculture and family farming systems are a key factor not only in understanding food security, but also for understanding the chances and challenges of guaranteeing food security in a changing climate (Bee, 2014). Peru is the third most vulnerable country to the effects of climate change –especially to climate variability–in the world (WFP & CENEPRED, 2015). The national Vulnerability to Food Security before the Recurrence of Natural Phenomena[6] is 0.15, while in the Department of Cusco this is ranked as "high" (0.292) (WFP & CENEPRED, 2015). This condition makes Peru vulnerable to progressive lost of crops like corn, potato and rice; reduction of fresh water availability; and increasing number of forest fires and extension of pests on crops (WFP & CENEPRED, 2015). Besides being affected by these and other climatic issues, peasant agriculture has been weakened

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[6] It means the likelihood that a population be affected by food insecurity before the impact of a recurrent threat of natural origin. This kind of vulnerability is given by threats of natural origin, and by the food insecurity vulnerability measured by the social-economic fragility and social resilience (WFP & CENEPRED, 2015).

by neoliberal policies promoting free markets and open economies[7], and with that their production has heavily oriented towards household food security and an extra task of women's domestic work (Deere, 2005). There is evidence,

> stronger for some countries than others, of a feminization of smallholder production, as growing numbers of rural women become the principal farmers—that is, own-account workers in agriculture. This phenomenon is associated with an increase in the proportion of rural female household heads; male absence from the farm, in turn related to growing male migration and/or employment in off-farm pursuits; and the decreased viability of peasant farming under neoliberalism. (Deere, 2005, p. iii)

In recent years, Peruvian authorities have declared publically the relevance of the family farming system for the country and the role that native communities play in it (MINAGRI, 2014). In a broader context, it is worth acknowledging that "information gathered from the study of traditional agriculture is useful for developing appropriate strategies that are sensitive to agroecological complexities, socioeconomic processes, and local peoples' specific needs" (Altieri, 1990, p. 551).

Focusing the research on gendered participation in physical tasks as well as in decision-making processes in the context of food security raises several important questions: Does the concept of gender complementarity manifest itself solely in physical tasks (*e.g.* plowing, seeding, harvesting, selling at the market, *etc.*)? Or, is it also observable in decision-making process about food production, accessibility and utilization? Then, do agricultural Quechua communities function under a patriarchal (*i.e.* men dominate decision-making process?), an egalitarian (*i.e.* multi-gender, joint decision-making or a different farming system altogether? This study contributes to a better understanding of community political organization and gender participation in two Quechua communities in the context of food security; it exhibits the predominant food security stressors faced by the communities, and describe how households and communities, especially women, respond to them. The study also provides information about

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[7] In order to balance the macro-economy, Latin American countries promoted market-determined prices, consolidation of exchange rate, elimination of export taxes and lower tariffs on inputs, while they reduced public investment and volume of resources available for farmers, and ended to subsidized agricultural credit, and others (Deere, 2005).

women's interests and needs that may be fulfilled in order to transform gender imbalances in traditional agricultural communities and before women's effective participation can take place: respect and appreciation from male community members, access to higher level of formal education, family/community practical support, and personal confidence and social skills, and others.

1.4   Research Summary

The research presented herein is a qualitative case study that focuses on two indigenous Quechua agricultural communities, Huamanchoque and Poques, in the Cuzco Region of Peru. Both communities are located in a geographical zone known as "Sacred Valley" (3000 – 4100 m.a.s.l.). Huamanchoque and Poques are engaged in subsistence agriculture, mainly growing a variety of Andean tubers and corn (*Zea mays*), and animal husbandry of alpaca and goats. The primary language in both communities is Quechua, followed by Spanish.

The research explores gender participation in the context of food security, with special attention to women's roles in physical tasks and decision-making processes.

Research objectives

(i)   Identify the main food security stressors in these two Andean communities,

(ii) Describe the main instances that communities make decisions regarding food security,

(iii) Analyze gender roles in food security strategies at household and community levels,

(iv) Report on the outcomes of the research back to the communities.

Hypothesis

In Andean agricultural communities, women exert a strong influence on decision-making processes regarding food security (production, accessibility and utilization) at the household level, but not at the

community level. In order to test the hypothesis, qualitative research methods were used including participant observation, field notes, semi-structured, in-depth individual and group interviews, gendered talking circles (adapted), and content analysis.

The following four overarching research questions guided this work:

i) What practices of food production, accessibility, and utilization do women resort to secure the provision of food resources for families and community?

ii) What is the level of women's participation in community decision-making process regarding food security?

iii) What knowledge, attitudes and perceptions (KAP) do men have about women's roles in food security at the household and community level?

iv) What KAP do women have about their participation in community-level decision-making regarding food security?

The remainder of this thesis describes gendered participation in food security strategies, and the ways that members of the partner research communities make decisions regarding food security. Chapter 2 provides a theoretical framework for the research questions of this study. Chapter 3 describes the methodologies and fieldwork that were employed, as well as the process of data analysis, and Chapter 4 describes research findings and outcomes organized in relevant themes emerging from the research questions. Chapter 5 summarizes the research findings, provides some conclusion and reflections, and outline future research.

Chapter 2: Theoretical Approach and Framework

In this chapter I introduce the main perspectives that frame this study: local knowledges vs. monoculture, agroecology, *cosmovisión Andina* and gender participation, as concepts that help elucidate gender roles and tasks in the context of food security, food sovereignty, traditional agricultural communities, and participation at household and community level. Secondly, I provide a description of historical Andean gender ideology in Peru, and how it has been affected by Spanish conquest and colonization. With this, I hope to facilitate an understanding of present day life, gender roles and relationships in the two indigenous Andean Agricultural Quechua communities. Finally, I bring in a framework to assess women's roles in these traditional agricultural communities/systems and, more specifically, gender participation at the community and household level. For this, I propose a conceptual model of participation ranging from nominal participation to self-mobilization.

2.1 "Monocultures of the Mind" and the Agroecology Response

The concept of "monocultures of the mind" presented by Vandana Shiva (1993) draws attention to the effects that Western systems of knowledge have had on food production worldwide, particularly in traditional agricultural and knowledge systems. This globalization which is manifest in Western science and technology, once proclaimed itself 'universal' (Shiva, 1993). The Western systems of knowledge is the globalized version of a very local tradition, rooted in a particular culture, class and gender that, later, displaced other local knowledges by negating them, referring to them as 'primitive' and 'unscientific' (Shiva, 1993). This particular way of understanding and interpreting the world was translated into a monoculture of the mind (Shiva, 1993). In the realms of forestry and agriculture, the Western system legitimized uniformity in pursuit of increased yields, and with that displaced "ecologically sounder indigenous peasant's age-old experiences of truly sustainable food cultivation, forest management, and animal husbandry" (Rojas, 2012, p. 264). The marginalization of local knowledge and wisdom connected to forestry and agricultural practices contributed to the destruction of cultural and bio diversity, which

according to Shiva are two inseparable elements (1993). Despite their projected self assurance and righteousness, these uniform systems became impoverished, unstable and unsustainable; conversely, if we democratize knowledge and legitimize local knowledges, Shiva (1993) argues that knowledge can be freed and, consequently, humanity freed from dependency on particular, limited and/or non-culturally relevant systems of thought.

Through the lens of agroecology, I suggest that it may be possible to shift such prevailing paradigms described by Shiva (1993), emphasizing more local over globalized knowledge. Agroecology principles and practices help contextualize the case study and address the research questions while attempting to ensure that the importance of local knowledge/agricultural activities is duly acknowledged. The agroecology paradigm recognizes the embedded experience and knowledge of traditional agricultural systems, which throughout human history has fostered the development of sustainable agroecosystems supported by local resources, and human and animal energy (Altieri, 1990).

Agroecology is a science, and a set of practices, that integrates agronomic studies, ecology, ethnographic research, and studies on rural context and environmental thought (Rojas, 2012). As a science, it is defined as the "application of ecological science to the study, design and management of sustainable agroecosystems' (Altieri 2002)" (Altieri & Toledo, 2011, p. 588). Agroecology emerged as the paradigm that acknowledges the importance of studying traditional agriculture, and agricultural traditional knowledge, to "accelerate the emergence and acceptance of agroecological principles[8] for the development of sustainable agroecosystems throughout the world" (Altieri, 1990).

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[8] In the practice, it implies minimal use of agrochemical and external energy inputs into any given agroecosystem (Altieri & Toledo, 2011).

As an alternative to industrial agriculture[9], agroecology promotes local/national food production by small land holders and family peasants based on local innovation and resources (Altieri & Toledo, 2011). From a socio-economic perspective, agroecology promotes community-oriented approaches that look after the subsistence needs of its members, emphasizing self-reliance (Altieri & Toledo, 2011). From an economic development vantage, however, Altieri (1990) acknowledges that agroecology is unable to address – without deep changes in land tenure and power relations- the structural and economic issues that underlie rural poverty; for that a wider approach is needed, one that takes into consideration the *campesinos'* social organization (Altieri, 1990) since agriculture is essentially a social activity (Morin, 2007) – a process of co-evolution between society and nature– (M. Altieri, 2009; Iles & Montenegro de Wit, 2015). Other scholars go beyond the need to see agroecology as playing a transformative role that contests the dominant agro-food regime (Levidow, Pimbert, & Vanloqueren, 2014), and conceive agroecology as a holistic response to present day challenges of the agricultural peasantry. This trend, which Gliessman (2014) calls "transformational agroecology", proposes that agroecology should embody and integrate three forms that are mutually dependent: scientific discipline as a transdisciplinary knowledge (including local and indigenous knowledge), interdisciplinary agricultural practices, and social movements that strongly connect to food and popular sovereignty (Levidow et al., 2014), food security and food justice in rural and urban communities (Gliessman, 2014).

For Rojas (2012), the integration or translation between Western scientific knowledge and local-experiential knowledge is possible and desirable through agroecology. Agroecology came to learn from peasant's traditional knowledge, and validate and promote it according to the tools of Western science (Rojas, 2012). Western science aims to find universals and generalize phenomena, while traditional knowledge tends to be site specific and looks for singularities: both knowledge systems "have their own

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[9] Industrial agriculture is characterized by high dependence on agrochemical and energy inputs, and a high degree of environmental disruption.

demands, merits, and weaknesses, depending on the aspect of reality they intend to illuminate" (Rojas, 2012, p. 263).

2.2   *Cosmovisión Andina*

In the context of the research presented in this thesis, Andean culture and agricultural practices are grounded in a very particular worldview: the *cosmovisión Andina.* According to Ishizawa and Rengifo (2009), for the indigenous people from the Andean region, "agriculture and culture are one and the same" (p. 62). The authors explain further:

> For the human communities of the *ayllu* (the natural collectivity or extended family that inhabits the local world (*pacha*) and includes deities and nature), all entities in their world are alive. The mountains are considered to be protecting deities who can speak, nurture plants and animals and take a turn as authorities in nurturing the *pacha*, just as any member of the human community. In the same way, the Earth is not an inert receptacle of plants. It is *Pachamama*, a living being who is mother of all that exists, including human beings (Ishizawa & Rengifo, 2009, p. 62).

The members of *Pachamama* or Mother Earth (nature, deities and humans) have equivalent worth and are involved in a relationship of mutual nurturance (Rengifo, 2012). The *chakra*, the author asserts, is the maximum expression of this relationship and "respectful of the vocation of nature for diversity, mimicking natural heterogeneity" (p. 27). Crop and human beings (or nurturer) integrate with each other as a unit in which biological and cultural elements are inseparable; crops nurture humans like a mother, while humans care for the seeds as a child (Rengifo, 2012). Under this *cosmovisión*, minerals and agricultural produce were related to female divinities (Hernández Astete, 2002). For instance, currently potato and maize are called *Papa mama* and *Sara mama* respectively. According to some researchers, the biodiversity of the Andes is a result not only of the productive technology of Andean Indigenous peasants, but also a product of agricultural rituals, such that biodiversity and agricultural rituals are interrelated through productive and symbolic technology (Van Kessel & Condori, 1992). Some technical productive work, the authors add, exhibit the features of a ritual liturgy, while the agrarian technology of a particular community defines the time of some spiritual religious expressions. In this context, the concept of production does not do justice in describing the relationship between Quechua farmers and

their crops (Rengifo, 2012). Work is an economic activity, but also a sacred expression through which the Quechua peasant relates with the *ayllu* and its three dimensions: human community, divine community, and nature or natural community in order to cultivate the life as a whole concept (Van Kessel & Condori, 1992).

2.3 Gender in Context

The following provides review of the concept of gender, which I compare to ancestral concepts of Andean gender-parallelism, complementarity and reciprocity. I then explore how gender roles, relations and perceptions in the indigenous communities in Peruvian Andes were affected by Spanish colonialism. Although this is not an exhaustive historical account, it provides the essential background for a deeper understanding of the communities under study, their culture, political organization and current gender roles and relations.

The concept of gender in gender studies includes a multilevel set of features and relations in addition to biological sex, and involves social significances, position, and relationships to the other genders (Bezner Kerr, 2011). Gender is a socially constructed concept, with meanings, position and relationships affected by social interactions that also change according to space, time and culture (Bezner Kerr, 2011). The study of the relation between genders generally examines the differences and inequalities manifested through roles, tasks, perceptions, power, and other criteria, taking place in diverse scales and spaces, from cities and organizations to the level of the household (Bezner Kerr, 2011). In addition, other socially constructed categories—for example class, age and ethnicity—interact with gender and affect each other in complex and multidimensional forms (Bezner Kerr, 2011).

With this concept in mind, it is worth reviewing some historical background that has influenced Andean gender roles and relations in the communities under study. From the approach proposed by Zavalla (1991), gender analysis must begin taking into account the historical structural circumstances that

constrain women's experiences and, then, one must look for links between these circumstances and the ways in which women react to and construct cultural representations from their experiences. This means that we must avoid concluding that male and female differences arise just from class, race or gender itself. On the contrary, the author says, we have to be able to research women's and men's lives, identifying the diversity found in other significant elements (1991). For example, the region (local economy) is another major factor that defines how both gender groups translate and act regarding associated assumptions about household division of labour.

Zavalla (1991) also pays special attention to family ideology, as it shapes the couple's experiences in the work market and women's wages labour in the larger political economy. Family ideology is in part a cultural expression; in that sense, for the purpose of this study, it becomes relevant to take into account the *Cosmovisión Andina*—or whatever remains of this *cosmovisión*—regarding gender at a household and community level. In addition, if we identify women's social location among other women and men, it helps to clarify structural and cultural similarities and differences in women's groups belonging to the same race and class (Zavalla, 1991). In this research, I apply women's social location criterion to analyze women from two different indigenous communities at the household and community level. Although women from these two communities are essentially of the same ethnicity, they belong to two different places/environments, with differences regarding ancient culture predominance and rural-urban connections, among other differences.

2.3.1   Gender in the *Cosmovisión Andina* and Spaniard Regime

In the *cosmovisión Andina* the concept of duality was present in almost all the manifestations of reality and thought (Hernández Astete, 2002), and this duality was also manifested in the conception of gender dynamics. "The Andean man perceived the world divided between opposite parts [*e.g.* high-short, right-left, close-far, male-female] which, at the same time, are complementary, since the existence of one is

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always needed to understand the other" (Hernández Astete, 2002, p. 37). Before the arrival the Spanish in the Andes (and in Mesoamerica), women and men from this region operated in different but equivalent and autonomous spheres, which is described conceptually as gender-parallelism. Genders were relatively egalitarian (Kellogg, 2005) and complementary (Powers, 2005).

Andean gender-parallelism was founded on the idea of parallel descent: men descended from a male line, while women came from a female one (Kellogg, 2005; Powers, 2005). In practice, ritual position and inheritable entities, such as lands and herds, were passed on from mothers to daughters, from fathers to sons. Consequently, women had the same access to the *ayllu*'s resources as did men (Powers, 2005). This kind of gender-parallelism was also present in the political organization of the Inca Empire[10]; in both cases gender-parallelism does not necessarily translate to gender equality. Although the Inca (king) governed over men and the *Coya* (the Inca'*s* sister/wife) governed over women (Lavrin, 1993)–implying shared power, where the spheres of women and men were joined, men maintained the highest political and social status at the apex of the empire (Kellogg, 2005; Powers, 2000). In the *ayllus* gender dynamics were similar: men were the ones to represent their families in legal/bureaucratic matters (Powers, 2005). The conception of duality also conceived some levels of hierarchy as between two elements one had to be superior (Hernández Astete, 2002). However, the hierarchy was interchangeable, and given specific contexts any of the two elements could head the hierarchy (Hernández Astete, 2002).

In Andean economies and labour systems, both genders constituted a single labour unit. Regarding the Empire economy, the marriage initiated the productive epoch in a couple (Hernández Astete, 2002; Rostworowski, 1986). Tasks were assigned to households –or domestic units (Rostworowski, 1998) –not individuals (Murra, 1980). Consequently, the household unit was the key to economic success, and the entity responsible for providing labour services to the Inca empire (Powers, 2000; Rostworowski, 1998).

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[10] The Inca Empire governed the Andean communities before the Spaniard arrival.

In the household and in the *ayllu*, work was allocated along age and gender lines (Murra, 1980), and women as well men had similar tasks and obligations to carry on (Hernández Astete, 2002). No agricultural task was strictly prohibited from being accomplished by either a woman or man (Guaman Poma de Ayala & Pease, 1980; Kellogg, 2005; Murra, 1980; Silverblatt, 1978). For instance, harvesting and weeding were tasks shared by both genders. The role of healer and confessor, and leading rites to ensure the *ayllu*'s wellbeing was the domain of women (Powers, 2005).

In the *ayllu*, labour and social relations were conceived under the principle of reciprocity (Murra, 1980) and redistribution (Rostworowski, 1998) among *ayllu's* members. This meant that "there were not wealthy or poor individuals, there were wealthy or poor *ayllus*" (Powers, 2005, p.34). Women also played a dominant role in food distribution: trade and barter among communities was of vital importance and mainly controlled by women (Silverblatt, 1978). However, with the imposition of the Spanish regime, Andean gender systems changed radically: women were relegated to a secondary social positions and their influence limited to the private sphere (Kellogg, 2005; Silverblatt, 1987; Vergara, 2007). It was both a cultural and a gender collision (Powers, 2005). Male privileges and power increased –within a generalized situation of colonial subordination for Indigenous male too–, and with them, so did gender inequality. Women were perceived increasingly as beings that lacked the ability to reason, and became dependent on men for political representation (Powers, 2005; Vergara, 2007). A male-centric worldview was imposed over the former gender-parallel character of historical Incan social organization.

The Spanish colonial system was divided into two different republics delimited by race: the Republic of the Spaniards (urban areas) and the Republic of the Indians (rural areas) (Powers, 2005). In the 16th century, Spaniards increasingly resettled indigenous peoples from scattered areas to villages. This policy of relocation forced Andean peoples to live grouped in a same town, and promoted the shift from endogamous to exogamous marriages (Powers, 2005; Spalding, 1967). It became an obligation for women to move from their ancestral families to those of their husbands (Spalding, 1967), and found

themselves paying double tribute: as part of their original *ayllu*, as well as in their husbands' *ayllu*. From that moment on, it became very difficult for women to inherit property in their original *ayllus* and their access to land was contingent on their husbands (Powers, 2005; Silverblatt, 1987); consequently, daughters were also affected. Men also affected: they were required to work outside of their *ayllus* with no compensation for their absence, and women assumed additional tasks not traditionally assigned to them (Powers, 2005).

Throughout the colony in the central Andes, as the native population decreased, the Spanish population grew, which placed a greater burden on rural communities, especially on women. Women were obligated to satisfy increased demands for food and goods from urban centers, which changed the nature and amount of women's work (Kellogg, 2005; Vergara, 2007). Many women were forced to migrate in order to find employment. By the 17th century, Andean women became the primary market vendors in the Andean region (Kellogg, 2005; Powers, 2005).

2.3.2   The Imposition of Western Progress

The deep knowledge and comprehension of the diverse environments and ecological systems, which was gained through thousands of years of lived experience, was key to Indigenous peoples' prosperity, including the assurance of food diversity in the Andean region. For Murra (Murra, 1980), the *puna* (plateau) and the *quishua* (mountain) "form a unit and a single cultural life zone" (p. 5) but, at the same time, with significant botanical, ecological and cultural diversity. Indigenous groups in this region functioned under the social-economic model that Murra (1980) calls "the vertical archipelagos" or "ecological complementarity[11]". These vertical archipelagos explain the dispersed settlement pattern used by many Andean ethnic groups, which allowed them to diversify productivity at different altitudes.

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[11] Also described by Murra (1980) as the vertical control of a maximum number of "pisos ecológicos" (geographical elevations).

Indigenous groups commissioned workers to find ecological niches at different altitudes and, in some cases, far away, to extract or produce resources not available in their immediate *ayllus* or main settlements (Powers, 2005; Spalding, 1967). With this, they ensured access to and control over "islands" of resources as agricultural and pasturage lands, as well as maritime and mineral resources, which some ethnic groups also complemented with several production and ways of exchange (Murra, 1980). As this model was practiced by several different groups of Indigenous peoples, in any one zone there might exist diverse "islands" administered by different groups, which were not necessarily exempt of dispute for the control of these resource rich zones.

Following the arrival of Spaniards to the Andes, the progressive decline of native populations, combined with their inability to provide adequate and appropriate tribute to sustain Spanish demand, the colonizers began taking possession of agricultural indigenous land and altering their ancestral territorial organization. The Spaniards created *haciendas*[12] in order to initiate business and export enterprises sustained by Indian labour. The implementation of *haciendas* disrupted ancestral Andean relationship between indigenous peoples and the land, implanting a modern ontology where space (land) and subject (indigenous peoples) are conceived separated and different (Surrallés & Garcia, 2005). *Ayllus* fell into relationships of dependency when the *haciendas* took control of maize and pasture highlands, and their access to the ancestral land and sources of water was exchanged for their labour (Skar, 1984).

Spanish *haciendas* also reinforced the new gender roles and division of labour (Powers, 2000): in the *ayllus* women were relegated to the household tasks and care of the family became their sole purview, losing independence and autonomy over their own work (as food producer, waiver, food trader, etc.) and products. Men were once again forced to be periodically absent from the families and agricultural lands to

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[12] *Hacienda* is a system of large landed state developed as profit-making, economic enterprises linked to regional or international markets imposed during the Colonial period.

sustain the *haciendas*' production and to obtain that which was needed for subsistence (Powers, 2000). The *haciendas* during Spanish colonization up until the 20th century in Peru were a manifestation of economic development. Shiva (1988) argues that development is a post-colonial project, since it assumes that Western progress—and its economic categories of needs, productivity and growth—is suitable for everybody. Consequently, economic development and the exploitation of natural resources will satisfy the basic needs of the people from former colonized countries. However, as development was founded in the "modern western patriarchy's economic vision" (Shiva, 1988, p. 2), the author explains that it is actually based on segregation of women, devastation of nature, and diminishing of culture diversity. Some men and entire communities are also struggling to survive this kind of development and the impoverishment that it brings, however, women lose more getting an unequal inclusion in it; rather, they assume the costs but do not reap the benefits (Shiva, 1988).

2.3.3   Food Security and Sovereignty

The most common and widely-used definition of food security originated at the World Food Summit in 1996 and states that, "food security exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (FAO, 1996). This definition brings in relevant notions of food availability, accessibility and utilization. Since its inception, however, it has become evident to the research community that food security needs to be approached from a more integrated perspective than food production alone (Ingram, 2011). Although food production per capita is more than sufficient to feed the world population, about 842 million people in 2011-13 were reported to face chronic hunger (FAO, 2014). Furthermore, it also became an urgent matter to consider various impacts on food systems globally, such as global environmental changes and the challenges of reducing negative externalities like soil degradation, water pollution, loss of biodiversity and greenhouse gas emissions, all of which are intimately connected with mass food production and the industrial food systems (Ingram, 2011). Ingram

(2011) adds that in an effort to better understand what constitutes food security, research needs to focus on food systems.

