

**Modernization and development as part of the globalization process: Holistic
participatory community development in a community in the Mantaro Valley,
Peru**

by

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DEDICATION

This dissertation is dedicated to my parents Saúl and Graciela, who have offered me their support, encouragement and love throughout the whole PhD process. Without their ever constant presence in my life, I would not be where I am. I also dedicate my work to my brothers David, Jaime and Jorge, my sisters-in-law and to Daniel, Cristina, Paula, Matías, Mauricio and Jazmin, my nephews and nieces. They bring happiness to my life and without really realizing, have given me with their energy when ever I have needed it. I love you all. I hope that this work is a good reflection of the support you have given me. Thanks to all!

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ACRONYMS

ACF	Advocacy Coalition Framework
AERM	Agro Ecological Resource Mapping
AI	Appreciative Inquiry
AKIS	Agricultural Knowledge and Information Systems
APAFA	Asociación de Padres de Familia
CA	Concerted Action
CCF	Community Capitals Framework
CIP	Centro Internacional de la Papa
CONACAMI	Coordinadora Nacional de Comunidades Afectadas por la Minería
CONAM	Consejo Nacional de Medio Ambiente
CTAR	Consejo Transitorio de Administración Regional
DGIS	Dutch Ministry for Development Cooperation
FAO	Food and Agriculture Organization of the United Nations
FONCODES	Fondo de Compensación para el Desarrollo Social
GGF	Global Green Grants Foundation
ILEIA	Center for Information on Low External Input and Sustainable Agriculture
INEI	Instituto Nacional de Estadística e Informática
INIA	Instituto Nacional de Investigación Agraria
IPM	Integrated Pest Management
IPPS	Instituto para la Pequeña Producción Sostenible
ISG	International Support Group
ISM	Integrated Soil Management
ISRIC	International Soil Reference and Information Center
IVITA	Instituto Veterinario de Investigaciones Tropicales y de Altura
LEISA	Low External Input Sustainable Agriculture
MRTA	Movimiento Revolucionario Tupac Amaru
NARS	National Agriculture Research and Extension Services

NCRCRD	North Central Regional Center for Rural Development
NGO	Non Governmental Organization
NRM	Natural Resource Management
PAR	Participatory Action Research
PETT	Programa Especial de Titulación de Tierras
PRONAMACH	Programa Nacional de Manejo de Cuencas Hidrográficas
PTD	Participatory Technology Development
R&D	Research and Development
RAAKS	Rapid Appraisal of Agricultural Knowledge Systems
RIMISP	Latin American Center for Rural Development, formerly known in Spanish as Red Internacional de Metodologías de Investigación en Sistemas de Producción
SA	Stakeholder Analysis
SANREM-CRSP	Sustainable Agriculture and Natural Resource Management Collaborative Research Support Program
SENASA	Servicio Nacional de Sanidad Agraria
SEPAR	Servicios Educativos de Promoción y Apoyo Rural
UNALM	Universidad Nacional Agraria La Molina
UNCP	Universidad Nacional del Centro del Peru
UNMSM	Universidad Nacional Mayor de San Marcos
UNORCAC	Unión de Organizaciones Campesinas de Cotacachi
USAID	United States Agency for International Development

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CHAPTER 1. INTRODUCTION

Development has been conventionally defined as directional change towards nationally organized economic growth. Currently, however, with the emergence of the global marketplace, the focus of development efforts has gone from nationally organized to globally organized economic growth (McMichael 2000). Bhattacharyya (2004) defines community development as the process of creating or increasing solidarity and agency. Community development involves building the capacity of people, encouraging them to create their own dreams and learn new skills and knowledge.

There are three community development issues that can impact the direction community development practice might take: structure (social practices and organizations: social capital), power (relationships with those who control resources: political capital) and shared meaning (social meaning: cultural capital) (Hustedde and Ganowicz 2002). According to Pichon et al. (1999), in Latin America development towards economic growth has focused on the top-down dissemination of modern technology that was presumed adapted to any type conditions. The process of modernization in rural Latin America was an attempt to “improve” people’s quality of life and standard of living. However modernization can set development against preservation of the environment (Pichon et al. 1999) natural capital. Given the evident failure of many countries to achieve development through the adoption of “modern” technology provided by first world countries, and the growing worldwide awareness of the pressure being put on the environment, the development project is shifting by bringing sustainability to the foreground (McMichael 2000).

Rural communities in Latin America are experiencing a modernity that stresses the individual rather than community values. This focus led to changes in social stratification and increased social mobility produced by urbanization (Roberts and Woods 2005). The challenge faced by development processes is to put sustainability in the forefront combining “modern” knowledge with “traditional”

knowledge and recognizing the importance of community in building development strategies to achieve sustainability, thus the importance of the idea of community development linked with sustainability. Strategies to curb environmental threats have been incorporated in to the development agenda (Chambers 1997, Dunlap et al 2002, Martens and Rotmans 2002, McMichael 2000, Roberts 2005, Edwards 1994, Kaimowitz et al 1999). One such strategy is that of community-based conservation (Agrawal and Gibson 1999). But, as Chambers (1997) points out, adoption of such strategies involved the revaluation of traditional knowledge within community as well as a willingness of outside agents involved in the development process to learn from local people.

My research looks at one rural peasant community in Peru, the community of Colpar, and analyzes ten years of participatory community development during which members of the community have engaged in actions directed towards more sustainable livelihoods. I use the community capitals framework to analyze the state of each capital in the community at different periods in time. The community capitals framework (CCF) developed by Flora et al. (2004) focuses on natural, human, social, financial, built, cultural and political capitals; availability and distribution of assets within and among communities, and the interaction between these different types of capitals in adding to or detracting from each other. As the same authors point out, this framework can also be a method of determining stratification and exclusion by looking at the structure of opportunity that emerges from the availability of or lack of access to resources/capitals. Thus, the CCF is a useful tool for analyzing social changes in the community (and at household level thus taking into account heterogeneity) as related to their ability or lack of ability to invest or build certain assets to respond to external or internal events.

My study analyzes the sustainability of holistic participatory community development in the face of modernization and facilitated mainly by Grupo Yanapai, a non-government organization working in the area for the last twenty years utilizing participatory action-research methodology. I look