In an attempt to consider the many factors that impact food security and food systems, Rojas (2012) defines food security as the condition made possible "by a food system that delivers food that is affordable, available, accessible, appropriate, safe, and sustainable for all" (p. 258). While Rojas' definition helps broaden conceptualizations about food security, many conversations using the food security framework continues to miss certain crucial elements. In this research, the fact that the Indigenous peoples were producers as well as consumers of their own food, it is crucial to bring in the concept of food sovereignty. Since its inception, the notion of food sovereignty highlighted the need to integrate into the food security debate the power relations behind production, distribution and consumption patterns that shape the food system (Wiebe & Wipf, 2011). In this sense, a broad definition of food sovereignty highlights "the right of nations and peoples to control their own food systems, including their own markets, production modes, food cultures and environments" (Wiebe & Wipf, 2011, p. 4). From a perspective more centered on consumption, some agroecologists look at food sovereignty as "the right of everyone to have access to safe, nutritious, and culturally appropriate food in sufficient quantity and quality to sustain a healthy life with full human dignity" (Altieri et al., 2011, p.12). Beyond the differences of these definitions of food sovereignty, the various themes or notions underlying each complement one another and highlight the need for approaching and assessing food systems, producers and consumers from multiple perspectives. These perspectives need to consider the dimensions of production, economics, environment, society, culture and politics. For Andean agricultural communities, a quantitative approach does not do justice the character of the peasant unit of production, since it misses the biocultural component (Rengifo, 2012). In Andean small-scale agriculture, production relates crop to cultivators and seeds to rituals and festivities, such that in a community of potato production there might be a "potato culture" (Rengifo, 2012).

2.3.4 Women and Food Security

According to the FAO and ADB (Schutter, 2013), in Asia and throughout the Pacific region, women are the main pillars of food security: they play a critical role in the availability, access and utilization of food in agriculture and at household- as well as community-levels. Women's roles, however, are underestimated and constrained by restricted access to resources, services and labour market opportunities (Schutter, 2013). Ironically, despite women's pivotal role in food security worldwide, around 60% of undernourished people are women and girls (WFP, 2009). Female social and economic empowerment may be the appropriate response to these critical issues. The relationship between improving women's access to the formal education system and strengthening their role in decision making at the household and the society levels is mutually reinforcing, as is facilitating economic autonomy, and improving women's bargaining positions within the household and the influence of their voices in public decision making (Schutter, 2013). Nonetheless, autonomy may not be the better answer for all women. Indigenous women demand that gender perspectives acknowledge the existence of multiple cultures and inter-cultures (Campo, 2012). For instance, indigenous women with *cosmovisiones* based on the concept of duality—like Quechua people—understand gender equity as a direct consequence of complementarity between man and woman, and not as part of autonomy or superiority of one gender over another (Campo, 2012; Radcliffe et al., 2004).

In order to consider the interaction between gender and food security, I utilize the argument presented by Bezner Kerr (2005), who explains that we should not regard households as undifferentiated units, because then age, gender and power differences in gender relations are ignored. For Bezner Kerr (2005) and for this study, it is also important to pay attention to unequal relations between genders within the household because, with inequality, the possibility for food insecurity increases. In that sense, Choudhary and Parthasarathy (2007) emphasize that household food security may not guarantee individual food security, often food is not equally accessible to every member of the household. The authors point out that traditionally women have found themselves in unfavorable positions in the process of food distribution

and nutrition security (2007). Consequently, the pivotal role women play in household food security is not enough to ensure food and nutrition security for each family member. Yet, Bezner Kerr (2005) adds, it is commonly assumed that if income increases in the household overall food security will also increase, as if any income produced were equally shared within the household. On the contrary, Bezner Kerr (2005) explains that, instead of seeing the household as a unitary model, it is more adequate to use a bargaining approach[13] in order to identify complex factors that affect household gender roles. Factors that specifically affect women's power to negotiate are as follows: property ownership, household's class position, access to income-earning opportunities and community commons, and support from friends, family members, gender organizations and the state (Bezner Kerr, 2005). These factors have to be considered entitlements, since they are owned assets or exchange entitlements, and women's access to them could explain both their disadvantage to bargain into the household in a specific region, and how poorer households tend to be food insecure (Bezner Kerr, 2005). However, if we do not incorporate historical and power dimensions when approaching gender power relations within household the bargaining approach is incomplete (Bezner Kerr, 2005).

Regarding household food security, it is also worth considering the essential non-tangible goods that are non-market commodities –warmth, nutrition and health–: these are the invisible components of household food security that hide the key female role (Choudhary & Parthasarathy, 2007). Women's tendency to ignore and underestimate their own work and its relevance might be a result of much of women's work being unpaid and, at the same time, obligatory—even when a woman earns wages, they may often be treated as of minor importance (Choudhary & Parthasarathy, 2007).

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[13] It refers to a way of approaching household dynamics in order to identify "complex factors, including perceptions and social norms that affect household bargaining positions" (Bezner Kerr, 2005, p. 55).

2.4   Andean Agricultural Communities

In the following, I describe some historical facts that explain how *ayllus* became *comunidades indígenas*, and then *comunidades campesinas* (peasant communities) – as they are known today. Indigenous community members still call their communities *ayllus*, as they did before the imposition of *haciendas*, which broke their ancestral relationships with the land (Surrallés & Garcia, 2005) and the creation of *comunidades campesinas* reinforced that division. Later, I present a definition of traditional agricultural communities that is applicable to the Andean communities I worked with to answer my research questions. Butler Flora (1990), Skar (1984) and Rengifo (2012) draw the essential characteristics of the Andean *peasants* and agricultural communities: while the community is the main instance of decision-making and conflict resolution, the household is the main unit of production and nurturer of agrobiodiversity (Rengifo, 2012).

2.4.1   A Shift from *Ayllu* to Community

As previously mentioned, historically, under the Andean cosmovisión, the *ayllu* is a human community that, together with deities and nature, inhabits the *pacha* (Ishizawa & Rengifo, 2009). In the process of colonization and post-colonization, the sense of *ayllu* was eroded and the concept of community as it is known today – with diminished interconnection and increased individuality within and among humans, and between humans and physical, biological and spiritual environments – became predominant in the ruling political and legal spheres. Once the Republican period had been fully established in Latin America, liberal voices argued that indigenous peoples should be considered as individual citizens and forms of association such as communal entities should be done away with (Gelles, 2002); "communal ownership and organization were seen as obstacles to progress" (p. 244). Nonetheless, in 1920, several hundred communities were legally recognized as *comunidades indígenas* (indigenous communities), and in 1969, with the massive land reform in the region, this number increased dramatically, and they were eventually renamed *comunidades campesinas* (peasant communities).

In Peru, the *hacienda* era ended in 1969, when the president Juan Velasco (1968-1978) enacted the Agrarian Reform Law. Though the law was meant to regulate the coastal and mountainous lands, it ended up reorganizing/redistributing land by shifting ownership from individual *hacendados* to collectives (Mayer, 2009). Later, the Law of Native Communities (1974) intended to strengthen the land rights of indigenous peoples. Both laws were framed by the Peruvian National Revolution under the Velasco's government, and the word "peasant" started to be used to denote the will of integrating indigenous peoples as fully-fledged citizens (Grillo & Sharon, 2012). Nevertheless, as the authors point out, for coastal and Andean native peoples, to be incorporated into the revolution as peasants had a high cost that, I might add, they continue to pay until now. Indigenous peoples and communities became peasants and peasant communities respectively, leaving behind part of their indigenous identity; this meant that they shifted from an ethnic category to a socio-economic one (Gelles, 2002). This new socio-economic category later opened the chance to extend rights through the creation of worker's cooperatives: legal entities that joined peasants in their condition of workers (Grillo & Sharon, 2012). Today, neoliberal reforms that threaten Andean nations concentrate on the land once again, remove community safeguards, and allow the business sector and government agencies to attack Indigenous highland communities, their common property regime and cultural identity (Gelles, 2002).

2.4.2   Traditional Agricultural Communities

Despite dramatic political and social change experienced by the *ayllus*, Rengifo (2012) states that the *ayllu* is still an organic and an ancestral way of living in current communities that is independent of the juridical, settler norm that regulates them. In the specific case of Andean communities, they can be integrated by one or more *ayllus*, and though a community may be formally divided or become part of another community, what remains is the *ayllu* (Rengifo, 2012) and the kinship relationships in which this is founded.

Many indigenous peoples are more likely to work in small scale or self-employment, and they have done this due to the colonialism and certain historical circumstances. Small-scale labor, the author explains, is not a temporary trend; this is part of their culture (Pérez Velasco Pavón, 2014). Indigenous peoples employ strategies ranging from workshop discipline[14] —controlling their own pace, timing and behavior at work—to factory discipline[15] (Pérez Velasco Pavón, 2014). In addition, they have very strong attachment to their land, and prefer construct their own culture, institutions and social groups that are non-dominant in some cases, and hierarchical in others (Pérez Velasco Pavón, 2014).

In traditional agricultural societies, the community plays a crucial role, since it is a source of rights and resources for smallholder economic life (Umar, 2014), and the site where decisions around conflicts regarding resource allocations are made (Flora, 1990). These kinds of societies have been only partially affected by capitalist relations (Flora, 1990): the household labors predominate, remains the main unit of production and exerts the right to sell or consume part of that production. Traditional agricultural societies can subsist partially outside of market rules due to particular exchange relationships that place the household at the center of production, and because key elements for their subsistence—land, animals, tools, and human labour—have a value beyond monetary ones (Flora, 1990). In addition, there are

> "social and cultural factors like the survival of the extended family that guarantees the *ayni*[16] or mutual help, the redistribution of harvests, the detailed knowledge of the crop's process, a delicate and permanent dialogue with the environment, and a behavior of care and respect for nature" (Rengifo, 2012, p. 48).

In order to characterize and understand traditional agricultural systems, Flora (1990) reviews three factors of production that are present in traditional agricultural communities: land, labour and capital. It is the community that guarantees to *peasants* effective access to those factors. The social and cultural dynamics regarding the following factors prevent the communities from being "completely proletarianized" (p. 33),

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[14] Lack of hierarchy and work with little or no division of labor.

[15] Hierarchy and division of labor.

[16] Mutual help calculated on length and type of work.

protecting "…the subsistence sector and the ability of the farming household to partially control at least in part both labor and product" (p. 33), and act as "barriers to increased dependency and exploitation" as wage laborers (p. 33).

i) **Land**: Land is valuable because of its uses and communal forms of ownership. Community is an institution of land tenure that regulates individual access to lands. Community lands are inalienable and cannot be bought or sold: according to need, plots are annually divided out among community members (*laymi*), while other lands are owned by families who administrate them under rules of inheritance (Skar, 1984). In Andean communities, usufruct rights ensure community social relations for a lifetime. In some communities, "there is a certain moral sense that those who live and work in the community should enjoy rights to land, and if it is scarce, outsiders are not welcome" (Skar, 1984, p. 86). Social and cultural mechanisms, including rites and festivals of land access ensure land availability for these communities.

ii) **Labour**: While households may depend on jobs not directly dependent on the land to ensure their subsistence, traditional agrarian communities provide mechanisms to help guarantee the production throughout the agricultural cycle. Even when temporary migration for wage work may remove a key family member from the area, in traditional communities non-commoditized extra-household social relations maintain the individual household's options to maximize sources of income and subsistence. Three kinds of labour exchange are present in Andean communities: *ayni*, calculated on length and type of work; *minka*, work in exchange for goods like food and coca leaves—it often involves unrelated people who, at the end of the work day, might get eggs or cheese (Skar, 1984), and *faena*, in which community members carry out public works. No wages are involved in *faenas*, but there is community accounting. Communal labour is thought to provide collective goods or benefits: "These are collective goods to which all have access, and thus, traditional communities develop norms and institutions to ensure that all contribute" (Butler Flora, 1990, p. 29). Skar (1984) adds another non-

wage labour called *ayuda*. It is the rightful claim of one's closest family, and it is free between family groups.

Based on the descriptions made by Powers (2000, 2005) and Silverblatt (1978, 1987) about *ayllu*, the kinds of labour identified by Butler Flora (1990) and Skar (1984) come from an Andean ancient way of functioning as an agricultural society, when, before the Spaniards' arrival, there was no money, and concepts such as earnings or capital did not exist. In fact, these forms of non-wage work exchange are an expression of social relations that have a strong significance for community subsistence even today. They are sustained by the sense of reciprocity, something that may be the key in Quechua social organization (Skar, 1984).

Today, non-wage labour provides the Quechua *campesinos* with the food needed to subsist at household and community levels. It is also crucial for women when men head to the city or tourist areas looking for wage labour. Non-wage labour activities also provide communities with security and identity, elements that sometimes modern economic relations lack (Flora, 1990).

iii) **Capital**: Traditional agricultural communities use financial capital, but the goal is to save it instead of increasing it. Butler Flora (1990) explains that community members decide the fate of this capital with the long-term plans in mind, looking for risk-reduction strategies instead of profit-maximizing strategies. In addition, in order to avoid creating a high level of dependency on external financial sources, community labour is intense, which leaves community members with very limited time for rest and leisure. In summary, traditional agricultural community systems may obstruct aspects of their production market and, with that, gain economic security that ultimately also sacrifices the possibility of economic accumulation (Flora, 1990). In line with these arguments, Umar (2014) brings in the voice of another author: "Chayanov posited that the goal of any smallholder household was simple reproduction rather than profit maximization" (p. 281). Yet, the interaction between consumption and

production in the household required a particular form of decision-making. This fact, Umar (2014) explains, distinguishes smallholders from other kinds of production units in the capitalist system. Consequently, the classic principles of lucrativeness cannot be applied to smallholder economy. In this case, the "utility maximization model involves a trade-off between the drudgery of farm work and the income required to meet the consumption needs of the household" (p. 281).

Despite factors that have hastened change in rural regions, such as market penetration, migration, political reform, new technologies and others, many of the traditional systems that exist in these rural areas have resisted change, exhibiting "a successful and resilient indigenous agricultural strategy" (Altieri, Funes-Monzote, & Petersen, 2011, p. 4). Some traditional systems can offer models for sustainability, promote biodiversity and maintain year-round yields despite drastic socioeconomic and environmental change (Miguel A. Altieri et al., 2011). Social capital may play a role in the survival of traditional systems, through the benefits that it brings to the communities and its members. By social capital it means, "features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit" (Putnam, 1995, p. 67), which include "the information, trust, and norms of reciprocity inhering in one's social networks" (Woolcock, 1998, p. 153).

2.4.3   Women in Traditional Agricultural Societies

Women around the globe have a long tradition as farmers, and today much of the agricultural production in the developing countries relies on women (Deere, 2005; Fortmann, 1990). The attitude toward women's work contributions in traditional agricultural societies may be explained by the elements that offer a comprehensive view of women's role in agriculture. Here, Fortmann (1990) analyses female inclusion in this kind of society, the types of tasks and the spaces where women usually perform their work:

i) **In the field**: a woman may have the responsibility of an entire field for production, or she may intercrop her plants in her husband's field. The work women do in the field involves planting crops—by themselves or in groups—but also taking care of them, one of the most intense tasks, as it includes "weeding, thinning, mulching, fertilizing, spraying pesticides, hand watering and bird scaring" (Fortmann, 1990, p. 36). These are time consuming, but essential activities, and they must be repeated during the whole cultivation cycle. Women also harvest, and play a key role doing it opportunely and carefully to avoid crop losses.

ii) **In the homestead**: seed selection and storage is the purview of women in many places in the world. Crop processing is another task, which may involve seed removing, cleaning, fiber extraction, stirring, drying and storing, among other processing tasks.

iii) **The spaces in between**: women depend on wild plants to sustain their families, and although these plants are not cultivated, their management (*i.e.* wild crafting) is key for the local ecology and system of livelihood that forms the context for traditional agriculture (Fortmann, 1990). In addition, around the world, it is mainly women who are the home gardeners, plant domesticators, herbalists, healers and seed custodians (Howard, 2003). In fact, the author highlights, home gardens or *huertos*[17], besides a source of wellness for the family, contribute to germoplasm preservation (2003).

iv) **Livestock production**: although animal husbandry is identified as a predominantly male activity, women tend to also play pivotal roles in livestock production, even in nomadic pastoralist populations (Fortmann, 1990). In one region of Peru, women also have a key role in decision-making regarding livestock production (Fortmann, 1990).

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[17] A huerto or *canchon* is a piece of land that ranges between 50 to 500 square meters. It is enclosed or open, located beside the house.

v) **Intellectual tasks**: In all three spaces mentioned, women intellectually contribute to agriculture as inventors, decision makers, managers and knowledge specialists (Fortmann, 1990). Women influence decision-making because their knowledge is specialized enough to meaningfully impact subsistence. This influence is also manifest when women persuade their husbands to perform as they think they should be done (Fortmann, 1990). In addition, when women lack resources, it does not mean that their tasks cease. On the contrary, women are challenged to problem-solve by creating other solutions, including looking for them in the social sphere (Fortmann, 1990). Women are even behind decisions supposedly made by others: they are independent decision makers on their own fields of production, they are consulted in joint decisions and influence decisions made by others (Fortmann, 1990).

For the purpose of this research, it is also relevant to consider Fortmann's (1990) arguments regarding the multiple domestic and reproductive tasks (*i.e.* care and maintenance of the household and its members) carried out by women, which enable other household members to focus on productive labour (*i.e.* production of goods and services for consumption and trade). Besides, women may have direct participation in productive work providing, for example, resources or goods and services that directly affect the performance of agricultural tasks (Fortmann, 1990).

2.5 What Does Participation Mean?

The primary purpose of this research is to explore gender participation in household and community decision-making as regarding food security within agricultural indigenous communities. This raises the question of what is meant by 'participation'. In the following, I define participation for the purpose of this research, and what elements should be present for effective participation to take place.

Participation in a group is defined as a "dynamic interactive process in which the disadvantaged have voice and influence in decision-making... [and can be judged by] its ability to enhance equity, efficiency,

empowerment and environmental sustainability (Uphoff, 1991)" (Agarwal, 2001, p. 1624). Participation

is established mainly by rules, norms, and perceptions, as well as by the skills and attributes of those

involved. These elements, however, can also disadvantage women, depending on a woman's capacity to

bargain power with the State, her community and her family (Agarwal, 2001). The level of participation

constitutes a way to measure empowerment and voice as citizenship rights, to the extent that a woman's

absence means that project has failed guarantying those rights (Agarwal, 2001).

At this juncture, it is useful to distinguish between *effective participation* and *participatory exclusion*, and

establish that between them there are different levels or degrees of participation. Often, the differences

between these two ends of the spectrum go unnoticed: some institutions or civil groups declare

themselves to be participatory, while in practice this may not be the experience of those that they purport

to work with. For that reason, in order to analyze the level of gender involvement in the Andean

communities, I will use as a framework the forms or levels of participation (Table 2.1) presented

independently by Agarwal (2001), and Pretty (1995) and White (1996).

Table 2-1 Typology of participation and levels of political inclusion

Form/Level of participation	Characteristic features
Nominal participation	Membership in the group but without guarantee of active inclusion
Instrumental	Labour is taking as a commitment to an objective; participation is seen as a cost (*e.g.* time) not as an option
Passive participation	Being informed of decisions *post facto*; or attending meetings and listening in on decision-making, without speaking up
Participation by consultation	Being asked an opinion about specific matters without guarantee of influencing decisions, while some external agents define problems and information gathering processes
Participation for incentives	Labour people contribute resources (*i.e.* labour in return for cash or materials), but they lose the interest of participating once the incentives end
Activity-specific participation	Being asked to (or volunteering to) undertake specific tasks

Form/Level of participation	Characteristic features
Active participation	Whether solicited or not expressing opinions, or taking other kind political initiatives
Interactive (empowering participation)	Having voice and influence in the group's decisions: joining analysis, development of action plans and formation or strengthening of local institutions
Self-mobilization	Taking initiatives independently of external institutions to change systems, but retaining control of how to do it

In order for women from rural communities to be effectively participating in community-level power and decision-making, some analysis suggest they should be involved in formal membership in managerial levels, and present at meetings where they are members and their opinions are given weight (Agarwal, 1997a). Their opportunities to influence decision-making can rest on the incorporation of women in political structures, as well as how and whether they represent female interests, raise their voices in different fora (private and public) and whether anyone listens (Cornwall, 2003). Effective participation implies a shift from minimal to more complete participation, which is defined by the level of people's involvement (Agarwal, 1997a). Participatory exclusions, on the other hand, are present in apparently participatory groups. They are caused by systemic factors and can affect equity as well as institutional efficiency (Agarwal, 1997a).

Cornwall (2003) offers one caveat though: despite the potential to create spaces for women's advocacy, the participation of women in political structures can also perpetuate unequal "gender relations" among females. For instance, some women may not identify with or experience solidarity with the condition or plight of other women, and their concerns may be focused primarily on women's family and children (Cornwall, 2003). What if, the author wonders, women having a voice "…affirm[s] ideals of femaleness that feminists might think of as 'gender oppressive'? What if the 'needs' women profess are connected with fulfilling their duties as wives and mothers? (2003, p. 1330). In order to detect and deconstruct some of this nuance, it will be necessary to interact directly with community members, to listen to and support

openly what each gender really wants, as a means to advocate for real democratization on decision-making.

2.5.1 Constraints on Women's Participation

Aside from the different levels of participation described previously, Agarwal (1997a) identified in a case study five kinds of constraints to women's formal participation in emergent institutional initiatives. These were as follows: explicit rules of governing membership, traditional norms of membership in public institutions, social barriers, logistic factors, and the attitudes of governing outside authorities, such as government forest department personnel[18]. Agarwal (1997a) describes social or cultural barriers as social constructions regarding female behavior, notions about gender spaces, and assumptions about gendered capabilities and 'appropriate' (*i.e.* gender-specific) social performance. The author also argues that the effective participation of women is affected by inexperience in public speaking, chronically unrecognized authority, comparatively disadvantaged formal education, and the absence of a female critical mass (1997a). Age and civil status are other social barriers: owing to their duties at home and with children, young married women have fewer chances of participating in public discourse than widows or single women. Logistically speaking, women's workload and the timing of the meetings are other factors that can obstruct and impede female participation.

2.5.2 Participation at a Household Level

In the Moser Gender Planning Framework, Caroline Moser (1993) poses several tools to approach the study of gender issues. I used three of these tools to analyze gender participation at the household level[19].

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[18] Although the attitudes of forest department personnel are not directly applicable for my study as a kind of constraint, I take it here as a generic representation of a kind of constraint coming from a public authority outside of the community, which could be health department personnel, agricultural department personnel, etc.

[19] The other three tools proposed by Moser (1993) are used to assess a specific gender program or project taking place in a community.

These included (1) women's 'triple role', (2) practical and strategic gender interests/needs – or 'gender needs assessment', and (3) disaggregation of resource control and decision-making within the household.

With the first tool, Moser (1993) proposed to map the gender division of labour by asking "who does what?" In this way, she identified three kinds of women's work (*i.e.* the "triple role"):

i)   Reproductive: the care and maintenance of the household and its members,

ii) Productive: production of goods and services for consumption and trade,

iii) Community-managing activities: includes the collective organization of social/spiritual events and services.

In addition, the author points out that men are the primary family member responsible for undertaking productive and community political activities (1993).

The second tool, developed by Maxine Molyneux's (1985) , is effectively a gender needs assessment and is based on the idea that women as a group have particular interests/needs in comparison to men, basically due to women's triple work role, and their subordinate position to men in most societies. Moser (1993) distinguishes two kinds of gender interests/needs, which are similar to Molyneux's (1985) ideas about gender interests: practical and strategic. Practical needs are those that "assist women in their current activities" (March, Smyth, & Mukhopadhyay, 1999, p. 57), and are often related to living condition inadequacies (*e.g.* water provision, health-care provision). Strategic needs are shared by other household members, although often women claim them as their own needs, and they understand that to meet these requirements are their responsibility (March et al., 1999). After women acknowledge that change is possible, they may be able to formulate their gender interests and needs (March et al., 1999). Working from the premise that strategic gender interests/needs exist because of women's subordinate social status, for the purpose of this research, I focused on strategic gender interests/needs that are defined as the

interests/needs, which, if those needs were being met, would transform unequal power relationships between genders (March et al., 1999).

The third tool aims to disaggregate the control of resources and decision-making within the household. Using this tool, I ask the following: Who has control over what resources, and who has what power to make decisions? (March et al., 1999). In other words, who controls what, who decides what, and how do they do it?

This framework has not been exempt from criticism, which suggests that this approach standardizes knowledge production, such as by excessive use of checklists, charts, and other tools, excluding or neglecting the importance of context, social location of the researcher, and social location of the research subject (Van Halsema, 2003). These limitations may be valid, but may also be addressed through attention to context and social location during the data collection period.

Chapter 3: Qualitative Research Methods

This chapter is organized into four main sections. Section one explains the methods applied during the fieldwork, and the reasons for deciding to apply mixed methods. Section two describes the case study approach of the research, and presents the main features of the communities framed by this case study. Section three describes the methods employed in the fieldwork, the activities and collaborators involved in both seasons. Finally, section four explains data analysis for the data collected during the fieldwork.

3.1 Qualitative Methods

In this research I applied qualitative field research methods. Given that I am only recently becoming familiar with the Andean culture, adopting mixed methods seemed prudent as it helped me to approach the research questions from different perspectives. After my first encounter with Quechua communities in 2012, I understood that I had to be very flexible to adapt to the indigenous *campesinos'* routines, concept of time, and culture. For instance, on occasions when scheduled interviews did not take place because the interviewees had other commitments, I chose to observe and take field notes about community activities happening at that particular time. In those situations, the concept of "strategies of inquiry" as described by Wilson (2008) was applicable. It was useful to develop a general strategy to help me remain open to change by the participants and the circumstances—instead of being tied to a rigid strategy of data collection. During the second fieldwork season the combination of methods applied helped me to build trusting relationships with the community members, as I did in the first season: "The shared aspect of an Indigenous axiology and methodology is accountability to relationships" (Wilson, 2008, p. 7). These features, Wilson (2008) argues, can permeate the whole process of researching.

3.2 Case Study

A case study was used to gain a better understanding of women's participation regarding food security, and to facilitate "the conveying of experience of actors and stakeholders as well as the experience of studying the case" (Stake, 2005, p. 454). With the help of female and male community members as research collaborators, I became "experientially acquainted" (Stake, 2005) with the case through observations, enumerations, and conversations.

The Sapaccto sector, from the Community of Poques, and the Community of Huamanchoque were the focus of the case study. Both communities are located around 3,800 m.a.s.l. along the highland of the Sacred Valley, in the Province of Calca, Cusco Region, Peru. In the region there are two marked seasons: one warm and rainy that lasts from October to March, and another one dry and cold that goes from April to September. The climate can vary drastically in hours and even in minutes (Rengifo, 2012). The indigenous *campesinos* in the region are subsistence peasants and their first language is Quechua, while Spanish is used as a second language. To access basic services, both communities must travel to Calca, the provincial capital, either by foot or using public transportation. In addition, both communities' organization and political life are governed according to the particular community statutes, legally framed by the Ley de Comunidades Campesinas N° 24656 (Law of Peasant Communities). Yet, Poques-Sapaccto and Huamanchoque differ in their existence as a legal community, also in their appreciation of Quechua ancestral values, and proximity to the highway and urban centers.

Sapaccto is one of three sectors of the Community of Poques. The community was formally registered in 1929. The main *ayllu* of Poques (also called Poques) is located 4,000 m.a.s.l and 23 km from Calca, the provincial capital, and has a land base of 3,993.80 hectares. The community of Poques has in total 160 *empadronados* (formally registered household heads), and the sector (or *ayllu*) Sapaccto 32 *empadronados*. Sapaccto is located specifically 4,200 m.a.s.l and 45 minutes by car from Calca. The main crops are potatoes and other tuber crops like *oca*, *lisas,* and *olluco*. Those who have land closer to the

valley complement the main crops with lima beans, corn, onions, cauliflower, and others. Some families also raise llama and sheep as livestock. Sapaccto has a one-room primary school, which is headed by one teacher. To access secondary education, youth and teenagers have to attend school in Calca or other urban centers.

According to the statutes of the community, the basic principles under which Poques and the Sapaccto sector are governed are: (i) solidarity in the work on the land, and the equality of rights and duties; (ii) the promotion of collective participation to ensure the progress of the community and its members; (iii) the protection of natural resources without compromising the environment; (iv) the promotion of the practice of human principles and values ("Christian") to strengthen the community's social progress and wellbeing; (iv) mutual respect among community members without discrimination of any kind; (v) the appreciation for the ancestral principles: *Ama Llulla* (do not lie), *Ama Quella* (do not be lazy), *Ama Suwa* (do not steal), *Ayni* (mutual help-collaboration), *Minka* (work done under compromise and reciprocity) and *Waquiy* (joined by a goal) (Comunidad Campesina de Poques, 1988).

According to the statutes, the community of Poques is the only owner with land titles and natural resources jurisdiction, with the exception of the law regulating the use of water resources and mining exploitation[20]. The right of usufruct of the land and the natural resources in general belong to all registered members of the community, and in accordance with the land uses and customs of the families. It specifically means that the right of usufruct and possession of the community lands is based on the family unit; if the head of household passes away, the land is inherited by the spouse and then by the children resident in the community. If there are no children, the land is ceded directly to the community (Comunidad Campesina de Poques, 1988).

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[20] Although the statutes do not specify what laws are pointed out, in Peru there are two laws regarding water sources and mining exploitation: Ley General de Aguas (N° 17752), and Ley General de Mineria (N° 23230)

Huamanchoque is a small community located 3,700 m.a.s.l, and 10 km from the provincial capital, Calca—30 minutes by car. The economic activity and source of labour in Huamanchoque is the cultivation of potato and other tuber crops. Thirty eight *empradonados* and their families constitute the community. Huamanchoque was legally registered in 1990 and 1,200.88 hectares of land are under community jurisdiction. Main crops include Andean tubers, but also other vegetables such as corn and fava bean *(Vicia fava L.)*. Children from Huamanchoque attend primary school in the closest community (Llanchu), while youth and teenagers must travel daily or move to Calca to attend secondary school.

The basic principles governing community's organization and life in Huamanchoque are: (i) solidarity in daily life, (ii) equity in the work on the land, (iii) equality of rights and obligations for all male and female community members (Comunidad de Huamanchoque, 2005).

The lands and natural pastures are community property and imprescriptible, only qualified and registered members, whether male or female, have the right to use them. The community general assembly establishes the amount of land for each community member, and members are not allowed to hoard it (Comunidad de Huamanchoque, 2005).

3.3   Fieldwork and Data Collection

Data collection was conducted in two field seasons. Field methods and activities carried out each season are described below.

The first field season covered the period between May and July 2012. During this time, 95 individuals participated in one or more of the research activities as interviewee (individually, in couples, or in groups), workshop participant, or motion and/or still picture subject. The research collaborators were male and female members mainly from seven communities in the Cusco Region: Poques, specifically

Sapaccto sector, Huamanchoque, Llanchu, Pampa Corral, Urco, Cochayoc, and Quispicanchi. I extended the sampling area to surrounding places where agricultural activities were carried out to ensure equitable gender participation, and a Quechua-Spanish translator was available. All this was possible thanks to the AGROECO researcher member, Daniel Huaman, who introduced me to the communities he was working with during the potato harvest and seed potato collection.

In the second field season in 2014, and with the thesis research questions formulated, a total of 28 community members from Huamanchoque and Poques-Sapaccto participated in individual or joint interviews and/or joined talking circles (adapted) during six weeks between March and April, 2014. Of those 28 participants, 11 individuals had collaborated with the research in 2012 as interviewees. This time, the local driver Romulo Betancour (who also worked as a Quechua-Spanish translator) was key to reintroduce me into the communities. In this fieldwork season, the selection of collaborators was mainly purposive in order to emphasize information-rich participants for in-depth study. Two women Quechua-Spanish translators (besides the driver) facilitated communication with the members. The translators and I met previously in order to explain the research objectives, edit the questions, clarify doubts, and take into consideration some potential language misunderstandings. The following is a description of the methods applied and the activities conducted during both fieldwork seasons.

Table 3-1 Summary of primary data collection

Method	Participants*		Community or city
	2012	**2014**	
Semi-structured interview	51	4	Huamanchoque; Poques-Sapaccto; Pampa Corral, Llanchu; Calca; Cusco
In-depth interview		13	Huamanchoque; Poques-Sapaccto
Group interview	8		Pampa Corral; Urco
Talking circles		18	Huamanchoque; Poques-Sapaccto
Workshop participant; motion and/or still picture subject	36		Huamanchoque; Poques-Sapaccto; Pampa Corral, Llanchu; Cochayoc; Quispicanchi
Total collaborators	95	28	

*Some research collaborators participated in both fieldwork seasons, and in more than one research activity.

3.3.1 Participant-observation and Field Notes

Participant-observation and field notes are interconnected activities and the core of ethnographic research. The participant-observation allows the ethnographer to introduce themselves in new or unfamiliar social situations, and to produce field notes of those situations based on direct participation (Emerson, Fretz, & Shaw, 1995). As a researcher, it is important to take into consideration that no fieldwork can be completely objective, and no ethnographer can be completely independent of the phenomena observed (Emerson et al., 1995). When I engaged in the lives of the community members (the research collaborators), their concerns and ambitions and my point of view became intertwined with the phenomena of my study, and according to my perspectives and methods. Indeed, the ethnographer does not define 'the truth' but uncovers the apparent several truths in people's lives (Emerson et al., 1995).

During the first field season most of the activities that I observed, participated in or took field notes about were agricultural activities (*e.g.* harvesting, sowing, plowing, and selecting seed potatoes), community festivities, assemblies, and other events. Depending on the activity that was being carried out, and how much I was involved, I took some field notes during that time while other notes were written down later (out of the field). In the second field season, permission to attend community assemblies and conduct participant-observation and take field notes was obtained from the president of each community. A total of three assemblies were documented: two in Poques and one in Huamanchoque. As the assemblies were conducted in Quechua and I do not speak that language, during the events, and without spoken content, I focused on the dynamics, gender relations, and body language among attendants. In parallel, the Quechua-Spanish translator took notes about the spoken content: the main topics of discussion and local authorities and members' interventions. All the notes were registered in a notebook in Spanish, and then translated in to English.

The community assemblies were held once a month and usually last several hours (*e.g.* 9am to 4pm). We attended each assembly—two on the same day and one on a different day—for only three or four hours as

both communities celebrated the assemblies the same day and at almost the same time. I acknowledge that this restricted our ability to completely understand the assemblies' dynamics as community decisions are taken at different point of the agenda. However, we had enough time to observe and get a general idea about gender public relations and behaviour, and the structure of and explicit topics discussed in the communities' most important political event.

3.3.2   Motion and Still Picture Record

Photography shows and describes what in a text would take many words to communicate (Harper, 2003). In addition, with a sequence of pictures, we may get a visual narrative commonly called film or video. Through a motion or still picture record we can collect empirical data, but as it implies observation, these records also demand interpretation and a point of view (Harper, 2003). Thus, empirical evidence is both subjective and real, and a visual ethnographer must be both conscious of that dichotomy and of the power to make statements through an image, as the camera is a tool to interpret social realities (Harper, 2003). In fact, the picture (still or in motion) is socially constructed: when a photograph or video are made, both the photographer's as well as the subject's social position come into play (Harper, 2003) . Furthermore, taking pictures is also a matter of gender: what a woman can see through the lens may be totally different from what a man sees and photographs, and vice versa (Harper, 2003).

During the first field season, I took pictures and video-recorded agricultural activities; household tasks carried out by a woman; a community festivity in Huamanchoque; workshops about preparation of natural fertilizers; greenhouse management workshops led by AGROECO members from the Universidad Nacional Agraria La Molina; a workshop about seed potato selection conducted by staff from the Municipalidad de Calca; and other activities. In the second season I took only still pictures of some of the

research participants and their close environment: *chakras*[21], food storages, barnyards, kitchens, and food for their own consumption.

3.3.3   Semi-structured Interviews

In most semi-structured interviews, the interviewer follows a pre-established questionnaire in a fairly standardized and straightforward manner (Fontana & Frey, 2003). Thus, all the respondents are asked the same set of questions, but not always presented in the same order, trying to follow the order given spontaneously by the responder's answers. In addition, I added some open-ended questions if the answer required it (*e.g.* an incomplete answer was given) as in this kind of interview the interviewer is expected to evaluate the responses. The role of the interviewer is also to establish a "balanced rapport": friendly and casual and, at the same time, direct and impersonal (Fontana & Frey, 2003).

In 2012, 51 men and women of the 95 total participants during that season participated in joint or individual semi-structured interviews: 33 indigenous peasants; 3 community authorities; 10 youth community members; 2 principals and 3 youth instructors. The interviews were conducted in the communities of Huamanchoque, Poques, Pampa Corral, Llanchu, and the cities of Calca and Cusco. They were based on four different sets of questionnaires depending on the age and role of the interviewee: peasant; local authority; community youth; principal and youth instructor. The questionnaire delivered to the peasants contained 50 questions, and each interview session took 40 to 60 minutes. As it was the first UBC-AGROECO fieldwork in these communities, our approach was exploratory and had an emphasis on ethnobotany (natural fertilizers, pests control, healing plants), gender (division of household and agricultural tasks, family and community life), and traditional knowledge transmission. Part of the sampling was purposefully selected after joining some agricultural activities and spending time with

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[21] A *chakra* is a piece of land of approximately 2,000-3,000 square meters (in the communities they call up to 1/3 hectare a *topo*), and it is mainly used to plant Andean tubers (potatoes, *oca*, *año,* and *lisas*), corn and others.

community members. Another group of peasant interviewees was approached on the spot in each visit to the community. It means that I found them in an unplanned, informal gathering; as I explained before, every day I had to be very flexible when approaching community members-research collaborators and when applying each method.

The other three groups of interviewees were composed of two community presidents (of Pampa Corral and Huamanchoque), and the president of the Association of Native Potato Producers, sector Sapaccto; two school principals—from the Centro Educativo N° 50206, Pampa Corral, and the Instituto Nacional Agropecuario N° 28, Calca; two independent youth instructors[22] and youth community members. For each group, I used a particular set of questions regarding the topics under exploration (community organization and knowledge transmission). All the semi-structured interviews were audio recorded.

Later, in 2014, to extend the information regarding communities' structure, governance, functionality, and members' rights and duties, I conducted four semi-structured interviews out of the 28 total participants in that year (Appendix A.1). These included the presidents of community (2), a former president, and the president of the Association of Native Potato Producers, sector Sapaccto. Three of these interviewees had been interviewed previously in 2012. All the interviews were audio recorded.

3.3.4   Depth Interview

Depth interview is a kind of semi-structured interview, and a useful research tool in the following contexts:

> When the focus of the inquiry is narrow, the respondents represent a clearly defined and homogeneous bounded unit with an already known context, the respondents are familiar and comfortable with the interview as a means of communication, and the goal is to generate themes and narratives (Miller & Crabtree, 2004, p. 186).

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[22] At that time, the instructors were working for the Swiss NGO "Terres des Hommes".

In general, interviews are far from being a controlled verbal informational exchange. On the contrary, they are full of non-verbal and emotional interchanges, and exchanges of multilevel messages are perceived differently (Mishler, 1986).

Depth interviews are usually effective when focusing on relations of individuals, and are not recommendable to learn about cultural context (Miller & Crabtree, 2004). Regarding structure, they consist of some relatively closed questions, and some few open-ended questions and subsequent prompts and follow-up questions (Miller & Crabtree, 2004). To succeed in the field research data-gathering process, before the interview happens, Miller and Crabtree (2004) suggest mapping the research topic from a literary[23], cultural[24] and self-review[25] perspective. Then, develop a sampling strategy, construct an interview guide, and plan protection strategies, *e.g.* consent and confidentiality forms (Miller & Crabtree, 2004). For depth interviews, respondents should be selected; the objective is to maximize the richness of information to answer the research questions. Thus, the sampling strategy has to be purposeful and not random, and it may be a homogenous sampling that allows accounting for contextual and cultural influences prior to the interview.

The relationship built in 2012 with some interviewees as well as with the whole community was fundamental for the second field season. A total of 13 community members were interviewed in-depth in 2014[26], and 10 of them had been previously interviewed in 2012. Two native Quechua speakers, and fluent in Spanish, assisted the interviews as translators. All the interviews were individual, except two of them where the interviewees were accompanied by their husband and family members respectively. To conduct the interviews, I applied a set of questions (Appendix A.2) with some variations depending on

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[23] In order to find out assumptions, expectations, and key conceptual domains.

[24] Regarding ethnographic reports and preliminary contact with potential respondents, and information about local language and modes of representation.

[25] As it is a communication exercise.

[26] This number of participants is in addition to the 4 participants in semi-structured interviews in 2014.

the specific group of gender. The topics covered by the questionnaires were: gender roles regarding household food security (especially on food production, accessibility and utilization); gender roles regarding community food security; community decision-making; institutional and informal activities regarding food security; and women participation/inclusion in those activities. The interviews lasted between 30 and 50 minutes, depending on the enthusiasm of the interviewees and the depth of their answers. This modality of interview gave me the opportunity to deepen some answers, and to explore different topics spontaneously mentioned by the interviewees, which could be directly related to the research purpose (*e.g.* historical facts regarding the impact on food systems or community-government relations).

3.3.5 Group Interview (or focus group)

With this technique several individuals are questioned systematically and simultaneously. The interviewer or moderator directs the inquiry and interviewees' interaction in a structured or unstructured manner depending on the interview purpose. However, the questions are commonly open-ended or unstructured (Fontana & Frey, 2003). Group interviews can be used to help participants recall specific events as well as to encourage them to describe in vivid details experiences shared by a group (Fontana & Frey, 2003). For people that find one-on-one interaction intimidating, group interviews may be a more comfortable research activity to participate in; as a group interview allows multiple lines of communication, it offers participants a safe environment to share ideas, attitudes, and thoughts in company of people of the same gender and/or similar socioeconomic and ethnic background (Madriz, 2003). On the other hand, the interviewer has to ensure that all respondents participate in equal conditions and their responses fully cover the topic under discussion (Fontana & Frey, 2003).

In 2012, 3 teachers from the Centro Educativo N° 50206, community of Pampa Corral, and a group of 5 youth and their mentor from the Asociación de Jóvenes Imperio Urco, community of Urco, participated in

two different group interviews. The main topics discussed with them were youth behavior and social issues, and traditional knowledge transmission.

3.3.6   Talking Circle (Adapted)

This method was adapted from Native North American rituals and traditions (Wilbur, Wilbur, Garrett, & Yuhas, 2001), and I used it as a form of focus group discussion. For Native North Americans, the circle symbolizes an approach to life and its physical manifestation throughout circular shapes; for instance, the moon, the sun, and the planets as well as their motions are circular. The talking circle ensures that relations are conducted in a respectful manner. It also provides both a group work structure and a process to build a sense of community. It develops group members' listening and empathy skills (Wilbur et al., 2001). In the practice, each participant in a talking circle has a chance to speak and express his/her thoughts and feelings, or keep silent during his/her turn, and the other participants are expected to remain silent.

As I observed during my first fieldwork period in 2012, Andean indigenous communities were also used to talking in a circle, commonly around shared food or coca leaves to chew (an ancient Andean custom). Therefore, I thought this approach to discussing issues would fit better in their culture, instead of the traditional way of conducting group interviews with a leader standing up in front of an audience. However, when I was heading the first talking circle with a group of women from Huamanchoque, I realized that I had to introduce some modifications to this activity and the dynamic around it. So, the translator and I ended up heading a modified version of the traditional talking circle. First of all, we sat down on low benches covered by sheep leather, around some bread, cheese and coca leaves. Before starting each gendered talk—four in total, two per community—I explained the purpose of the research, their rights, and some basic rules to participate in the circle: talk in turn; listen with respect and in silence

to whoever is talking; there are no wrong answers or comments; confidentiality. I also made sure that all participants were there voluntarily.

When conducting talking circles, it is suggested that the person taking the turn to talk holds a symbolic or sacred object in their hands, for example, a feather. We, instead, used something more culturally suited, a *Ch'uspa*: a small woven bag containing coca leaves. In the first round, each participant spontaneously took coca leaves from the bag to chew during his or her turn. During the first rounds of conversation the participants who were not speaking tended to respect the silence, but after about 40 minutes, the talking circle became a more open and spontaneous dialogue. For instance, while somebody was talking, another one expressed his or her agreement or disagreement, or added something to the conversation. Although this dynamic is not usual in traditional talking circles, I allowed it as participants became much more involved and enthusiastic about the conversation.

After my first field season with the communities, and the depth interviews conducted in the second season, I invited some community members to participate in the talking circles. I chose some of them because they were talkative people and I thought they would be willing to join the research activities again. The rest of the participants were invited by other community members; in each place I entrusted a man and a woman to invite other *campesinos* of their same gender but different age to participate in the circles. Thus, I ensured a minimum number of participants (four) in each circle. As one of my research foci was gender participation in community decision-making, and to assess the knowledge, attitude, and perception (KAP) about gender and performance roles, I organized the talking circles with men and women separately. As I noticed in the previous fieldwork, women did not speak so much in public, and I wanted to see if they were willing to talk more when men were not around and in a small group of people.

In total, four talking circles were conducted divided by gender and community of origin. 18 community members participated in the circles, and from that number nine of them had participated in depth

interviews (2014), and/or semi-structured interviews (2012). The age range in the female-talking circles was 29 to 70 years old, and in the male circles it was 29 to 62 years old. Coincidentally, in both female talking circles the number of participants was 4, while the number of participants in the male group was 5. The circles lasted between 1 and 1.5 hours, and two sets of questions regarding gender were asked (Appendix A.3 and A.4). The main topics approached with each gender group were: formal and informal community events and gender participation, gender KAP toward household roles and community decision-making, and inclusion of women in community assemblies.

At the end of each talking circle, we shared food with the participants in order to thank them for their time and collaboration. In Andean culture food is considered a treasure, and a way to manifest appreciation, love, and respect. Sharing food is also framed by the ancient concept of reciprocity. During both field seasons, most of the research participants welcomed us into their homes and offered us hot food, *mate* (herbal tea), bread and cheese if it was at hand. So, our food was also received by them with gratitude.

3.3.7   Content Analysis

Whatever the message, "nearly every time something is read, it is being content-analyzed" (Ogilvie, Stone, & Kelly, 1982, p. 220). However, the formal content analysis occurs just when the content analyst systematically applies an objective set of rules to examine the messages, and from there, makes inferences and reaches a conclusion regarding its research subject (Ogilvie et al., 1982). The content analysis aims to achieve both summarized and comprehensive description of the subject under study, creating concepts or categories that describe the subject (Elo & Kyngäs, 2008). Those concepts and categories help us build up a conceptual system, conceptual map, or categories. Content analysis also requires contextualized interpretation (Hodder, 2003), above all if the object of analysis is a document; the data provided may lack a spoken form or differ from that. Contrary to spoken form, the text also endures and provides valuable background (Hodder, 2003).

Both community presidents allowed me to access and photocopy the statutes that rule "the institutional and government life, and the organization of the *comunidad campesina"* (Comunidad Campesina de Poques, 1988, p. 1), and "the organization, functioning and the complying of the rights and duties of male and female community members formally registered" (Comunidad de Huamanchoque, 2005, p. 1). These documents, in accordance with the *Ley de Comunidades Campesinas* N° 24656, have legal validity and recognize that the respective communities, Poques and Huamanchoque, are "the only proprietors of the lands of immemorial possession" (Comunidad Campesina de Poques, 1988, p. 1), and "the proprietor of the lands transferred by the Agrarian Reform" (Comunidad de Huamanchoque, 2005, p. 1). The statutes provided me with important facts about the community structure, governance and objectives, besides gender participation and rights.

3.4   Inductive and Deductive Data Analysis

In collaboration with another UBC-AGROECO member, the interviews and field notes conducted during the first field season were transcribed, translated from Spanish to English, and coded with the qualitative data analysis computer software NVivo 10. This data provided background information to define methodologies and research focus of the second field season. Data collected during the second field season was translated and transcribed from Quechua to Spanish by a native speaker local field assistant. Data from the talking circles, field notes, depth interviews, and semi-structured interviews was coded using software NVivo 10. The demographic data of the participants was also analyzed using the same software. The data gathered that was not analyzed for this study was the group interviews with teachers (3) and youth (5), and the visual material: both photographs and videos. Given the time to conduct the thesis research and the diverse and extensive amount of data gathered through the fieldwork methods, I decided to analyze only the data relevant to answer the thesis research questions. The results of the data analysis for both field seasons of this study are presented in chapter four.

3.4.1 Inductive Analysis

I conducted the data analysis from both inductive and deductive approaches. Before the first field season our research team did not have former knowledge about the communities and the topics under exploration, so we used an inductive approach in the data analysis. Thus, we looked for specific concepts or ideas and combined them into general statements (Elo & Kyngäs, 2008) (Elo & Kyngäs, 2008). First, we organized the qualitative data through open coding: many notes and headings were written down in the text's margins while reading the material. This was done in order to describe all the aspects the content revealed (Elo & Kyngäs, 2008). Instead of using coding sheets, we uploaded the data to the software NVivo10, and we coded the material there. After the open coding, the lists of categories (called nodes in the NVivo environment) were grouped under higher order headings. To create categories the data was compared to other observations and then classified as "belonging" to a particular group (Elo & Kyngäs, 2008).

3.4.2 Deductive Analysis

For the data gathered during the second field season, I used a deductive analysis. This approach is suggested when there is previous knowledge about the subject studied, or when existing data in retested in a new context (Elo & Kyngäs, 2008) . For this, I outlined a matrix of nodes (categories) and coded the data to correspond with the nodes.

> When using a structured matrix of analysis, it is possible to choose either only the aspects from the data that fit the categorization frame or, alternatively, to choose those that do not. In this way, aspects that do not fit the categorization frame can be used to create their own concepts, based on the principles of inductive content analysis (Elo & Kyngäs, 2008, p. 112).

I developed the matrixes of nodes based on the main questions delivered through the questionnaires, and from them I set the nodes: semi-structured interview, depth interview, talking circle (re-adapted), which were different than the ones I used for the analysis of the data from the previous field season (2012). For the content analysis of the community statutes, I looked for explicit mentions of gender (women and men) and gender similarities/differences about participation, roles, rights, and duties as community members.

Given that I am a native speaker of Spanish, and the limited time available to conduct the second data analysis, I decided to code the data in this language and translate into English only the most relevant material to the study objectives and the research questions.

3.5   Limitations of the Study

Four months of fieldwork allowed me to gather rich data about the communities, but it might be not enough time to deepen in the complexity of the issues presented. As during the first field season part of the sampling was approached on the spot in each visit, the collaborators are not statistically representative of the communities' population at large. However, the data collected provides an insight into gender issues at the community and household level regarding participation and food security that a random sample of population might not have provided. In addition, I acknowledge that the data collected do not allow me to address all the dimensions of food security and food sovereignty. Instead, I approach food security and three of its basic dimensions–production (availability), accessibility, and utilization–restricted to the concept presented by FAO (1996). This is also worth consider that these communities are constantly adapting as the socio-political and environment changes happen; some facts given one year cannot be in place the next one. Language is another considerable limitation that challenged the fieldwork, preventing me to hold a more fluent and effective communication with the community members. The Quechua-Spanish translators who collaborated with the research are not professional translators; in consequence, some information or meaning provided by the interviewees could have been lost or changed during the translation process.

Chapter 4: Results and Discussion

In this chapter I describe the gender, age, level of formal education, and marital status of the community members from Huamanchoque and Poques-Sapaccto who were involved during both field seasons in interviews and talking circles, and who provided us with demographic information. I present the outcomes of the case study in relation to the research questions and the main topic of interest: the features and functioning of a traditional agricultural community; food security stressors; gender participation at household and community levels regarding food security; and knowledge, attitude and perception (KAP) toward women roles in participation related to food security. To facilitate and summarize the analysis of the results, I include some tables according to the research framework presented in Chapter 2.

4.1   Research Collaborators Demographics

For this thesis, I include data from a total of 49 women and men (community members, presidents and former presidents) from Huamanchoque and Poques-Sapaccto who collaborated with the research as interviewee and/or talking circle participant during the two field seasons; 26 individuals collaborated in both years. From the grand total, 29 —16 women and 13 men— were from Poques, and 20 —8 women and 12 men—were from Huamanchoque. The participants demonstrated a fairly equal gender ratio —24 women and 25 men. Their ages ranged from 22 and 74 at the time of the interview. Most of the research participants (14) were between 30-39 years old, followed by the groups between 40-49 (10) and 50-59 (10), and the average age was 44.

Regarding gender and formal education (n=49, valid responses=47), women exhibit a lower rate of schooling: while 9 women (4%) did not attend any kind of formal education, only 3 men (1.4%) did not. In regard to primary school, 15 men (7%) and 9 women (4%) attended it partially. On the other hand, 5 women were able to finish primary school, while only two of the men completed it. None women attended secondary school. Comparing the level of formal education between Huamanchoque and

Poques-Sapaccto, we obtained different results: while in Huamanchoque 12 participants (5.6%) attended primary school, completely or partially, in Sapaccto 19 interviewers (9%) attended it in the same condition, and one person attended secondary school partially. Two of the interviewees from Huamanchoque reached studies at the secondary level, and one of them completed them. In Poques one man partially attended secondary level.

4.2   Quechua Agricultural Communities

Huamanchoque and Sapaccto-Poques still exhibit some characteristics of the traditional *ayllu,* and function as traditional, primarily subsistence-based, agricultural communities. The governance of both communities is framed by the *Ley de Comunidades Campesinas*, but organization and political life is regulated by their particular statutes. Some Andean communities remain independent of the juridical norm that regulates them (Rengifo, 2012). For instance, Poques and Huamanchoque are the only owners with land titles and natural resources jurisdiction (with the exception of some laws)[27]. In addition, both communities formally ascribe their appreciation for ancestral principles that highlight mutual collaboration, compromise, and reciprocity.

An *ayllu* (or community) can be composed of one or more *ayllus* (Rengifo, 2012) –like Huamanchoque and Poques-Sapaccto respectively. At a much smaller scale compared to ancient times, both communities still function under a social-economic model known as "the vertical archipelagos" (Murra, 1975, 1980). This model allows them to exert vertical control of several "*pisos ecológicos*[28]*"* in the community's territory, and diversify their crop production, food provision, and access to other resources (*e.g. ichu* to sell, pasture land for livestock). This control has been pointed as critical for their community integrity and access to food diversity (Powers, 2005). For example, if Sapaccto community would solely rely on their

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[27] Ley General de Aguas (N° 17752), and Ley General de Mineria (N° 23230).
[28] Different altitudinal levels and corresponding microclimates (Murra, 2002).

local production they would only be able to access Andean tubers. Yet, this social-economic model allows other economic activities including *Chhalakuy* (bartering) which increases food accessibility and diversity.

4.3   Factors of Community Production

Both Huamanchoque and Poques-Sapaccto exhibit several characteristics previously described as factors determining production by Flora (1990).

Table 4-1 describes those factors identified in this study.

Table 4-1 Factors of production present in Huamanchoque and Sapaccto-Poques

Factors of Production	Features
Land	• Ownership: owned by families and the community: *chakras*, *huertos*. • Use: pastureland and recently forage cultivation, pine and eucalyptus plantation (Huamanchoque) • Management: rented or lent out to another community member in need
Water	• Mostly rain-fed for Andean tuber crops • Crops on lower land depend on rain and artificial watering system (*e.g.* sprinkler irrigation fed from creek or rivers)
Non-wage labour	• *Ayni*: calculated on length and type of work • *Minka*: work in exchange for goods like food and others • *Faena* or communal labour for crop cultivation and civil works • *Ayuda* (help) among neighbours and family members
Capital	• Communal livestock (often administrated by community associations) • Communal crops (*e.g.* barley, beans, and peas in Poques; alfalfa and potatoes in Huamanchoque) • Seed lend by municipality for community crop plantations • Livestock granted by municipality • Community food/money collection for people in need • Membership annual fees: paid by registered community members • Bank saving account (Huamanchoque) • Community loan and investment (Poques) • Community production decreasing in both communities. In Sapaccto,

Factors of Production	Features
	as they got into debt as a group, they decided to not plant together anymore.
Others ways of production/food provision	• Bartering of food • The "vertical archipelagos" or food access making use of ecological gradients • Diversification of crops through *chakras* and *huertos*

Land: Andean community has been described as a source of rights and resources for smallholder economic life (Umar, 2014) including access to (no-wage) labour and capital . However, current community structure in Huamanchoque and Poques-Sapaccto does not guarantee land access. In these communities land access is mainly by inheritance, families not have enough land to distribute among their children and cannot guarantee access to community to future generations.

> There is jealousy because in the communities they are running out of land to work because of the increasing number of people there. The young people tries to integrate but even from home, the parents do not want to teach their children the traditions [indigenous agricultural knowledge] because it's easier if they send them to other places like the city. They get rid of them because there is no economic sustenance (EVC, indigenous youth instructor. Calca, 2012).

In the traditional household, sons have priority to inherit family land over the daughters, and household head and ownership/management of the land resides on men. Also, inheritance priority depends on age (*e.g.* firstborn) and if the son or daughter has their own family. In addition, if a young community member is interested in working on communal land —that would not be legally owned but managed — the applicant needs to be *empadronado* (a formal community member). This process may take three or five years, and behaviour, participation, loyalty, and work collaboration will be evaluated by the community authorities during this period. Once community membership is approved, the applicant will get access to community land, for which he/she will pay an annual fee per household (*e.g.* in Poques, $2 Peruvian New Soles[29] every two years, plus $15 or $20 Peruvian New Soles annually and depending on the land dimensions).

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[29] $1 Peruvian New Sol = CAD $0.41 (Dec 2015).

In the participant communities land use has gradually changed over the last few decades. For example, the lack of enough grass to pasture the cattle has forced some family to use *sitios* and *chakras* traditionally allocated to feed the family (described later) for forage production for their own animals or for sell. Also, the introduction of non-native species like Eucalyptus and pine plantations has forced reallocation of land for food production motivated by access to "good" money (Field notes, 2012 and 2014, Huamanchoque). These changes contribute to increase the magnitude of food security stressors in these communities.

Water: Although Butler Flora (1990) does not include water as a factor of production in her review, water is essential for crop production in these communities and was identified as production factor in this research. In both communities local governments regulate water access, as it is fundamental for human consumption and agricultural production. Both communities depend on rainfall, particularly to water tuber crops. Some community members also grow other crops at lower elevations where they depended on sprinkler irrigation feed by small creeks or rivers. Access to this irrigation system is not restricted by gender, but by household as a unit. No other details about gender relations on water access were collected.

Labour: In Andean communities, non-wage labour is the main unit of production, but cannot be considered an autonomic economic entity at the household level (Rengifo, 2012). In Huamanchoque and Poques-Sapaccto non-wage labour are key elements of exchange relationships among households. Through these and other exchange relationships (*e.g.* bartering) households and community members support each other with food, goods, and services such as roof fixing, cloth weaving, and others. This description coincides with Butler Flora (1990) assertion that exchange relationships in Andean communities subsist outside of the market allowing the household to reproduce itself depending partially from the market rules. Exchange relationships are so crucial for community functioning that not attending

a *faena* could be sanctioned with a fine[30], or to deny *ayuda* could deeply affect friendship. In Andean communities, communal practices allow community members to renew and strengthen relations, demonstrate affection and appreciation, and keep stability and continuity of the *ayllu* (Rengifo, 2012).

Capital: Huamanchoque and Poques-Sapaccto make effort to bring in investment from some governmental and finantial institutions. They allocate resources to aim at increasing economic diversification (*e.g.* increasing livestock number, allocating agricultural land to plant exotic trees or forage), but sometimes at the cost of compromissing the benefits of traditional agricultural practices. The main purpose of owning community crops and livestock, and having communal fees, is to create communal capital to offset communal expenditures. This fund cover expenses incurred by the board of directors and may be use to buying supplementary food once or twice a year, including processed food (*e.g.* sugar, rice) to be distributed among community members. In some cases, the fund is simple divided among the membership. Sometimes, community funds are also used to organize events at Christmas time. Huamanchoque has a communal savings account in a local bank, and Poques has access to loans to buy one hundred alpacas from the *Arariwa* Association and local government (Field interviews, 2014). The plan is to sell the livestock and diversify the revenue.

4.4   Food Security Stressors

The first objective of this study was to identify the main food security stressors in these two Andean communities. The prevalent stressors described in Table 4.2 were identified using coded data collected through semi-structured and in depth-interviews. Interviewees did not rank the stressors nor were they asked to identify them with a specific question about food security stressors. Instead, this list emerged

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[30] For each absence (*e.g.* missing an assembly or a *faena*), they had to pay a fine equivalent to a labor day: $20 Peruvian New Soles (May 2014).

from an inductive analysis from interviews about food production and food security questions. Table 4.2 describes environmental and socio-economic food security stressors identified in both communities.

Table 4-2 Food security main stressors identified in Huamanchoque and Sapaccto-Poques

Environmental stressors impacting crops and agricultural activities
Adverse climate/geographical conditions; climate change effects (*e.g.* altitude, frost, prolonged heavy rain, drastic temperature fluctuation)
Seasonal crop diversity with high dependence on tuber cultivation
Pests, poor soil quality
Natural fertilizer (manure) shortage
Socio-economic stressors impacting household and community economy
Old workforce performing agricultural tasks, and absence of generational replacement
Low market prices to sell produce
Insufficient family income
Community isolation, and time and distance (*e.g.* to reach markets and services in urban centers)
Decrease of agricultural land (described in section 4.3)

Huamanchoque and Poques-Sapaccto are essentially agricultural communities that produce at subsistence level. This means that they mainly eat what they produce, and what they store from their production, bartering practices or from what they obtain through interchange relations and some non-wage labour (Table 4.3). "Everybody has their own *chakra*, nobody is in need" (GGS, female, 43. Sapaccto, 2014). Another interviewed said, "At home you always have to have harvested products. If in a year there is no harvesting, you have stored products [food] to avoid starvation" (PYS, male, 47. Sapaccto, 2014).

In these communities the main food security stressors are environmental and socio-economic. The first group impacts directly on crops and agricultural activities. The second one affects family and community economy and sustainability. The compounding effect of FS stressors is forcing communities to diversify their agricultural activities, and the households to experience some changes traditional food production, accessibility and utilization.

Environmental stressors: The main environmental stressors are adverse climate (pronounced rainy season followed by drought season, and recurrent episodes of frost during winter) and geographical conditions inherent to the Andes highland. Additionally, as a probable impact of climate change, there has been an increase in agricultural pests incidence in the last 15-20 years (Field interviews, 2012). "When I was a child, there weren't worms nor *rancha* [a kind of pest], and no so much *helada* [frost], but since 15 or 16 years ago I have seen many pests" (EQS, female, 45. Sapaccto, 2012). "In the past we would only see worms in the lower land, but now we get a lot of worms and *rancha* in the upper land" (M.M.S, male, 68. Sapaccto, 2012). Also, women from Huamanchoque (2014) explained that the soil was "not giving" as much as it used to do. As a consequence, in the last years they have allocated agricultural land for pine and eucalyptus plantations, and mostly purchased food at the markets.

The fact that environmental stressors impact food security in these communities remains anecdotal, but participants suggest that these stressors affect the amount and quality of agricultural production.

The daily diet of the household surveyed in both communities indicates a high dependence on tuber crops, which may be a consequence of Andean environmental conditions. The dependence on tuber crops may be accentuated by restricted access to ecological altitudes—vertical archipelagos— (Murra, 1980). Women and men identify thick soup (*lawa*) as the most popular meal in their homes: soups of *chuño*, *tapura*, *moraya*, *sara*, *olluco*, *menestras*, quinoa, fava bean. The main ingredients in these soups, are the same in both communities and include Andean tubers, alpaca or sheep meat and *asnapas* (aromatic native herbs and vegetables), with small differences in their preparation and conservation. Other secondary ingredients may include fava bean, corn, cabbage, carrot, barley, rice, and pasta. While I was conducting interviews, several community members shared their household food. Based on that experience, I observed that tubers and meats were staples in their daily diet.

The scarcity of manure as a natural fertilizer was mentioned by community members as a limiting factor to improving soil quality. Not all families own livestock, as a consequence access to manure is limited. Some families borrowed alpacas or sheep to let them rest for several days in an enclosed place (*canchón*), or get another type of fertilizer outside the community (*e.g.* "guano de isla": bird manure extracted in the Peruvian coast that has to be purchased in the market).

Socio-economic stressors: Youth emigration to urban centers is increasing in the participant communities, and it is supported and sometimes encouraged by parents (Field interviews, 2012). Migration out of the communities may negatively impact household and community agriculture and economic activities (except for those households that economically depend mostly on family members living out of the communities). Some parents expressed their concerns and aspirations during the interviews:"I'd like my children get good education to stay here and to work at the crops, but I also think that, if they leave, they would have better chances" (C.M.S, female, 26. Sapaccto, 2012). Other common answers among adult community members were: "I want my kids to be better than me", and "I don't want kids suffer like me" (Field interviews, 2012).

> Around 80% of the students do not want to return to their community. They would rather stay as workers [in urban centers] because the life condition in their communities has impact them deeply, and they have found better opportunities in the city (Eloy Rodriguez, Principal of Instituto Nacional Agropecuario N° 28. Calca, 2012).

Agricultural tasks in household and community *chakras* are mostly headed by adults and elders. Youth migration directly impacts the workforce replacement in these communities, and increases the workload for those left behind. For instance, some *chakras* are located one to three hours away from the community and are only accessible by foot or on horse demanding a bigger physical effort from older community members. Traditionally children and youth were in charge of pasturing and taking care of animals, but with children attending school and youth moving away from the community, women are increasingly becoming responsible for this work and with larger labour load. For single-headed households and

elderly people agricultural activities have also become challenging as they lack the support of an adequate workforce.

Furthermore, consumers at the city markets appreciate organically grown produce and wild Andean tubers from these communities, but participants suggest that these consumers are not willing to pay a fair price for them. "They value the plants [tubers] but there is no fair price... Natural ways are not viable, it is better to work with fertilizers. Growing crops naturally doesn't give you much [income]" (BHH, female, 34. Huamanchoque, 2012).

> They [consumers from Calca] don't see the value on our harvest because hybrid potatoes are bigger and people prefer those, even if they are more expensive. People say the native ones are too small. People just don't see the value (AHS, male, 33. Sapaccto, 2012).

Low prices at the market directly affect family incomes and the motivation of adults and youth for maintaining traditional agricultural alive. This perception is also shared outside these communities:

> When we [students and teachers] talk about growing organic [crops], they [students] know they can be sold at a higher price, but they doubt somebody is going to buy them. The consumer does not value it, unless we talk about a touristic hotel; but the common customers won't [buy it]. To produce organic [crops] it takes more work and it is not rewarded. (Eloy Rodriguez, Principal of Instituto Nacional Agropecuario N° 28. Calca, 2012).

Community isolation, road infrastructure to reach the chakras, markets, and services in urban centers add workload imposed by agricultural activities. For example, it takes 45 min to travel from Sapaccto to Calca by public transport, and 30 minutes from Huamanchoque. However, if community members cannot afford to pay for public transportation, they have to walk to town. Accessibility to urban centers is critical for the household economy when the produce needs to be sold at the market. Also, during the rainy season transportation is not reliable and the roads may close due dangerous conditions leaving the communities isolated without notice (Field notes, Huamanchoque, 2012).

4.5 Food Security and Gender Roles at Household Level

Conventional approaches to the gender division of labour in agricultural contexts tend to confine this division to physical activities (Doss, 2015; Jha, 2004). However, decision-making is itself a task and the main component of the practice of tasks (Jha, 2004). Table 4.3 shows the levels of participation by gender regarding food production, accessibility, and utilization. The Table presents the spaces and kinds of tasks performed by women, and takes in consideration women's role in traditional agricultural societies according to Fortmann (1990). The "intellectual tasks" (Fortmann, 1990) and "decision-making" has been segregated by gender, where "TI" represents total inclusion or heading the performance and/or decision-making in respect of a specific task, and "C" means collaboration or secondary level of inclusion. Also, a disaggregated triple role of women —reproductive, productive, and community work—, and dual role for men —productive and community politics activities— (March et al., 1999; Moser, 1993).

Table 4-3 Gender's roles and participation regarding food security

FS main pillars		Spaces/ main tasks	Tasks	Women		Men	
				Performed by	Decision making	Performed by	Decision making
Productive	Production	In the field	Crop (*chakra*) management	C	C	TI	TI
		Spaces in between	*Huerto* management	TI	TI		
		Livestock management	Small animals: chicken, guinea pigs	TI	TI		
			Pasturage and care: sheep, alpacas	TI	TI		C
	Accessibility		Market (*mercado*)	TI	TI	C	C
			Grocery store	TI	TI	C	
			Bartering	TI	TI	TI	TI
			Family budget management	TI	TI	C	TI
C. work		Productive work	Wage labour	C	C	TI	TI
			Non-wage labour and exchange relations	TI	TI	TI	TI
			Market selling	TI	TI	C	TI
Pro	Util izat	In the	Seed and food allocation	TI	TI	TI	TI
			Food storage management	TI	TI		C

	FS main pillars	Spaces/ main tasks	Tasks	Women		Men	
				Performed by	Decision making	Performed by	Decision making
		homestead	Food transformation/ preservation	TI	TI	C	C
Reproductive		Domestic and reproductive tasks	Family feeding/cook	TI	TI	C	
			Childcare	TI	TI		C
			Housekeeping	TI	TI		
			Weaving	TI	TI		
			Spinning	TI	TI		
			Knit	TI	TI		
Community politics activities			Attendance to assemblies	C	C	TI	TI
			Attendance to specialized committees	C	C	TI	TI

Women head physical and decision-making tasks related to *huerto*, small-animals (guinea pigs, chickens) and livestock management, access to market and grocery stores, food storage management, food transformation, and family feeding; while both men and women equally share physical tasks and decisions regarding bartering, non-wage labour and exchange relations, and harvesting allocation. Men make decisions related to crop management more autonomously *(chakra)*, and perform wage labour, and attend assemblies and specialized committees. There are other tasks performed and decided on by women identify as domestic and reproductive tasks (March et al., 1999; Moser, 1993): childcare, housekeeping, weaving, spinning, and knitting (these 3 last tasks performed to supply their families or to gain some income).

As suggested by Twyman (2015), in a joint or egalitarian family farming system both women and men provide labour and share decision-making: making joint decisions or specializing in some kind of decisions with variations depending on the tasks. This appears to be the case in the communities of Huamanchoque and Poques-Sapaccto. The gendered task division described in Table 4.3 may be rooted in both the traditional conception of gender complementarity and duality; but also impacted by current

NGO's activities and local services[31] in the communities, which may be reinforcing those traditional concepts through workshops about gender tasks at household, childcare, domestic violence, and other topics. The use of concepts like "authoritarian" and phrases such as "we are two for a good reason" (related to the concept of Andean gender complementarity) suggest the combination of both influences. CGH (male, 55. Huamanchoque, 2014) explained that decisions about how to access food, what to grow, and how much food to sell were made by both women and men: "It can't all be just decided by the male, neither just by the woman. It is always decided by the two of them. It always has to be coordinated. Otherwise it'd be authoritarian." Though RMH (male, 74. Huamanchoque, 2014) and his wife lived separately (she takes care of the family's livestock on higher lands), they decided together about work to be done on the land and other household tasks, as he explains here:

> She always knows [if they have to sell alfalfa at the market]. I can't decide by myself. Though she only comes sometimes [to the main house], we always talk about our tasks. If I were to do it just by myself, that wouldn't be right. I may do something wrong, so I can't decide by myself. We are two for a good reason.

While understanding that agricultural households are both production and consumption units where decisions are interrelated (Twyman et al., 2015), the egalitarian family farming system is the prevalent system in both communities at household level. The family farming system regarding market selling tends to be patriarchal, while household food security tends to be matriarchal: headed by female decision-making and physical task performance. Both women and men said that males had more expertise and knowledge about crop management: "Regarding the *chakra*, the man decides when he has to plant, how much, what to plant, about all these things. But, both the man and the woman always have to do something" (AHS, male, 35. Sapaccto, 2014).

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[31] The presence of NGO in Andean highland communities is heavy, and Huamanchoque and Poques-Sapaccto interacted actively with several of them regarding social, economic and health issues (Field observation, 2012-2014).

In general, when it comes to crops and land (*chakra*) management, both women and men mentioned that women "helped" men; thus, women are seen as collaborators. For example, besides harvesting and/or collecting seeds, women cook and bring food to the *chakra* when there are *masas* (a group of workers) working on the family land. Or, as EHS (male, 68. Sapaccto, 2014) explained, "the man decides [what to plant], but as the woman also knows [about crops], she gives her opinion about what to plant. She also supports you." It may be an example of what Hernandez Astete (2002) explains about the conception of duality and complementarity in the *cosmovisión Andina*, which conceives some levels of hierarchy as between two elements one had to be superior, but the hierarchy is interchangeable between those two elements, or genders, given specific contexts.

However, for one of the Quechua interviewee from outside of the community, the description of women as 'helper' regarding the work in the *chakra* is a clear underestimation of real women's role in the field:

> They both [women and men] work the land, because it is a shared work. Although men do not acknowledge that women work too; for them, women are just helping. Is the tradition [usage] to underestimate women's work, and women allow it to happen too. They don't say 'I am working', they say 'I am helping'. Women's work is not valued or appreciated (EVC, indigenous youth instructor. Calca, 2012).

In words of Agarwal (1997b), this supposed underestimation may constitute a cultural barrier that would assume that women have a secondary or subordinated role in the *chakra* management, preventing that both women and men acknowledge they both share equally intellectual and physical task in the field.

4.5.1   Production, Accessibility and Utilization at Household level

The following constitutes the main sources of food in the communities of Huamanchoque and Poques-Sapaccto as mentioned (not ranked) by women and men: i) *chakra*, ii) *huerto* or *canchon*, iii) household food storage, iv) *mercado* or market, v) livestock, and vi) bartering. These sources, and the work and traditional techniques each of them demands, also constitute effective responses to the food security

stressors (presented in Table 4.2.). They are presented according to three basic dimensions of food security: production (availability), accessibility, and utilization (FAO, 1996).

4.5.1.1   Food Production and Utilization

Chakra: Men commonly manage the *chakra*, but for certain tasks female partners have the predominant role, *e.g.* seeding, harvesting, and seed collection. Some factors male interviewees consider when making decisions regarding land and crop management are: what kind of potato they wanted to work with (personal preferences), what potato would produce better, and what the market potato price was. One effective way of ensuring food for a long period is to plant at different times to guarantee several potato harvests, and manage *chakras* with a diversity of crops in different geographical elevations (*pisos ecológicos*) on the community lands. Growing crops at different elevations also generally prevent frost and pest (food security stressors) affect crops. The *chakra* produce is assigned primarily to family consumption, and secondly for selling and bartering. In one or several *chakras* they could also cultivate forage, it is not clear how much of the forage production each family destine for each, as the amount varies according to the seasons and temporal needs faced by the household. For instance, if the family has to purchase a specific good, they may allocate more produce to sell in the market than to consume it at home. The common location of the *chakras* may encourage women to be less involved in the *chakras* than men. As women are responsible for domestic tasks (*e.g.* cook, housecleaning, child feeding, pet care, *etc.*) and livestock, they would not be able to take on an equal amount of crops management as an extra task. A second fact that may discourage women is the need of organizing *ayni or minka* to work in a family *chakra,* which demands leadership skills commonly attributed only to men.

Huerto **or** ***canchon***: A *huerto* or *canchon* is mainly managed by women. Women work in the huerto by themselves or helped by their children.

Table 4-4 Predominant crops in *huertos/canchones*

Plants	Community
Lettuce (*Lactuca sativa)*, parsley (*Petroselinum crispum)*, onion (*Allium cepa)*, cauliflower (*Brassica oleracea* var. *botrytis)*, oregano (*Origanum vulgare*), cilantro (*Coriandrum sativum*), carrot, garlic	Sapaccto (Poques)
Onion, cabbage, *asnapas*, lettuce, cauliflower*, tarwi (Lupinus mutabilis Sweet),* spinach (*Spinacia oleracea*), radish (*Raphanus sativus*), beets (*Beta vulgaris)*	Huamanchoque

The food harvested in the *huerto* may not be significant in amount as *huertos* are usually small, and some crops grow depending on the season. However, *huertos* are a close source of food, and provide diverse vegetables and herbs, in some cases reducing the household dependency on the local market. "I don't depend on the market because my wife is more skilled than me; she has her *huerto*" (CGH, male, 55. Huamanchoque, 2014). Some women also sell and exchange food grown in their *huertos* with their neighbours.

Though this study did not assess the nutritional value of the community diet, it is worth to highlight women's role and knowledge about food utilization. Women acknowledged that they had to cook "something heavy" (Appendix B.1) according to family members' daily performance and activities: "[My husband] does not like to eat just that [traditional meals]. He only wants pasta, rice, and that is it. And with that I get angry: how we could get strength with that…" (CCS, female, 42. Sapaccto, 2014).

> My oldest son tells me: when you cook just a soup [early in the morning], I'm already starving after arriving to the lower land [where he attended school]. That is why I always cook something heavy (BHH, female, 34. Huamanchoque, 2014).

In both communities, women are also concerned about how to boost food flavours. To this purpose, they prepare traditional meals seasoned with *asnapas* (aromatic native herbs and vegetables) mainly cultivated in their *huertos*. These tasks regarding utilization and culturally appropriate food (Altieri et al., 2011),

describe in part the invisible components of household food security that hide the key female role in this (Choudhary & Parthasarathy, 2007).

Livestock: The kind of meats most often consumed in the communities includes sheep, alpaca, and *cuye* (South American guinea pig). Alpaca or sheep meat is usually preserved by dehydration or drying. Only a few families own cows to provide the family with milk for their children, or to sell in the market. Some families also own chickens and pigs but not in a significant number (two or three).

Table 4-5 Kind of meats most consumed by interviewees, Huamanchoque and Sapaccto

Access to meat	Community
Cuye, alpaca, sheep	Sapaccto
Cattle, sheep	Huamanchoque
Fish (this is not a main source of meat. Those who mentioned it had access to a lagoon where trout has been introduced)	Sapaccto

Women play a key role in managing livestock: caring for and pasturing the big animals, as well as caring for and feeding cuyes, chickens, pigs, and pets (cats and dogs). This is a daily task that demand hours of work as animals are guided far from the houses to graze. Women also have a predominant role in both communities regarding decisions about livestock. According to AHS (male, 35. Sapaccto, 2014) his wife "decides by herself about livestock. She tells me: that sheep has to be inseminated, that sheep is sick and you have to heal it. Or that day there is a meeting you have to attend. I just help her." ICH (female, 58. Huamanchoque, 2014) is also in charge of decisions regarding their livestock:

> I decide by myself [about livestock], because I don't wait for my husband to tell me we will slaughter a ram. No, if it is urgent, I get the animal, male or female, and bring the animal or the meat to the town.

4.5.1.2   Food Accessibility

Market: Regarding vegetables, the local market is a secondary food supplier after the *chakra* and *huerto*. The market is the main supplier of processed food, followed by the grocery store placed in nearby communities or urban centers. The most common food products purchased in the market are: rice, pasta, oil (otherwise they use animal fat), salt, and sugar; then fruits and vegetables like pea (*Pisum sativum*), fava bean, garlic (*Allium sativum*), onion, carrot (*Daucus carota L.*), broccoli (*Apium graveolens* var. *dulce)*, cauliflower, cabbage (*Brassica oleracea* var. *capitata)*, celery (*Apium graveolens* var. *dulce)*, tomato (*Lycopersicon)*, and cumin (*Cuminum cyminum)*.

In Huamanchoque, for single heads of households and elders without family members in the community, the market is the principal food supplier. For those who receive external financial support, *e.g.* from family members living in urban centers, the market also is a more accessible source of food than their *chakra* and *huerto*.

Bartering *(chhalakuy*): This is another way to access food in the communities. Most of the interviewees are familiar with the system, but according to E.H.S (male, 68. Sapaccto, 2014), bartering was much more popular decades ago. Women usually barter food among themselves (neighbours or family members). Between communities, men and women plan and organize the exchanges. According to G.Q.H (female, 34. Huamanchoque, 2014), "from the lower lands they bring quinoa (*Chenopodium quinoa*), peas, *moraya*", while E.H.S exchanges corn for tubers, *moraya*, *chuño,* and potatoes. However, in order to barter between different communities, the members must have previously established close relationships, since this activity was based on trust.

Wage, market place selling, and non-wage labour: Most of the women say that both, men and women, bring income home, though men are mentioned as the main providers. They are expected to bring

more money home and to provide the family with money to purchase food, or with food from non-wage labour. Unlike women, if men are not working in their *chakras*, they usually leave the community for a day or more to look for jobs in any position, *e.g.* weeding *chakras* or harvesting corn in other communities, or they rent out their land. In these situations, men make some money or receive food as payment. Other times, they work for the municipality building roads or other civil works, and as porters on the Inca Trail. It is also expected that neighbours help each other regarding food provision and exchange, highlighting the importance of (good) exchange relations. In case of food shortage at his household, AHS (male, 35. Sapaccto, 2014) pointed out: "I would get help from neighbours. I trust them, as I'm a good neighbour."

When I specifically asked women whether "they made money" (Field interviews, 2014), women indicated they did and/or elaborated in great detail. In fact, women are very resourceful when it comes to increasing family income and food provision. Depending on their skills (*e.g.* weaving, knitting, selling), they offer non-wage labour for food. Most women, however, go to the city to sell food (meat and vegetables) or other items like alpaca wool, alfalfa and straw as forage, and to purchase food or goods for their families:

> Because *ichhu* [straw] sells well, I'm also selling *ichhu*. I bring *ichhu* from the top of the hill, and that way I have money to give to my children. We also have animals and we sell them. I also sell at the market to have money for myself. Each Sunday, I bring something to the market. With that, I buy food for the whole week (BHH, female, 36. Huamanchoque, 2014).

> Most often my husband [makes and manages the money], because he is the one to earn more, when we sell in the market too… I just see to the household needs, and with that in mind, I tell him to buy food and other things. He gives me money, if there is money. When I sell [food in the market], I also spend it on household needs (BHH, female, 36. Huamanchoque, 2014).

In Sapaccto there is a male that acknowledged his partner brings more income than him:

> In other homes, the man brings the money. In my case, it doesn't happen like that. I work and my wife also works with alpaca wool. I have many alpacas, and from them we get wool, and my wife sells that. And she makes more money than me (AHS, male, 35. Sapaccto, 2014).

Family budget management: Most women agree that they are better at managing the family's budget, as men are perceived as not being reliable. Some male interviewees agree with that perception: "My wife

is more accountable. When we [men] keep it [money], we spend it or we also drink with friends and spend it. However, the woman spends money according to what is needed" (PYS, male, 47. Sapaccto, 2014). This quote may reinforce the arguments presented by Bezner Kerr (2005) that it should not be assumed that if the income increases in the household, the overall food security will increase too. Considerable differences between how men and women spend family incomes are identified by the interviewees, in consequence, it is not guaranteed that family incomes may be equally shared within the household (Bezner Kerr, 2005).

Additionally, two men, the oldest from both communities, said women and men together administrate the family budget. EHS (male, 68) expressed:

> Interviewer: Here, who makes money? Who is in charge of administrating money or providing food at home?
> Interviewee: We both do. Who else could do it? It is done by us, both of us, always. If it weren't like that, everything would be done in a hurry, and your home would be empty. You wouldn't have anything (Sapaccto, 2014).

This last quote may also be understood according to the ancient Andean concept of gender complementarity, which shows the interdependence of men and women to perform differentiated tasks for the maintenance of the household and the community (Hernández Astete, 2002; Murra, 1980; Radcliffe et al., 2004; Rengifo, 2012).

4.5.1.3   Food Utilization

The traditional agricultural techniques and practices regarding crop and food preservation that are part of the Andean indigenous knowledge allow families to self-supply for several months and years (Appendix B.1), *e.g.* potatoes for six months, *chuño* and *moraya* (prepared with potatoes) for two years. Other food stored for several months are corn, fava beans, *khaya* (prepared with *oca*), quinoa, and *tarwi* in Sapaccto; and wheat and barley (*Hordeum*) in Huamanchoque. However, some changes to traditional practices and technologies introduced in the communities may be affecting the life and the quality of stored food:

Fava beans are now stored peeled instead of storing them with their shell [as it was done since ancient times], so, now, they become *chuma* [tasteless]; [another example is] products [food] stored in *ta'ques* to keep the products warm, and doing a ceremony using *t'anta anis* [anise bread] and incense, instead of using sacks. (EHS, male, 68. Sapaccto, 2014).

Some families store the tuber seeds in the house, and other in the *chakra* or beside the house, and cover them by *itchu* (straw). In order to store food, women and men work together in the *chakra*, first harvesting, and then selecting the tubers for food or seed, but women are the ones who know the storage place better and how to allocate the food:

We both are in charge of storing the harvest. In the chakra I select the potato, and my husband is in charge of transporting it to the house… I tell him how everything has to be allocated: in one place the small potatoes, in another the potatoes to make *chuño*, then the potatoes *para sancochar* [to boil in water], and in that way we store all… (ETS, female, 56. Poques, 2014).

The same division appears to happen within two other couples, CCS (female, 42) and PYS (male, 47). They store the food together, but he builds the storage structure while she manages it. EHS (male, 68, Sapaccto) expressed: "My wife (GMS, 61) rations [family food] according to what she can do. She ensures we always have stored products [food], right? If a woman wastes food, [she] won't have enough food later."

Moser (1993) describes women's strategic needs as those needs shared by household members, although women often claim that to meet these requirements (needs) is their responsibility (March et al., 1999). However, the interviewee EHS assert that the potential lack of food would be an issue for his wife, and not for the entire family. It means that not only women but also family members would see some strategic needs (*e.g.* lack of food in the storage) as purely women's obligations. Probably, family members also expect that women fill that need, for instance, doing whatever they can to ensure food for their family, *e.g.* exchange relations and services, selling at the market, *etc*.

4.6   Community Political Structure

In both communities, members are those men and women who fulfill the Statutes of Peasant Communities' requirements, and are formally registered as members. In the statutes of both Poques and Huamanchoque I did not find many explicit mentions of gender differences. However, compared to the statutes of Huamanchoque, those of Poques mention the word "woman" or specifically allude to the female condition more often. While the statutes of Poques and Huamanchoque mention that males and females have the same rights, the latter one expresses that both groups also have the same duties. Another aspect related to gender mentioned only in the statute of Poques is that it is the duty of community members "to provide a good home and good life example to children, males and females, in equal condition" (Estatutos Comunidad Campesina de Poques, 1988). In addition, the document expresses that widows and single mothers must attend assemblies, *faenas,* and other activities, and the kind of work assigned to them will be according to personal capacity.

The political structure and functioning of Huamanchoque as well Poques rest upon two main organs: the general assembly and the specialized committees. Another opportunity to discuss community issues, but in an informal way, is the *faenas.* Some interviewees pointed out that the extra workload and time demanded by committees and non-agricultural *faenas* are some of the reasons that prevent community members working together more often on community crops. Although with the extra activities some progress is brought to their communities (new roads, sanitary system, stadium, *etc*.) that is not provided directly by the district authorities, their traditional agricultural system is being affected as the communal agricultural activities would not be a priority anymore.

General assembly: Held once a month, the general assembly is the most important socio-political community event to resolve community issues. The issues discussed are diverse and range from livestock invading neighbours' crops to stream and lake contamination. In the assemblies, community members

also decide on crop management such as the use and possession of plots or which are the "rotation" lands, what kind of seeds will be planted and where, how many seeds and manure is required, prices of crops, *etc*. (Field notes, 2012 and 2014; Estatutos Comunidad Campesina de Poques, 1988; Estatutos Comunidad de Huamanchoque, 2005). It is mandatory for each registered community member to attend the assembly and the *faenas*, elect community authorities every two years, and pay a fee as an active member.

The president heads the assembly with the help of a vice-president, secretary, treasurer, auditor, and *vocales*[32]. The decision making and voting is commonly done by show of hands, except when community authorities are elected; when a formal suffrage is called. If there are urgent issues to resolve, such as a community member's accident, the president may call for an extraordinary assembly.

Specialized committees: In each community there are "specialized" committees to answer specific needs regarding organization and management including farming, business, community services, control of conflicts and crime, and others to boost community development. Each committee is headed by a president, and supported by a secretary and a treasurer; and it has a set of regulations and a manual of functioning in accordance with community norms. In Huamanchoque and Poques there are several specialized committees (*e.g.* of health, sport, farming, environment, community safety, watering), and some organize *faenas* to accomplish specific objectives (*e.g.* building water irrigation channels or the community hall, *etc*.).

Faenas: Besides assemblies and committee meetings, *faenas* can be considered a third instance where community issues are discussed but in an informal way during breaks (at least two per *faena*) among

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[32] *Vocales* are part of the community board and among their functions are: take the vice-president, secretary or treasurer's function in case of their absence, and collaborate with the board when needed.

community members, mostly men, and authorities. However, though the conversations and discussions are made in an informal context, this might not mean that they are less important than those carried out in assemblies or committees.

> You talk [to community members] whether something can be done or not. In the *chakra* we talk, so, if something is right or not, how we can do it, thus being informed you attend the assembly. If there is a voting, you do, as you already know [what is happening]. (EHS, male, 68. Sapaccto, 2014).

4.7 Food Security and Gender Roles at Community Level

Comparing household and community roles in food security, in Huamanchoque and Poques-Sapaccto the household is the main unit of production and food provider for community members, followed by the community. Based on the data presented in Section 4.5, in both communities food security is mainly a household and not a community matter, even in times of food shortage. Community members recall "months of hunger" the six months previous to harvesting season, during which they eat mainly what they have in their household storage. However, for everyone, women and men, facing severe food shortages in their own household and in the community is a rare occurrence. In any case, if this happened, "each member has to resolve this [in their own household]" (CGH, male, 55. Huamanchoque, 2014).

4.7.1 Production, Accessibility and Utilization at Community Level

Both Huamanchoque and Poques are mainly organized to produce food and income to cover some community expenses, and to perform civil work. As a community, Huamanchoque raises alpacas and grow potatoes and other tubers. In Poques, some community members are organized under the Small Livestock Producers' Association to raise guinea pigs, and in Sapaccto they raise alpacas to produce for the market. However, several interviewees said not to be functioning as a traditional agricultural community in comparison to decades ago. In Sapaccto, they do not work in agricultural *faenas* together anymore. PYS (male, 47. Sapaccto, 2014) said they were not able to work together on community crops because of the high number of civil work *faenas* and others. He recalled that when they used to cultivate

together [15 years earlier], they shared the small potatoes and the big ones were sold as seeds. ETS

(female, 56. Sapaccto, 2014) had memories about the times they were working on community crops:

> I liked to participate; now, I don't have time. Before, I was able to do it because my children
> helped me. My husband went out early morning to work, and we [women] went to the *chakra*
> with our kids. We sat our kids down at the edge of the *chakra*, and we prepared the land to plant
> lettuces or onions. In that way we [women] worked before.

ETS used to be the president of the Women's Committee, and at that time, the committee had a more

relevant role in the community: "It [the group] participated in the board of directors. We used to grow

vegetables. Before, the committee supported the president. Women supported the president." Nowadays,

added ETS, the committee is part of the Health Group with no direct connection to the community

authorities. In addition, in Sapaccto community members are discouraged to work the land as a

community due to an unfortunate experience. According to GGS (female, 43. Sapaccto, 2014), years

earlier they had cultivated potato with borrowed seeds, but because of a heavy rainy season, part of the

harvest spoiled and the rest were very small. As a consequence, Sapaccto was left in debt.

> If the harvest was guaranteed and the potato wouldn't get any disease, maybe we'd work together
> again. There are many diseases that have appeared, and that is why I get discouraged when I work
> [the land] or I plant, because crops don't grow as before (PYS, male, 47. Sapaccto).

In Poques, if community members were in need (widows, sick people) the community *chakras* could be

lent out to them. Churches also play a key role gathering community members around spiritual interests

and social issues. Community members celebrated a day of thanksgiving to share and collect food or

organize a BBQ to raise money for in-need people from their community or outside of it. In the case of

Huamanchoque, when they buy processed food as a community, they share it with elders and community

members in need on a regular basis, and collect money to assist them. CGH (male, 55. Huamanchoque,

2014) also recall that they had received food from the National Food Assistance Program (PRONAA).

4.7.2   Gendered Participation in Community Decision-Making Regarding Food Security

Having described the main instances and activities through which the communities made decisions regarding food security, the current subsection discusses the research question: what is the level of women's participation in community decision-making regarding food security? Neither men nor women are very keen on joining community activities (assemblies, committees and *faenas*) claiming to not have enough time to participate. However, participation is mandatory and they could not avoid participating in those activities.

> I don't like to participate in the assemblies, nor give my opinion. If I express my opinion on something, people would say that I have to do something, or they ask me to take a directive position. Before, I expressed my opinion a lot and I liked to collaborate, thus people always looked for me. Now, I don't have time, I prefer to spend time with my kids. (GGS, female, 43. Sapaccto)

As an exception, a couple of men from Sapaccto said they would like to have more active participation, "I always participate. I like to participate and work for the community, so I always have a position on the board of directors. Women also should be like this" (AHS, male, 35. Sapaccto).

Table 4.6 illustrates gender participation and levels of inclusion in the communities where I conducted fieldwork. To the typologies of participation presented independently by Agarwal (2001), Pretty (1995) and White (1996) in Chapter 2, I added two types of participation based on the fieldwork: Intermediated Participation and Constitutional Participation. The first one refers to indirect participation that is not immediately evident because it may take place through an intermediary. For instance, some interviewees mentioned that they talk to their partners about community issues, but it is unclear whether women's opinions are represented in community assemblies by men. In tune with what Fortmann (1990) expresses about women's "intellectual task" in traditional society, women influence decision-making and persuade their husbands to perform as they think it should be done. In constitutional participation, it is expected that women attend and vote in the communal authority election (in order to comply with the statutes' requirements), but it is not necessarily expected that they attend the ordinary assemblies throughout the

year. On the contrary, in some cases they are discouraged to participate more. *E.g.* in Poques women are verbally discouraged to attend assemblies "too often" on behalf of their partners, otherwise their partners "may be fined" (Field interviews, 2014).

Table 4-6 Political participation by gender

Form/Level of participation	Feature	Women	Men
Nominal participation	Membership in the group but without guarantee of active inclusion	Assemblies	
Instrumental	Labour is taken as a commitment to an objective; participation is seen as a cost (*e.g.* time), not as an option	*Faenas*	
Passive participation	Being informed of decisions post facto; or attending meetings and listening in on decision-making, without speaking up	Assemblies	
Intermediated participation	Participation through an intermediary	Assemblies *Faenas*	
Constitutional participation	Participation only in elections	Community election	
Participation by consultation	Being asked an opinion about specific matters without guarantee of influencing decisions, while some external agents define problems and information gathering processes		Assemblies
Participation for incentives	People contribute resources (labour in return for cash or materials), but they lose interest in participating once incentives end	External projects executed in the communities	
Activity-specific participation	Being asked to (or volunteering to) undertake specific tasks	Assemblies Faenas Committees Community events	
Active participation	Expressing opinions whether solicited or not, or taking other kinds of political initiatives		Assemblies Faenas Committees Community events

Form/Level of participation	Feature	Women	Men
Interactive (empowering participation)	Having voice and influence in the group's decisions: joining analysis, development of action plans and formation or strengthening of local institutions		Assemblies Committees External projects
Self-mobilization	Taking initiatives independently of external institutions to change systems, but retaining control of how to do it		Assemblies Committees

In both communities women are more involve in the lower levels of participation in the community political structure, and part of their participation is mandatory (constitutional participation) or motivated by incentives (participation for incentives) like goods or money. Men are also motivated by incentives, but, compared to women, they are involved in more meaningful ways of participation, and with major influence on the community main instances of decision-making.

General assembly: Both women and men are expected to attend the assemblies according to the statutes (Estatutos Comunidad Campesina de Poques, 1988; Estatutos Comunidad de Huamanchoque, 2005). Specifically in Poques, women and men must attend at least 50 percent of the total number of general assemblies (Estatutos Comunidad Campesina de Poques, 1988). However, in practice, it is mostly men who attend those in both communities (Field notes, 2012, 2014); all partnered female interviewees attend on behalf of men, for example, if their husbands are away. Others women attend as heads of household (widows or single mothers): "Interviewer: Who attends the assemblies? AMH: Males do, women don't. We are just [attending] some [she is a widow]. Just when there are big assemblies to elect the president, it is attended by men and women (Female, 59. Huamanchoque, 2014). Women are also aware that, during assemblies, decisions are made mainly by men, and even those women who are heads of household play a secondary role in the decision-making process.

> Interviewer: Do women participate in the community's decision-making processes? For example, if food should be sold or not, or allocated among community members?

BHH: Yes, there are always women, but sometimes not all widows attend [the assembly]. They just go to the *faenas*… Not all women are there, neither in the assemblies, nor the *faenas*. Just widows attend.
Interviewer: And do they [women] decide?
BHH: They help decide (Female, 36. Huamanchoque, 2014).

The dialogue below (Huamanchoque, 2014) happening among men, reveals men are also aware about who make decisions regarding community matters, and women's role on this.

Interviewer: In your opinion, who decides regarding community matters? Men, women or they together?
ARH (29): They both. Both.
Interviewer: How does it happen if women don't attend assemblies?
JRH (62): How could be both if male mostly decide…
EHH (57): The males decide. Let's say, some of you have asked to your wives [their opinion] about the road construction? No, nobody, right? Nobody has asked them. [Pointing to JQH] Have your wife told you that the road has to be done? No!…
JQH (43): No really. The males decide more about the community matters and community situation.
EHH: The males…
JQH: We are saying that they [women] are not here [during community activities]… that they don't have enough instruction to decide. If we talk about land community titles, who knows more about it? The males know more about it. We, the males, will decide it. Sometimes women support us in some ways.
Interviewer: Why do you [ARH] say that both women and men decide together?
ARH: Ok, let's say, I ask to my wife about what we'll work on the [family] *chakra*, if we count with people to work or not, and those things. In that case, yes [we both decide], I talk to her. I do ask and talk to my wife, so.

Regarding women's participation frequency, female interviewees rarely attended an assembly on behalf of their husbands: "Last year I attended three times, and this year I haven't attended it. When my husband goes for a job outside the community, in August or September, I'll attend the assembly." (ETS, female, 56. Sapaccto, 2014).

Women committees: In both communities there are committees headed only by women, but they are lower in number and in some cases (*e.g.* Huamanchoque) they formally exit only to obtain some subsidy (*e.g.* access to milk delivered once a month). The statutes of Poques (1988) describe the function and structure of each committee, alluding explicitly to the presence of men on each board of directors, except for the Committee of Women. This committee mandate is to encourage female participation to access

benefits for themselves and the committee as a whole (Estatutos Comunidad Campesina de Poques, 1988). The committee also promotes women's attendance to courses, meetings, and trainings organized by public and private institutions; arrange trainings for production in sewing, fabric, crafts, and others with external institutions; ensure the continued governmental benefit of activities like "Glass of Milk" (public subsidy program); join women's organizations at a district and provincial level; and ensure and encourage women to be beneficiaries of social programs (Estatutos Comunidad Campesina de Poques, 1988). On the other hand, in Huamanchoque there are two female committees, Mother's Club and Glass of Milk, but no specifications about their work or structure are included in the Community statutes.

Faenas: For women, *faenas* are not an appropriate space to share thoughts and opinions regarding community issues. Because of their public nature, women, unlike men, prefer to just listen during *faenas*; they would only talk about community matters outside these settings, and with people who are closer to them and who they really trust: "I almost don't talk with others. It can be a cause of discord. They say: she was speaking, like that. They can go tell the president, right? I just can talk with my neighbours; they are nice people." (CCS, female, 42. Sapaccto, 2014).

In Poques, women can attend two *faenas* per year on behalf of their husbands, and are exempt from them at 50 years old, and men at 60 years old (Estatutos Comunidad Campesina de Poques, 1988). There is no explicit mention of this in the statutes of Huamanchoque. Though both Poques and Huamanchoque excuse pregnant members of working in *faenas*, in Poques husbands are also excused close to the due date (Estatutos Comunidad Campesina de Poques, 1988). If women do not participate directly in *faenas* on behalf of their husbands or as heads of household, community authorities "order" some of them to cook for the workers (AMH, female, 59. Huamanchoque, 2014). To "order" women to participate in different ways may be a habitual practice, even during community festivities. However, men are also "ordered" to participate by the community authorities, *e.g.* to attend a workshop in the municipality on behalf of the community (Field notes. Huamanchoque, 2012). As a direct consequence of the low level of female participation in public events and community activities, aside from festivities and other similar events, it

is supposed that women are mostly informed about community matters through their husbands: "I always tell my wife what is happening in the community" (AHS, male, 35. Sapaccto). "She also has to know [about community matters], not just me. As she doesn't attend [assemblies], I have to tell her. (EHH, male, 57. Huamanchoque).

> Oh, yes. We [my husband and I] talk about it: if the president is right or not, if the president is working well, if he is doing it correctly, what the president should do to improve the community. He tells me when the next *faena* will happen, about those who have to pay fines (ETS, female, 56. Sapaccto, 2014).

Given the mechanisms that women are able to access to participate in the community political structure, I deduce that their formal level of participation and influence on food security decision-making at the community level is minimal. Female voices in assemblies and *faenas* are mostly expressed by widows and occasionally on behalf of husbands, and though women could have a level of influence on men's decision-making, it is unclear how their opinions are represented. In both Huamanchoque and Poques-Sapaccto, in comparison to the kind of decision-making taking place at household level, I might assert that at community level it corresponds to a patriarchal system as described by Twyman et al. (2015): men and women provide labour, but men control the decision-making processes regarding food production and distribution, and other key community matters.

Besides lack of time and heavy workload, women cite several reasons for not wanting to participate in community activities. Their reasons may constitute what Agarwal (Agarwal, 1997a) identify as social barriers (social constructions) regarding assumptions about gender's capabilities. Women feel afraid of performing in public and being rejected by men, and at a disadvantage with respect to them: "They [men] always despise us. Your opinion is stupid, they say." (ICH, female 58. Huamanchoque, 2014). Another woman agreed that men do not value their opinions: "I don't help anymore, because when you help, they don't even say thanks. They don't give you anything. Sometimes, they don't even listen to you." (AMH, female, 59. Huamanchoque, 2014). ETS (female, 56. Sapaccto, 2014) explained her lack of "world experience" was partially to blame for her insecurity:

It [feeling afraid of participating in an activity outside the community] happened because I didn't know anything and I didn't go anywhere. I didn't know any other place than the community. If you don't go to other places, and you just stay here forever, you are afraid.

ETS (female, 56) highlighted the positive effect on her of taking a more active role in community organization, describing it as a learning experience:

When I joined the community's board of directors, I learned… With the board, I have started to go out; I have learned to relax more and to speak with people. Thus, little by little, I have learned and I have also learned to direct women (Sapaccto, 2014).

These words confirm an example of the relevance of female empowerment to confront women's underestimation and social and economic constrains (Schutter, 2013).

4.7.3   Social Barriers to Women's Performance and Attitude

Other socially constructed barriers I identify in the communities are regarding notions about gender spaces and appropriate social performance. What men and women expect from female behaviour in and out politic spheres is quite different. According to the youth instructor EVC,

In the society an extroverted woman with a strong personality is not accepted. They're called 'Caremalica', it means to be 'machona' [female macho]. Having a voice and social skills are male characteristics. It has been like that since the ancestors. They have been overcoming that situation but not quite totally (Calca, 2012).

However, those expectations are totally different regarding female political leadership. Both women and men share the same expectations (social barrier or constructions) about women's political leadership. As socio-politic space is dominated by men, women are expected to behave like men regarding political leadership. In October 2012, the community of Poques elected a woman as president for the first time. Though all the interviewees consulted voted for her, their opinions about her skills and work as president were divided. Those who disapproved of her work, regardless of whether they were women or men, complained that she lacked "male attributes":

A woman is not the same [as a man]. Sometimes, a woman just speaks and gives orders and doesn't work with the rest. But a man always does it. He says: we'll do it and such. We work and he directs well. A male president is better. Our current president doesn't direct as a male would do it. She still lacks that (PYS, male, 47. Sapaccto, 2014).

These thoughts also were shared by a couple from Sapaccto:

> ETS: She doesn't work as a man.
> GCS: Yes, she doesn't work with us [men]; a male president works with us.
> ETS: Of course, women won't work together with males.
> GCS: Yes, in the assemblies, she just gives orders to us and in the *faenas* she just comes to give orders to us, and she doesn't work with us. And when we take a break during the *faenas*, there is nobody that talks to us either. However, if the president is male, he does, at least he talks to us when we are resting. (ETS, female 56; GCS, male, 55. Sapaccto, 2014)

ETS and her husband's words also reveal other kinds of social barriers (Agarwal, 1997a) that may prevent

men and women from feeling comfortable and trusting each other.

> GCS: We voted for her, but now we regret it, because she is not working like a man.
> ETS: It is the same as if, for example, a man were the president of the Women's Committee. There may not be [enough] trust to [feel comfortable to] talk. Instead, if we are just women, at least we may talk. The same happens with males; they don't trust her.

On the other hand, those who agreed with the president's performance thought that she had attributes that

"men lacked," and saw her election as a fact that demonstrated gender equality:

> It is better to have a woman [as a president]. Sometimes, we, males, drink when we are on the board. But a woman is more accountable. Thus, they [women] get more enthusiastic; they want to work. They want to progress. Some [men] don't think like me. I think they think women are not valuable… because they are ignorant, I think." (EHS, male, 68. Sapaccto, 2014).

4.8 Men's Knowledge, Attitude and Perceptions (KAP)

Table 4.7 shows the KAP men have toward women's roles in the household as well as in the community

regarding food security. First, I approach the KAP from a wider scope, and then I try to find those KAP

related to food security and gender. From my perspective, in these communities food security cannot be

analyzed as an independent fact. Instead, it demands from male and female members decisions, work,

performance skills, and knowledge, that determine the whole life at the household as well as the

community, and overlap other crucial subjects at both levels (*e.g.* family wellbeing and economy, health,

workload) and vice versa.

Table 4-7 Men's KAPs toward women

Men's KAP	Women in community	Women in household

Knowledge
(about women)
	• Ignorant
	  (regarding community issues)
	• Lack of:
	  -Formal education and social training opportunities (*e.g.* nutrition, health, etc.)
	  -Opportunities outside the community
	• Deficient Spanish proficiency
	• Discriminated in urban centers
		• Helper (in crop work and management)
		• Decision maker and knowledgeable
		• Work highly demanded (preventing women to attend political events)

Attitude
(toward women)
	• Paternalist, protective
	• Compassionate
	  (regarding gender-social inequality)
	• Expectant about:
	  -Women's progress
	  (*e.g.* education, training, social skills, etc.)
	  -Women's empowerment
	  (*e.g.* to defend their rights)
		• Thankful
		  (regarding multitask performance)
		• Compassionate
		  (regarding workload)

Perception
(about women performance)
	• Enthusiastic
	• Reliable and accountable
	• Decision making supporter
	
	• Socially unskilled
	• Invisible participant
	  (*e.g.* assemblies)
	• Nonessential in political sphere
	• Unskilled in male attributes
	• Placed steps behind men
	• Relegated to a secondary status
	  (by males)
	• Distracted and inattentive
	  (in community discussions)
	• Afraid
	  (of making mistakes and be ridiculed)
	• Shy
	• Passive
	• Quiet
		• Primary household head
		• Reliable and accountable
		• Master of household management and wellbeing provision

In summary, men acknowledge that in their communities gender inequalities exist, and they are more present at the community level than at the household level. Men know that women are subject to discrimination in the community and in the urban centers, and at a disadvantage regarding education and socio-political facts, while at household level they say female partners are knowledgeable and have a

primary role as decision-maker, in family wellbeing and particularly in relation to food security. Regarding attitude, men show compassion and gratitude toward women's role in the household and, at the same time, compassion and paternalism in the community space. Men also expect women to be able to make some personal progress in the areas of education, training, and social skills. Some husbands acknowledge women's economic contribution to the household, and encourage their wives to participate more in public as a way to empower women in both places: "I also tell her that she has to participate, that it doesn't have to be like before… As we are from the countryside we are so discriminated by people in the city" (AHS, male, 35. Sapaccto, 2014).

Finally, men perceive women in a very weak position in the community space (shy, passive, invisible, distracted, afraid, etc.), and tend to compare women with men describing females as unskilled in male's attributes and "placed steps behind men". For men, women are perceived just as supporters and helpers to perform physical tasks regarding food security and agricultural production in general, and without any relevant role in community decision-making process. Yet, men perceive women as empowered in the household.

4.9   Women's Knowledge, Attitude and Perception (KAP)

Regarding the research question about women's KAP toward their participation in community decision-making, women are consistent with men in several ways. Women are aware that there are gender inequalities, and they are in a better position in the household than in the community.

Table 4-8 Women's KAPs toward themselves

Women's KAP	Community	Household
Knowledge	• Lack of: -Formal education -Social skills • Deficiency in Spanish proficiency • Disadvantage with respect to men	• Primary decision makers • Supported by men regarding decision-making performance • Devoted mothers • Abused and threatened (by

Women's KAP	Community	Household
	(schooling, workload, others) • Absence in political events (*e.g.* regular assemblies) • Low understanding about community issues • Decision-making supporter • Afraid of performing wrongly in public	husbands) • Secondary income earners
Attitude	• Disappointment (regarding gender inequality) • Encouragement (themselves)	• Recognition
Perception	• Hard worker • Supportive (in decision-making and labour on crops) • Equal capacity to men in intellectual and physical performance • Outcast from political sphere • Secondary role in decision-making process • Insecure • Victims of chauvinism • Discriminated (in the community and in the city)	• Harder workers than men • Reliable • Skilled • Victims of chauvinism • Worthy of male respect

Women's attitude toward the facts around gender inequalities is, on one hand, one of disappointment and, on the other hand, of encouragement to fight those inequalities manifested in the community. At a household level, their attitude is of recognition toward their workload and multitasking skills. Although a couple of their negative perceptions about participation in community decision-making coincide with men's perceptions (outcast from political sphere, insecure/afraid), men report a longer list of negative features regarding women's performance. Women perceive themselves as hard workers, supportive in decisions and labour, and with the same intellectual and physical capacity as men. Those features are not mentioned by men, but both groups agree that women are belittled by men: relegated to a secondary role (mentioned by men) and victims of chauvinism (mentioned by women) in the community sphere as well as in the household.

4.9.1   Gender Interests/Needs Assessments

Moser (1993) argues that women have a subordinate position to men in most societies. If women's

strategic interests/needs were met, it may enable them to transform existing imbalances of power with

respect to men (March et al., 1999). Table 4.9 outlines participant views on women's interests/needs to

transform gender disparities in both communities.

Table 4-9 Women (gender) interests and needs to transform gender imbalances

Women's interests and needs
• **Access to formal education system and training** "I'm alone at home because I'm a little sick. But I'd like to get information and help us on how raise cuyes, chickens… At least to be trained on it." (RQS, 53, female. Sapaccto, 2014)
• **Improvement of Spanish as a second language** "As we do not speak Spanish fluently, and people from the town talk Spanish, we also feel afraid of speaking in the school meetings." (GQH, female, 34. Huamanchoque, 2014).
• **Expedite access to public services in urban centers, or in their communities** **-Improvement of the quality of service offered to women Quechua speakers and from Quechua communities** "Many times, when we go to the hospital, they do not attend us because we speak Quechua. They attend us badly and put us on the bottom of the patient waiting list, and it shouldn't be like this. That is why I don't go anymore to see a doctor… I cure myself just with herbs, even when I feel really sick." (CCS, female, 45. Sapaccto, 2014).
• **Access to meaningful ways of social and political participation in their communities and outside them (*e.g.* interactive participation and self-mobilization participation)** "I'd like to participate more, all we [women] would like to, and at least to listen to [discussion in the assembly]… Because sometimes organizations come [to the community] and they announce what they will do here… So, at least, to get information about it. If we don't attend assemblies we won't know anything. Sometimes our husbands even don't tell us what the assembly was about." (CCS, female, 45. Sapaccto, 2014)
• **Feel welcomed, appreciated and included in community spaces and socio-political events** "Some males laugh when a woman speaks in a debate. If you make a mistake, everybody laugh of you. But if you speak well, nobody does it. Besides, male and female have the same rights of participating and giving our opinion wherever we are." (CCS, female, 45. Sapaccto, 2014)
• **Be respected and appreciated within household** "Husbands do that [do not put attention to wives]. They think badly about us and sometimes some husbands are abusive and maltreat their wives. And they are those who do not consider women's opinions." (JMH, female, 44. Huamanchoque, 2014) "Others [men] marginalize women. If they arrive drunk they hit their wives." (GQH, female, 34. Huamanchoque, 2014)
• **Community respect and appreciation for:**

Women's interests and needs
-Women's opinions and ways of expressing themselves "When we want to speak they don't want to listen to us, because there is still some males that are chauvinist, and they don't allow us to speak out in the assemblies. In some homes there are still male chauvinist that don't know to listen, but they are less in number" (PVS, female, 29. Sapaccto, 2014). "The decision is made by both [wife and husband]. In my house it is like that. Even sometimes we make decision with my children. We talk to each other. A woman can't decide by herself, neither a male can decide by himself. They both have to make decisions. In the assemblies should also be like this…" (RQS, female, 53. Sapaccto, 2014) "There is always fear if one [a woman] wants to speak out, we [women] always think: 'what about if I say it? Maybe I won't be able to explain myself well. We always have fear of speak out because we could make a mistake" (GQH, female, 34. Huamanchoque, 2014) **-Women's particular skills and features (*e.g.* reliable, accountable, hard workers)** It is better to have a woman [as a president]. Sometimes, we, males, drink when we are on the board. But a woman is more accountable." (EHS, male, 68. Sapaccto, 2014).
• **Public acknowledgement of women's role and contribution in the community's social-economic and workforce spheres as well as in the household food security and family wellbeing** "I don't depend on the market because my wife is more skilled than me; she has her *huerto*" (CGH, male, 55. Huamanchoque, 2014). "My wife is more accountable. When we [men] keep it [money], we spend it or we also drink with friends and spend it. However, the woman spends money according to what is needed" (PYS, male, 47. Sapaccto, 2014).
• **Economic support for single mothers and heads of household**
• **Community and family practical support to women to be able to attend political and social events (*e.g.* assemblies, committees)** "[Why women do not attend assemblies so often?] It also happens because women are still discriminated. Besides, why should we attend it? ...to just lose our time all day. The assemblies long all day." (CHS, 36, female. Sapaccto, 2014) "We [women] would like to attend them [assemblies], but we are mostly busy taking care of our children, pasturing our animals… That is why we don't know so much at least to be able to speak out. As we don't go out to other places we don't know anything. Yes, we'd like to attend them [assemblies] to know something at least… to attend workshops, things like this." (CC, 45, female. Sapaccto, 2014) "Yes, I'd like it [attend assemblies], but as we [women] have some many things to do, we do not have enough time. Besides, what I could do in the assembly? I don't understand so much what they talk about." (CGH, female, 70. Huamanchoque, 2014)
• **Family/community practical support during partner migration season**
• **Female empowerment and encouragement** "You [women] don't have to be afraid, you just have to speak. Among us [women] we encourage each other, and we advise each other. As some of us are humbles they discriminate us for that reason." (GQH, female, 34. Huamanchoque, 2014) "Just men have knowledge? Women also have to learn. We [women] also can, we have to speak without fear… Why should we be afraid of them?" (CCS, female, 45. Sapaccto, 2014)
• **Women's awareness about their key role regarding household food security and family**

Women's interests and needs
wellbeing "I decide by myself [about livestock], because I don't wait for my husband to tell me we will slaughter a ram. No, if it is urgent, I get the animal and bring the animal or the meat to the town" (ICH, female, 58. Huamanchoque, 2014) "Because *ichhu* [straw] sells well, I'm also selling *ichhu*. I bring *ichhu* from the top of the hill, and that way I have money to give to my children. We also have animals and we sell them. I also sell at the market to have money for myself. Each Sunday, I bring something to the market. With that, I buy food for the whole week (BHH, female, 36. Huamanchoque, 2014).

Table 4.9 exemplifies how aware women are of their needs (Moser, 1993) and the constraints (Agarwal, 1997a) they confront in their daily life in household and community; but at the same time, the table illustrates the causes of those unsatisfied needs and constrains including limited access to formal education and technical training, limited access to public services (for them and their children), domestic violence, chauvinism, restricted participation in community political structure, discrimination in the urban centers, and high domestic workloads. While some female participants in the study declared that they prefer to not participate in community political structure (*e.g.* assemblies), their main reasons indicate social barriers and logistic factors (Agarwal, 1997a) like lack of time, heavy workload, *etc.* In these communities, women have a subordinate position to men (Moser, 1993) mainly in the public space. However, they are willing to participate, gain education, training, and become fluent in Spanish, while some male partners support these and other changes in favour of female empowerment. Women would like to be appreciated and respected in both household and community, and they encourage each other to overcome their fears and take a stand for their empowerment. As Schutter (2013) states, female social and economic empowerment may be the adequate response to these critical issues and. By improving women's access to education their role in decision making at the household and the society levels would be strengthened, and by facilitating their economic autonomy women's bargaining position, within the household and in public decision-making, would be improved (Schutter, 2013). In Huamanchoque and Poques-Sapaccto, women play a key role in food security mainly at the household level. Through

women's empowerment their key practices, strategies, experience, and decisions regarding food security may be strengthened and embraced by male community members for the benefit of the whole community.

Chapter 5: Conclusion and Recommendations

Huamanchoque and Poques-Sapaccto still exhibit some features corresponding to an *ayllu* and a traditional agricultural community, while they are also embedded within the capitalist system, market rules and Western culture. It looks like the Republic of Spaniards and the Republic of Indians (Powers, 2005) are still in place; where the habitants of the Republic of Indians (Quechua speakers) must travel to the Republic of Spaniards (Spanish speakers) in order to diversify their incomes and gain access to education, health, and other basic services, while still at risk of being discriminated. Challenged by external influences, and by the urgent need of increasing their incomes at community and household levels, Huamanchoque and Poques-Sapaccto are willing to open themselves to new markets and switch the traditional use of the agricultural land for exotic tree plantations (Humanachoque), or increase the number of livestock (Poques) for business aims. In the name of modernity and progress, the communities are also inclined to carry out *faenas* to perform civil work, while leaving behind traditional *faenas* for agricultural purposes. Those decisions might be weakening the character of the traditional agricultural community. However, these Quechua communities have not been penetrated completely by the capitalist market rules thanks to their ancestral knowledge, technologies, practices, values and politic-social organization. Though their culture and its manifestations have been seriously transformed since the Spaniard arrival, community life and the ways of coping with issues like food security stressors are supported mainly by the ancestral Andean culture and practices.

The food security stressors found throughout the study are mainly of two kinds: environmental and socio-economic nature. The first group is headed by adverse climate (including climate change effects) and geographical conditions inherent to the Andes highlands that have a direct impact on crops and agricultural activities. Whereas youth progressive emigration to urban centers, low market prices for community produce, and community isolation, time-distance management and road infrastructure affect family and community economy and sustainability. Although this study does not assess how the food

security stressors affect genders, the thesis exhibits the critical role that both women and men have in the food production (availability), accessibility and utilization, and in the specific tasks, traditional techniques and knowledge that constitute effective responses to the food security stressors.

Huamanchoque and Poques-Sapaccto are agricultural communities that produce at subsistence level; they mainly eat what they produce, store, barter, and obtain through other interchange relations and non-wage labour (*minka*, *ayni*, *faena*, *ayuda*) based on principles of mutual collaboration, reciprocity, and gender complementarity. The communities still function under the social-economic model "the vertical archipelagos" (Murra, 1975, 1980), that allow them to diversify crop production and food provision, explore other resources to sell in the market (*e.g.* forage), and prevent frost and pests from affecting crops homogeneously. To guarantee several potato harvests, they also plant at different times during the year, and they utilize traditional skills to store and transform food to preserve it for six months and longer. However, some changes in traditional practices and technologies introduced to the communities are affecting the life and the quality of their food.

The main sources of food in households, that also constitute effective responses to food security stressors in these communities, are: *chakra*, *huerto* or *canchon*, household food storage, *mercado* or marketplace, livestock, and bartering. Since the household is the main unit of production and food provision, followed by the community, food security is mainly a household matter and not a community matter, even in episodes of food shortage. During the "months of hunger" (the six months previous to harvesting season), community members eat mainly what they have in their household storage. This may means that, at least, during six months their diet is basically based on tubers. Research focused on nutritious value in community diet may be worthwhile to assess other key components of food security that were not considered in this study.

In regard to gender roles in food production, accessibility, and utilization at household level, the research shows that in Huamanchoque and Poques-Sapaccto women head physical and decision-making tasks (Jha, 2004) in *huerto* and in small-animal (*cuyes*, chickens) and livestock management. Women lead –although not exclusively–the access to marketplace and grocery stores, food storage management, food transformation, and family feeding, while both men and women share physical tasks and decisions regarding bartering, non-wage labour, and harvesting allocation more equally. Other tasks performed and decided by women related to family wellbeing are childcare and housekeeping. On the other hand, men head wage labour and political activities like attending assemblies and specialized committees on behalf of their households. They also perform and make decisions more autonomously regarding crop management (*chakra*), while women are seen as collaborators in this.

The study also shows that women perform a relevant function in food cultural appropriateness and utilization (Altieri et al., 2011). They cook accordingly to family members' daily work and activities, and put special care into boosting food flavour with native herbs. In addition, when it comes to increasing family income and food provision, women are very resourceful. Depending on their skills (*e.g.* weaving, knitting) they offer non-wage labour for food, or go to the city to sell food, alpaca wool, alfalfa and straw as forage, to purchase food or goods for their families.

Under the premise that agricultural households are both production and consumption units where decisions are interrelated (Twyman et al., 2015), it looks like in both communities the egalitarian family farming system (Twyman et al., 2015) is prevalent at household level. Both women and men provide labour and make joint decisions or specialize in some kind of decisions with variations on specific kind of decision. In practice this means that regarding market production and selling, and wage-labour, the family farming system tends to be patriarchal, while household food security tends to be matriarchal: headed by female decision-making and physical task performance. The gendered tasks division of physical and intellectual tasks (Fortmann, 1990) may be rooted in the traditional conceptions of duality – with

interchangeable hierarchy (Hernández Astete, 2002) –and gender complementarity currently reinforced by some NGO and local services that have heavy presence in the communities.

The *ayllus* Huamanchoque and Poques-Sapaccto are mainly organized to generate income to supply administration expenses and perform civil works to bring some progress to their places; the interest in communal livestock and plantations of exotic species is rising to the detriment of traditional agriculture.

The political structure and functioning of Huamanchoque as well as Poques rests upon two main organs: the general assemblies and the specialized committees. In these, community members discuss and decide about food security and agricultural matters, and a wide range of other topics. The *faenas* are a third opportunity to talk and be informed by the local authorities about community issues, but in an informal way. According to the community statutes, each registered community member must attend the assembly and the *faenas*, elect community authorities every two years, and pay a fee as an active member. In both communities women are more involved in the lower levels of participation in the community political structure, and part of their participation is mandatory (constitutional participation) or motivated by incentives (participation for incentives) like goods or money. Men are also motivated by incentives, but, compared to women, they are involved in ways of participation with more direct influences on community decision-making. Through the study I found two types of participation to describe women's participation: Intermediated Participation and Constitutional Participation. The first one refers to indirect participation that is not immediately evident because it may take place through an intermediary. In the Constitutional Participation type, it is expected that women attend and vote in the communal authority election, but it is not necessarily expected that they attend general assemblies throughout the year. In practice, it is mostly men who attend assemblies in both communities, and in some cases women are discouraged to participate more. All partnered female interviewees attend assemblies only if, for example, their husbands are away. Besides, both women and men are aware that in the assemblies decisions are made mainly by men. Yet, those women who are heads of single-households play a secondary role in the

community decision-making processes. In regard to women's participation on specialized committees, in Huamanchoque and Poques some committees are headed only by women, but they are fewer in number. For instance, the statutes of Poques (1988) describe the function and structure of each committee, alluding explicitly to the presence of men on each board of directors, except for the Committee of Women. Neither is the *faena* an appropriate space for women to share their thoughts and opinions on community matters. Because of the public nature of *faenas* women prefer to just listen, unlike men. They are willing to talk about community matters outside these settings, and with people whom they trust.

If women do not participate directly in the main instances of community decision-making, I infer that their level of participation and influence on community food security matters is minimal. Though women could influence community decision-making through their partners, and persuade them to perform as they think it should be done (Fortmann, 1990), it is unclear if women's opinions are truly represented by men. If, through intermediate participation, a woman exerts total or some level of influence on decision-making processes in the community, it is crucial to clarify how empowered that woman is in the socio-political sphere, and how she feels regarding her supposedly intermediate participation. Some women said that they did not know so much about current community matters, others expressed their male partners did not inform them about community facts, and younger women declared they wanted to participate more actively in decision-making processes, but not under the current circumstances. In consequence, in order to assess gender participation in these two communities, the following should be considered: the real participation/contribution made by a member to the community, how that member feels about their role, and how the community guarantees, encourages, and reinforces their participation. According to the communities' statutes, all women are expected to attend and participate in general assemblies (held every month), but during the year women attend assemblies only when they are household-head or on behalf of their partners; they usually have an auxiliary role in the political structure. It is not only about gender participation but about how communities and their socio-political structure guarantee women's rights as community members and citizens (Agarwal, 2001).

In comparison to the egalitarian family farming system (Twyman et al., 2015) at household level, at the community level a patriarchal system predominates: to a varying degree men and women provide labour in the community, but men control the decision-making processes regarding food production and distribution, and other key community matters. The study partially confirms the hypothesis presented, that in the Andean agricultural communities women exert a strong influence on decision-making processes regarding FS at the household level, but little influence at the community level. The essential principle of gender-parallelism and complementarity in these communities was dramatically impaired centuries ago (Kellogg, 2005; Silverblatt, 1987; Vergara, 2007), and this condition still remains. In Huamanchoque and Sapaccto-Poques women are still struggling with similar circumstances to those under which Indigenous women in the Andes lived centuries ago: women's influence is limited to the household while they are viewed as auxiliary in public spaces. They have a secondary role in community decision-making processes and depend on men for political representation. A role or social position inherited since the Spanish arrival as has been described in the literature (Powers, 2005; Vergara, 2007). This is reflected in the kind of participation they currently perform in the community political structure, in which decisions regarding food security are made for the sake of the community members.

There are several reasons that prevent women from participating in community activities that constitute social barriers or assumptions about gender capabilities (Agarwal, 1997a). In both communities women feel afraid of performing in public and being rejected by men, and feel at a political and social disadvantage with respect to them. Other social constructions-barriers (Agarwal, 1997a) identified in the communities are in regard to notions of gender spaces and appropriate social performance. What men and women expect regarding female behaviour in private and public spheres is quite different. As socio-politic spaces are dominated by men, some community members expect that a woman exerts a masculine political leadership style. This means leadership with characteristics socially attributed to men. However, other male voices appreciate female leadership as it would exhibit attributes that men lack (*e.g.*

enthusiastic for community matters, honest, and organized), and would demonstrate that in the community gender equality is practiced.

In regard to men's knowledge, aptitude, and perception (KAPs) toward women's roles in the household and in the community regarding food security, the study shows the following: men acknowledge that gender inequalities exist, and these are more predominant in the community than in the households. Men express that women are subject to discrimination in the community and the urban centers, and at a disadvantage regarding education and socio-political facts compared to men. They state that regarding family wellbeing and particularly food security, female partners are knowledgeable and have a primary role as decision-maker. Regarding attitude, men express compassion and gratitude toward women's role in the household and, at the same time, compassion and paternalism in the community space. Men also expect women to advance in schooling, technical training, and to gain social skills. Some husbands acknowledge women's economic contribution to the household, and encourage their wives to participate more in public as a way to empower them in both spaces. At community level, men perceive women in a very weak position and describe them as "shy, passive, invisible, distracted, afraid" and, as I expressed before, tend to compare genders describing females as unskilled in male attributes and "placed steps behind men".

Women's KAP toward their own participation in community decision-making processes are mostly consistent with men. Women are aware of gender inequalities and their empowerment regarding food security at the household but not at the community. Women's attitude toward the facts around gender inequalities is, on one hand, one of disappointment and, on the other hand, of encouragement to fight those inequalities manifested in the community. At a household level, their attitude is of recognition toward their work load and multitask skills. Though a couple of their negative perceptions about participation in community decision-making coincide with men's perceptions (outcast from political sphere, insecure/afraid), men report a longer list of negative features regarding women's performance.

Women perceive themselves as hard workers, supportive on decisions and labour, and with the same intellectual and physical capacity as men. Those features are not mentioned by men, but both groups agree that women are belittled by men: relegated (mentioned by men) and victims of chauvinism (mentioned by women) in the community sphere as well as in the household's.

Women are aware of needs (Moser, 1993) and constraints (Agarwal, 1997a) that they confront in their daily life, and of the causes of those unsatisfied needs and constraints: limited access to schooling and technical training, limited access to public services (for them and their children), domestic violence, masculine pride in the communities, restricted participation in community political structure, discrimination in the urban centers, and high workload in the households. Though some women declare they prefer to not participate in community political structure (*e.g.* assemblies), their main reasons point to social barriers and logistic factors (Agarwal, 1997a) like lack of time, long distances, heavy workload, *etc.* In fact, old and young women would like to attend assemblies more often but they are unable under the current circumstances. They are willing to participate, gain education, training, and become Spanish language fluent, while some male partners support these and other changes in favour of female empowerment. Women would like to be appreciated and respected in both household and community, and some of them encourage each other to overcome their fears and stand for their empowerment.

5.1   Recommendations

Recommendations for authorities

1. Acknowledge at local level that agricultural indigenous communities hold a key role in Peru as food producers. I recommend that the recognition that national authorities are giving to family farming systems and indigenous peoples (MINAGRI, 2014) be replicated at local level by government authorities and civil organizations. In a context of food security, acknowledging traditional agricultural communities in their key role in food production would be the first step to establishing relations of collaboration between partners. This is not just about acknowledging and assisting a group of Peruvian farmers in

socio-economic distress (INEI, 2013), but about establishing strategic relations with partners on food security and other current issues, *e.g.* climate change effects.

2. Recognize nationally and regionally the particularities of indigenous communities as assets to sustain traditional agriculture and family farming systems. The indigenous agricultural communities in this study, and others in the Andean highlands, function according to specific ancestral values, knowledge, practices and socio-political organization. They are *campesinos* but also indigenous. Those assets have allowed them to be resilient, sustain agricultural production for centuries, and contribute to the food supply of almost an entire country (MINAGRI, 2014). To recognize them and encourage them to keep alive their knowledge and practices is also a strategic way of contributing to the sustainability of the traditional agriculture and agri-cultural diversity for the sake of the province and the entire country.

2.1 Offer Western knowledge and practices in tune with Andean knowledge and practices. Before proposing any foreign solution to the communities, I recommend to first try to find solutions and knowledge based in the Andean culture, and with the total involvement of community members; women and men. If this is not applicable, I recommend that any Western knowledge, technique, and technology offered to the communities be related to and in tune with members' interests, values, history, and practices.

> This does not always happen, and often the institutions, either public or private, only develop projects related to their goals and not the community goals. If they have a project for a certain activity, they only look after that, and there is no community consultation to ensure that the project can be sustainable (EVC, youth instructor. Calca, 2012).

If the institutions ignore or underestimate Andean knowledge, culture, and identity, their attempts to help might end up harming instead of supporting the communities. Without collaboration, any outcome may be unsustainable in the long term.

3. Provide communities with adequate public services according to their needs, rights, and role in food production. I recommend authorities support Quechua communities as primary agricultural producers, allowing them to concentrate their effort mainly on the production of food; this is what they have done masterfully for centuries. Civil works that are headed by government authorities in urban areas, in Huamanchoque and Poques are sometimes performed by community members to the detriment of traditional agricultural development and their own wellbeing. I recommend public services be delivered to rural communities according to their population' specific needs and context. Though Huamanchoque and Poques-Sapaccto have several strategies to deal with some food security stressors, communities are not able to face them completely on their own. Food security stressors rooted in social-economic conditions (*e.g.* youth emigration, low market prices, community isolation, road infrastructure), as well as environmental stressors that demand specific policies, require attention and intervention from authorities.

3.1 Support peasants to access the formal schooling system, and ensure the curriculum is applicable to the agricultural-rural context. I recommend educational authorities facilitate access to the formal school system for peasants, adults and youth, while ensuring the system responds to the specificities presented by the agricultural-rural context. Currently, the destiny of Huamanchoque and Poques, and maybe other similar communities, mainly depends on illiterate and insufficiently formally educated men. Community authorities and members are constantly challenged to make right decisions and choices, *e.g.* regarding land use –traditional agricultural land *vs* exotic plantations– and many others, according with economic and market rules that they are not familiar with, and with potentially dramatic consequences for the entire community. Women's formal education requires special attention, since they find themselves behind men, especially in Spanish language and social skills.

4. Approach communities as gendered places formed by gendered households in which women have a key role regarding food security, and where complex gender dynamics support community life and traditional agricultural systems. Women's participation in agricultural production usually remains

under-reported in agricultural surveys (Deere & León de Leal, 1982; Dixon, 1982; Kleysen & Campillo, 1996; Twyman et al., 2015) and, in consequence, institutions tend to reproduce unequal gender dynamics and gender exclusion (Cornwall, 2003). It is important that authorities approach communities in the right way, above all in places where gender complementarity is prevalent, physical work in agriculture and food production is shared, and decision-making processes tend to be egalitarian (Twyman et al., 2015) in the household, and patriarchal in the community. I recommend authorities invite both men and women to participate in equal conditions in meetings held with the community, and provide support to women and families to effectively deal with the constraints that prevent female engagement in formal participation (Agarwal, 2001). I further recommend that authorities acknowledge that attitudes and perceptions between genders in some cases may be affected by social constructs[33], and authorities might also be influenced by those constructs (Agarwal, 1997a). It is crucial to apply methodologies of research and collaborative work (*e.g.* field observations, time use analysis), to gain a holistic understanding of gender dynamics and roles.

5. Conduct studies in agricultural indigenous communities to assess nutritional value of their diet. I recommend local and provincial authorities to assess nutritional value in community diet in order to approach food security especially from the dimension of utilization. Research collaborators from Huamanchoque and Poques-Sapaccto expressed that they do not confront issues regarding food quantity, but based on field observations (2012-2014), I may say their diet lacks nutritional value due to heavy consummation of tubers, and this could be more pronounced during the previous season of harvesting, when they mostly eat dehydrated and dry food from their household storage.

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[33] Regarding female behaviour, notions and assumptions about gender spaces, gendered capabilities and appropriateness (Agarwal, 1997a).

Recommendations for communities

1. Become familiar with the concept of Food Sovereignty, and embrace agricultural traditional knowledge and practices as unique assets to empowerment as key food producers. Today knowledge and information are considered key assets in Western societies. Some kinds of knowledge and information are used strategically and they even have monetary value. I recommend Quechua communities acknowledge this fact, and become the main guardians of their agricultural traditional knowledge and practices. Claiming them as assets might help communities to empower themselves as partners of civil and government organizations in matters related to food security, biodiversity, organic production, and climate change effects in agricultural production.

2. Obtain independent advice from experts, consultants, and civil organizations to support community decision-processes and negotiations with outsiders. The level of formal schooling in the communities is low, and many times their authorities and members must make decisions about new markets, investments, land uses, *etc.*; facts that they are not necessarily familiar with. Consulting with independent professionals or organizations that communities trust, could counteract community members' lack of formal education and knowledge in processes of negotiation, and allow them to become more aware of facts and consequences of certain decisions.

3. Based on the Cosmovisión Andina, support and promote women's participation in decision-making processes as community stakeholders. I recommend empowering Quechua women and girls through their own indigenous worldview and history. As the concept of gender complementarity is still alive in the communities under study, and possibly alive in other communities, it would be culturally meaningful to revisit and reinforce that notion with the active participation of men and women. The activity would promote community dialogue about their own identity and concepts like duality and gender parallelism, in order to create awareness about women's key role in food production, food security, and family wellbeing.

4. Acknowledge publically women's interests, contributions, and needs, and encourage some male community members to open the dialogue in their gender group. I recommend community authorities acknowledge publically that gender inequalities exist within and outside the communities, and invite community members to talk about it. Those men aware that women are subject to discrimination and at a disadvantage regarding education, social skills, and socio-political participation, might promote in their gender group acknowledgement of and a change of attitude toward women. This may be an effective way of opening dialogue around uncomfortable gendered topics, and with some men who resist giving support and recognition to women.

4.1 Support the creation of a female critical mass

Further, I recommend community authorities support the creation of a female critical mass (Agarwal, 1997a) to guard women's wellbeing, interests, and needs (Moser, 1993), and propose ways to confront constraints (Agarwal, 1997a). Supporting female organization is a way to encourage women to empower themselves, acknowledge their rights as citizens, their roles and contributions as members of agricultural communities, and acquire social skills that allow them to participate effectively in public instances inside and outside of the communities.

References

Agarwal, B. (1997a). Environmental action, gender equity and women's participation. *Development and Change*, *28*(1), 1–44.

Agarwal, B. (1997b). Re-sounding the alert - gender, resources and community action. *World Development*, *25*(9), 1373–1380.

Agarwal, B. (2001). Participatory Exclusions, Community Forestry, and Gender: An Analysis for South Asia and a Conceptual Framework. \iWorld Development, \i29(10), 1623–1648.

Altieri, M. (1999). Applying agroecology to enhance the productivity of peasant farming systems in Latin America. *Environment, Development and Sustainability*, *1*(3), 197–217. Retrieved from http://doi.org/10.1023/A:1010078923050

Altieri, M. (2009). \iVertientes del pensamiento agroecológico: fundamentos y aplicaciones (SOCLA). Medellin, Colombia.

Altieri, M. A. (1990). *Agroecology and Small Farm Development*. (M. A. Altieri & S. B. Hecht, Eds.). Boca Raton, Fla: CRC Press.

Altieri, M. A. (1990). Why study traditional agriculture? In R. Carroll, J. H. Van der Meer, & P. M. Rossett (Eds.), *The ecology of agricultural systems* (pp. 551–554). New York: MacGraw Hill Publishing.

Altieri, M. A., Funes-Monzote, F. R., & Petersen, P. (2011). Agroecologically efficient agricultural systems for smallholder farmers: contributions to food sovereignty. \iAgronomy for Sustainable Development, \i32(1), 1–13.

Altieri, M. A., & Toledo, V. M. (2011). The agroecological revolution in Latin America: rescuing nature, ensuring food sovereignty and empowering peasants. *The Journal of Peasant Studies*, *38*(3), 587.

Bee, B. (2014). "Si no comemos tortilla, no vivimos:" women, climate change, and food security in central Mexico. \iAgriculture and Human Values, \i31(4), 607 – 620.

Bezner Kerr, R. (2005). Food security in Northern Malawi: gender, kinship relations and entitlements in historical context. *Journal of Southern African Studies*, *31*(1), 53–74.

Bezner Kerr, R. (2011). Agricultural Systems: Agroecology and Rural Innovation for Development. (S. Snapp & B. Pound, Eds.). Academic Press.

Campo, E. del. (2012). *Mujeres Indígenas en América Latina: Política y Políticas públicas*. (E. del Campo, Ed.) (1. ed). Madrid: Editorial Fundamentos.

Carr, E. R. (2008). Men's crops and women's crops: The importance of gender to the understanding of agricultural and development outcomes in Ghana's Central Region. World Development, 36 (5), 900 – 915.

Choudhary, N., & Parthasarathy, D. (2007). Gender, work and household food security. *Economic and Political Weekly*, *42*(6), 523–531.

Cornwall, A. (2003). Whose Voices? Whose Choices? Reflections on Gender and Participatory Development. World Development, 31 (8), 1325 – 1342.

Deere, C. D. (2005). The Feminization of Agriculture? Economic Restructuring in Rural Latin America. In Gender equality: striving for justice in an unequal world. Geneva: United Nations Research Institute for Social Development (UNRISD).

Deere, C. D., & León de Leal, M. (1982). Women in Andean Agriculture: Peasant Production and Rural Wage Employment in Colombia and Peru - Summon.

Dixon, R. B. (1982). Women in agriculture: counting the labor force in developing countries. *Population and Development Review*, *8*(3), 539–566.

Doss, C. R. (2015). Women and agricultural productivity: what does the evidence tell us? *Yale University Economic Growth Center Discussion Paper*, (1051).

Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, *62*(1), 107–115. Retrieved from http://doi.org/10.1111/j.1365-2648.2007.04569.x

Emerson, R. M., Fretz, R. I., & Shaw, L. L. (1995). *Writing Ebthnographic Fieldnotes*. Chicago: University of Chicago Press.

FAO, F. and A. O. of the U. (2014). Agricultura familiar en América Latina y el Caribe: recomendaciones de politica. (S. Salcedo & L. Guzman, Eds.). FAO.

FAO, F. and A. O. of the U. N. (Ed.). (1996). *Rome Declaration on World Food Security and World Food Summit Plan of Action: World Food Summit, 13-17 November 1996, Rome, Italy*. Rome: Food and Agriculture Organization of the United Nations.

Flora, C. (1990). The social and cultural dynamics of traditional agricultural communities. In M. A. Altieri & S. B. Hecht (Eds.), *Agroecology and Small Farm Development* (pp. 27–34). Florida, US: CRC Press.

Fontana, A., & Frey, J. H. (2003). *Collecting and Interpreting Qualitative Materials*. (N. K. Denzin & Y. S. Lincoln, Eds.) (2nd ed.). Thousand Oaks, CA: Sage.

Fortmann, L. (1990). Women's role in small farm agriculture. In M. A. Altieri & S. B. Hecht (Eds.), *Agroecology and small farm development* (pp. 35–44). Florida, US: CRC Press.

Gelles, P. H. (2002). Andean culture, indigenous identity, and the state in Peru. In D. Maybury-Lewis (Ed.), *The politics of ethnicity: indigenous peoples in Latin American states* (pp. 239–266). Cambridge, Mass: Harvard University David Rockefeller Center for Latin American Studies: Distributed by Harvard University Press.

Gliessman, S. (2014). Agroecology and social transformation. *Agroecology and Sustainable Food Systems*, *38*(10), 1125–1126. Retrieved from http://doi.org/10.1080/21683565.2014.951904

Grillo, M. T., & Sharon, T. (2012). *Environment and Citizenship in Latin America*. (A. Latta & H. Wittman, Eds.) (Vol. 101). Berghahn Books.

Guamán Poma de Ayala, F., & Pease, F. (1980). *Nueva Corónica y Buen Gobierno* (Vol. 75–76.). Caracas: Biblioteca Ayacucho.

Hamilton, S. (2000). The myth of the masculine market: gender and agricultural commercialization in the Ecuadorean Andes. In A. Spring (Ed.), *Women farmers and commercial ventures: increasing food security in developing countries*. Boulder, Colo: L. Rienner Publishers.

Harper, D. (2003). *Collecting and Interpreting Qualitative Materials*. (N. K. Denzin & Y. S. Lincoln, Eds.) (2nd ed.). Thousand Oaks, CA: Sage.

Hernández Astete, F. (2002). *La Mujer en el Tahuantinsuyo* (1a ed.). Lima: Pontificia Universidad Católica del Perú, Fondo Editorial.

Hodder, I. (2003). *Collecting and Interpreting Qualitative Materials*. (N. K. Denzin & Y. S. Lincoln, Eds.) (2nd ed.). Thousand Oaks, CA: Sage.

Howard, P. L. (2003). *Women & Plants: Gender Relations in Biodiversity Management and Conservation*. (P. L. Howard, Ed.). New York: Zed Books. Retrieved from http://www.loc.gov/catdir/description/hol041/2002190824.html

IFAD, I. F. for A. D. (n.d). *Enabling Poor Rural People to Overcome Poverty in Peru*. Rome, Italy: IDFA. Retrieved January 1, 2014 from http://www.ifad.org/operations/projects/regions/pl/factsheet/peru_e.pdf

Iles, A., & Montenegro de Wit, M. (2015). Sovereignty at what scale? An inquiry into multiple

    dimensions of food sovereignty. *Globalizations*, *12*(4), 481–497. Retrieved from

    http://doi.org/10.1080/14747731.2014.957587

INEI, I. N. de E. e I. (2010). Brechas de género. Insumos para la adopción de medidas a favor de

    las mujeres. INEI. Retrieved from

    http://proyectos.inei.gob.pe/web/biblioineipub/bancopub/Est/Lib0905/index.htm

INEI, I. N. de E. e I. (2013). Indicadores de genero. Retrieved January 25, 2016, from

    https://www.inei.gob.pe/estadisticas/indice-tematico/brechas-de-genero-7913/

INEI, I. N. de E. e I. (2015, April). Encuesta demogarfica y de salud familiar 2014. INEI.

    Retrieved from

    https://www.inei.gob.pe/media/MenuRecursivo/publicaciones_digitales/Est/Lib1211/pdf/

    Libro.pdf

INEI, Instituto Nacional de Estadistica e Informatica. (2013, July). IV Censo Nacional

    Agropecuario 2012. Retrieved from

    http://proyectos.inei.gob.pe/web/DocumentosPublicos/ResultadosFinalesIVCENAGRO.p

    df

Ingram, J. (2011). A food systems approach to researching food security and its interactions with

    global environmental change. *Food Security*, *3*(4), 417–431. Retrieved from

    http://doi.org/10.1007/s12571-011-0149-9

Ishizawa, J., & Rengifo, G. (2009). *UNESCO. Learning & knowing in indigenous societies*

    today. (P. Bates, M. Chiba, S. Kube, & D. Nakashima, Eds.). UNESCO. Retrieved from

    www.unesco.org/links

Jha, N. (2004). Gender and decision making in Balinese agriculture. *American Ethnologist*, *31*(4), 552–572.

Kellogg, S. (2005). *Weaving the Past: A History of Latin America's Indigenous Women from the Prehispanic Period to the Present*. New York: Oxford University Press.

Kleysen, B., & Campillo, F. (1996). *Productoras de Alimentos en 18 países de América Latina y el Caribe: Síntesis Hemisférica*. Costa Rica: BID and IICA.

La Via Campesina. (2009). Declaration of Rights of Peasants - Women and Men. La Via Campesina. Retrieved from http://viacampesina.net/downloads/PDF/EN-3.pdf

Lavrin, A. (1993). La vida femenina como experiencia religiosa: biografía y hagiografía en Hispanoamérica colonial. *Colonial Latin American Review*, *2*(1–2), 27–51.

Levidow, L., Pimbert, M., & Vanloqueren, G. (2014). Agroecological research: conforming—or transforming the dominant agro-food regime? *Agroecology and Sustainable Food Systems*, *38*(10), 1127–1155. Retrieved from http://doi.org/10.1080/21683565.2014.951459

Madriz, E. (2003). *Collecting and Interpreting Qualitative Materials*. (N. K. Denzin & Y. S. Lincoln, Eds.) (2nd ed.). Thousand Oaks, CA: Sage.

March, C., Smyth, I. A., & Mukhopadhyay, M. (1999). *A Guide to Gender-Analysis Frameworks*. Oxford, England: Oxfam.

Mayer, E. (2009). *Ugly stories of the Peruvian agrarian reform*. Duke University Press. Retrieved from http://books.google.ca/books?hl=en&lr=&id=UXVajtmyQF4C&oi=fnd&pg=PP8&dq=Ugly+stories+of+the+Peruvian+Agrarian+Reform&ots=aPm2gcPgm1&sig=x0qY7QDwQX4CkMshay0rHnoCnes

Miller, W., & Crabtree, B. (2004). *Approaches to qualitative research: a reader on theory and practice*. (S. N. Hesse-Biber & P. Leavy, Eds.). New York: Oxford University Press.

MINAGRI, M. de A. y R. (2013, July). Estrategia Nacional de Seguridad Alimentaria y Nutricional. MINAGRI. Retrieved from https://extranet.who.int/nutrition/gina/sites/default/files/PER%202013%20-%20ENSAN_Estrategia-Nacional-Seguridad-Alime.pdf

MINAGRI, M. de A. y R. (2014). Estrategia Nacional para la Agricultura Familiar 2015-2021. Ministerio de Agricultura y Riego. Retrieved from http://faolex.fao.org/docs/pdf/per145634anx.pdf

Mishler, E. G. (1986). *Research interviewing*. Harvard University Press.

Molyneux, M. (1985). Mobilization without Emancipation? Women's Interests, the State, and Revolution in Nicaragua. *Feminist Studies*, *11*(2), 227–254.

Morin, E. (2007). *Introducción al pensamiento complejo*. Gedisa Barcelona.

Moser, C. O. N. (1993). *Gender planning and development*. Routledge.

Murra, J. V. (1975). *Formaciones económicas y políticas del mundo andino* (1. ed., Vol. 3). Lima: Instituto de Estudios Peruanos.

Murra, J. V. (1980). *The economic organization of the Inka State* (Vol. 1980 v. 1.). Greenwich, Conn: JAI Press.

OECD, & Organisation for Economic Co-operation and Development. (n.d.). *Managing food insecurity risk: analytical framework and application to Indonesia*. OECD. Retrieved January 15, 2016 from http://www.oecd-ilibrary.org/content/book/9789264233874-en

Ogilvie, D. M., Stone, P. J., & Kelly, E. F. (1982). *Handbook of social science methods*. (R. B. Smith & P. K. Manning, Eds.). Cambridge, Mass: Ballinger.

Ortega, E. (1986). Peasant agriculture in Latin America. *ECLAC/FAO Agriculture Division*.

Pape, I. S. R. (2008). "This Is Not a Meeting for Women": The Sociocultural Dynamics of Rural Women's Political Participation in the Bolivian Andes. *Latin American Perspectives*, *35*(6), 41–62.

Pérez Velasco Pavón, J. C. (2014). Economic behavior of indigenous peoples: the Mexican case. *Latin American Economic Review*, *23*(1). Retrieved from http://doi.org/10.1007/s40503-014-0012-4

Powers, K. V. (2000). Andeans and Spaniards in the Contact Zone: A Gendered Collision. *American Indian Quarterly*, *24*(4), 511–536. Retrieved from http://doi.org/10.1353/aiq.2000.0025

Powers, K. V. (2005). *Women in the crucible of conquest: the gendered genesis of Spanish American society, 1500-1600*. Albuquerque: University of New Mexico Press.

Pretty, J. N. (1995). Participatory learning for sustainable agriculture. *World Development*, *23*(8), 1247–1263. Retrieved from http://doi.org/10.1016/0305-750X(95)00046-F

Putnam, R. D. (1995). Bowling alone: America's declining social capital. *Journal of Democracy [H.W. Wilson - SSA]*, *6*(1), 65.

Radcliffe, S. A., Laurie, N., & Andolina, R. (2004). The Transnationalization of Gender and Reimagining Andean Indigenous Development. *Signs*, *29*(2), 387–416. Retrieved from http://doi.org/10.1086/378108

Rengifo, G. (2012). *Small scale agriculture in the Peruvian Andes*. PRATEC.

Rojas, A. (2012). Polycultures of the Mind. The End of the Peasant and the Birth of Agroecology. In A. Dirlik, R. Prazniak, & A. Woodside (Eds.), *Global capitalism and the future of agrarian society* (p. 256–277)). Paradigm Publishers.

Rostworowski, M. (1986). *La mujer en la época prehispánica*. Lima, Peru: Instituto de Estudios

Peruanos. Retrieved from http://www.sidalc.net/cgi-

bin/wxis.exe/?IsisScript=AGRUCO.xis&method=post&formato=2&cantidad=1&expresi

on=mfn=002623

Rostworowski, M. (1998). *Ensayos de historia andina II: Pampas de Nasca, genero, hechiceria*

(Instituto de Estudios Peruanos). Lima: Iep.

Schutter, O. de. (2013). *Gender equality and food security: women's empowerment as a tool*

against hunger. Mandaluyong City, Metro Manila, Philippines: Asian Development

Bank. Retrieved from

http://GW2JH3XR2C.search.serialssolutions.com/?sid=sersol&SS_jc=TC0001369691&ti

tle=Gender%20equality%20and%20food%20security%20%3A%20women%27s%20emp

owerment%20as%20a%20tool%20against%20hunger

Shiva, V. (1988). *Staying alive: women, ecology, and survival in India*. New Delhi: Kali for

Women.

Shiva, V. (1993). *Monocultures of the mind*. Zed Books.

Silverblatt, I. (1978). Andean Women in the Inca Empire. *Feminist Studies*, *4*(3), 37–61.

Silverblatt, I. (1987). *Moon, sun, and witches: gender ideologies and class in Inca and colonial*

Peru. Princeton, N.J: Princeton University Press.

Skar, S. L. (1984). Interhousehold Co-operation in Peru's Southern Andes: a Case of Multiple

Sibling-Group Marriage. In N. Long (Ed.), *Family and work in rural societies:*

perspectives on non-wage labour (pp. 83–115). New York: Tavistock.

Soubbotina, T. (2004). *Beyond Economic Growth: An Introduction to Sustainable Development*

(2nd ed. ,Revised,Expanded). Washington: World Bank Publications. Retrieved from

http://GW2JH3XR2C.search.serialssolutions.com/?sid=sersol&SS_jc=TC0000085559&title=Beyond%20Economic%20Growth%3A%20An%20Introduction%20to%20Sustainable%20Development

Spalding, K. W. (1967, January). *INDIAN RURAL SOCIETY IN COLONIAL PERU: THE EXAMPLE OF HUAROCHIRI*. ProQuest Dissertations Publishing, University of California, Berkeley. Retrieved from http://search.proquest.com/docview/302222400

Stake, R. (2005). *The SAGE handbook of qualitative research*. (N. Denzin & Y. Lincoln, Eds.). Sage Publications.

Surrallés, A., & Garcia, P. H. (2005). *The land within: indigenous territory and the perception of the environment*. IWGIA. Retrieved from http://books.google.ca/books?hl=en&lr=&id=1rOGvODC3LUC&oi=fnd&pg=PA8&dq=The+Land+Whitin:+Indigenous+Territory+and+the+Perception+of+Environment&ots=Qd81VSRzIV&sig=oB6iLZLY20PLII9acf2KXx9X4Uw

Tapia, P. (2006). Agroecología y agricultura campesina sostenible en los Andes Bolivianos. AGRUCO, Plural Editores.

Toledo, V. ., Boege, E., & Barrera-Bassols, N. (2010). The biocultural heritage of Mexico: an overview. *Landscape*, *3*, 6–10.

Toledo, V. M., & Barrera-Bassols, N. (2008). *La Memoria Biocultural: La Importancia Ecológica de las Sabidurías Tradicionales* (Vol. 3). Icaria Editorial. Retrieved from https://books.google.ca/books?hl=en&lr=&id=5LAJ8kp0BjUC&oi=fnd&pg=PA11&dq=La+Memoria+Biocultural:+la+importancia+ecologica+de+las+sabidurias+tradicionales.&ots=FqbvQJE4Uo&sig=TKOtGPdr2vbqFq9-IGteMvu60AU

Twyman, J., Useche, P., & Deere, C. D. (2015). Gendered perceptions of land ownership and

   agricultural decision-making in Ecuador: who are the farm managers? *Land Economics*,

   91(3), 479–500.

Umar, B. B. (2014). A critical review and re-assessment of theories of smallholder decision-

   making: a case of conservation agriculture households, Zambia. *Renewable Agriculture*

   and Food Systems, *29*(3), 277–290. Retrieved from

   http://doi.org/10.1017/S1742170513000148

Van Halsema, I. (2003). Feminist methodology and gender planning tools: divergences and

   meeting points. *Gender Technology And Development*, *7*(1), 75–89. Retrieved from

   http://doi.org/10.1177/097185240300700104

Van Kessel, J., & Condori, D. (1992). *Criar la Vida: Trabajo y Tecnología en el Mundo Andino*.

   Chile: Vivarium. Retrieved from http://www.sidalc.net/cgi-

   bin/wxis.exe/?IsisScript=AGRUCO.xis&method=post&formato=2&cantidad=1&expresi

   on=mfn=002785

Vergara, T. (2007). Aporte femenino a la creacion de la riqueza. In C. Meza Ingar & T. Hampe

   Martínez (Eds.), *La mujer en la historia del Perú: siglos XV al XX*. Lima: Fondo Editorial

   del Congreso del Perú.

Wernke, S. A. (2013). *Negotiated Settlements : Andean Communities and Landscapes under Inka*

   and Spanish Colonialism. Gainesville, FL, USA: University Press of Florida. Retrieved

   from http://site.ebrary.com/lib/alltitles/docDetail.action?docID=10653079

WFP, T. U. N. W. F. P., & CENEPRED, C. N. de E., Prevencion y Reduccion del Riesgo de

   Desastres. (2015, December). Mapa de Vulnerabilidad a la Inseguridad Alimentaria Ante

   la Recurrencia de Fenomenos de Origen Natural 2015. WFP, CENEPRED.

WFP, W. F. P. (2009). WFP Gender Policy and Strategy: Promoting Gender Equality and the

    Empowerment of Women in Addressing Food and Nutrition Challenges. Rome: WFP.

White, S. C. (1996). Depoliticising development: the uses and abuses of participation.

    Development in Practice, *6*(1), 6–15.

Wiebe, N., & Wipf, K. (2011). *Food sovereignty in Canada: creating just and sustainable food*

    systems. (A. A. Desmarais, H. Wittman, & N. Wiebe, Eds.). Black Point, N.S: Fernwood

    Pub.

Wilbur, J. R., Wilbur, M., Garrett, M. T., & Yuhas, M. (2001). Talking circles: listen, or your

    tongue will make you deaf. *Journal for Specialists in Group Work*, *26*(4), 368–384.

Wilson, S. (2008). *Research is ceremony*. Fernwood Pub.

Woolcock, M. (1998). Social capital and economic development: toward a theoretical synthesis

    and policy framework. *Theory and Society*, *27*(2), 151–208. Retrieved from

    http://doi.org/10.1023/A:1006884930135

Zavalla, P. (1991). *Gender at the Crossroads of Knowledge: Feminist Anthropology in the*

    Postmodern Era. (M. Di Leonardo, Ed.). Berkeley: University of California Press.

Appendices

Appendix A

A.1   Semi-structured Interviews: Set of Questions

1. Could you please describe a typical community assembly?

2. How many community members/families are currently registered? How many community members/families are not registered?

3. Are there specific duties established for each registered family? Man? Woman? Are there specific rights established for each registered family? Man? Woman? How are these rights determined?

4. Who has the right to vote in the assemblies?

5. Could you describe what happens in the community during the "months of hungry"?

6. Could you describe the main community activities related to crops/food that were carried in the last years?

7. Are there exclusively male or female organizations/projects in the community? If yes, can you tell me more about them?

8. Does the community own cattle? Or other food resources shared by the community?

9. Could you tell me about any good or bad experience you might have had as president; can you recall any?

A.2   Depth Interviews: Set of Questions (for males and females)

Topic #1: Gender roles at household food security (FS), specifically in food production, accessibility, utilization

1. What is the most popular meal at your home? How often do you cook/eat it? What ingredients are used to prepare it?

2. Could you tell in detail what kind of food does your family store? Who specifically does that?

3. If food were scarce at home and your storage, what would you do to ensure food provision?

4. Do external organizations deliver food/money to the families of this community? Which organizations are those?

5. In your household, is there somebody responsible for making money? Who is this? (What about you?) Who does manage the money at your home? Why?

6. In your household, who does make decisions about where to get food? And about what kind of crop to cultivate? About how much food to sell in the market?

Topic #2: Gender roles regarding community FS

1. Are there some communal activities or tasks related to food? Which are they?

   a. How are the community members involved in these activities? Do you participate in these activities? How?
   b. Which are the responsibilities assigned and by whom?
   c. Do you participate in making decisions regarding these activities? How?

2. If a family, or the whole community, is facing food scarcity, does the community do something about it? What about you?

Topic #3: Community decision making: informal/formal processes regarding FS, and gender participation

1. Where are the decisions regarding food and crops made? (*e.g.* informal meetings, assemblies, others)

2. Could you please describe a typical community assembly?

   a. Do you attend community assemblies?
   b. When was the last time you attended one?
   c. Do you and your husband/wife talk about community topics discussed in the assemblies with each other?
   d. Do you discuss the communal decision or your personal vote/opinion with somebody else?

3. Do you have a role in the assembly, or have you been assigned community tasks during the assembly? If so, what kind?

4. Are any external organizations working in the community? Do you participate in them?

A.3   Talking Circles with Women: Set of Questions

1. In this community, do women get together to talk? When? Where? How often?

2. What kind of topics do you like to be informed about? Why?
    a.   Do you talk or discuss about X topics with somebody else?

3. In this community, do women meet? How often?

4. Are there some topics that women know more about than men? Which are they? Are there some topics that men know particularly more about than women?

5. What are men's attitudes toward women's opinions regarding household topics? What about communal topics?

6. What are the activities or events where community members talk about community topics?

7. If in your community you want to give your opinion about some community topics or issues, what do you do?

8. I attended a community assembly once and I saw that most of the attendants were men. There were just a couple of women in the assembly. Is it usually like that? Why?

9. In a classroom I saw boys laughing at girls when they spoke to the rest of the class. What do you think about it?

10. I read that in a community in Bolivia women felt fear of "making mistakes" and shame of being scolded if they speak in the community assemblies. What do you think about it?

A.4   Talking Circles with Men: Set of Questions

1. What kind of communal topics do you like to be informed about? Why?
    a.   Do you talk or discuss about "X" topics with somebody else?

2. Are there some topics that men know more than women? Which are they? Are there some topics that women know more than men?

3. What are the activities or events where community members talk about community topics?

4. If in your community you want to give your opinion about some community topics or issues, what do you do?

5. I attended a community assembly once and I saw that most of the attendants were men. There were just a couple of women in the assembly. It is usually like that? Why?

6. In a classroom I saw boys laughing at girls when they spoke to the rest of the class. What do you think about it?

7. I read that in a community in Bolivia women feel fear of "making mistakes" and shame of being scolded if they speak in the community assemblies. What do you think about it?

Appendix B

B.1   Facts About Food: Diet and Preferences, Preservation and Storage

Traditional Diet

Women as well as men pointed out stew (lawa) as the most popular meal in their homes. They eat a variety of stew (*chuño, tapura, moraya, sara, olluco, menestras*, quinoa, fava bean), but the main ingredients are the same in Huamanchoque and Sapaccto (Poques): tubers in their different forms of conservation, alpaca or sheep meat, and *asnapas*. Additional ingredients are: corn, cabbage, carrot, barley, sweet potato, rice and pasta.

Eaten Schedule

3–4 am, wake up

5–7 am, breakfast: coffee, mate (herbal tea), bread, plus a soup or dry meal. The first meal of the day must be a satiating one. Afterwards, every family member goes out; men to work the land or chakra, women to pasture, children to the school.

12–1:30 pm, lunch: can be a *fiambre* (light snack of fruit, cheese, dry meat, tubers) for men working alone in the chakra or women pasturing livestock. If there is a *mink'a*, the *chakra*'s owner's wife brings a proper meal to the field or cook there for everybody. The owner also has to provide the *chicha*.

4:30–5 pm, those working in the chakra by themselves go back home. If they are in a *mink'a*, they will have dinner in the *chakra*, also provided by the land's owner's wife.

6–7 pm, dinner at home; they eat the same type of food they did during breakfast.

Examples of Traditional Tuber Preservation Techniques

Tapura: Potato preserved under the soil to alter its consistency. It is similar to what happens to potatoes when they rot for excess of rain.

Khaya: Dehydrated *oca* (tuber)

Moraya: (Also called *chuño blanco*) For five to eight days, the potatoes, covered with straw, are subjected to the frost during the night and to strong sunlight during the day. Then, the tubers are soaked in rivers or streams for 20 to 30 days. After that period, the potatoes are removed from the water and compacted by stomping to remove excess liquid. Then, they are exposed to the sunlight for another five to eight days and finally, they are peeled by hand.

Chuño: Small potatoes exposed for five to ten days, without any protection, to night frost and strong sunlight. It has a characteristic black color.

Examples of Traditional Technology to Store Food

T'aqe: Basic rectangular or cylindrical structure made of flexible, intertwined stems used for storing seeds and vegetables.

Marka: Dwelling's rustic second floor or high structure used to store food and other stuff.

Raki: Large clay bowl with flared base and wide mouth used to keep chicha.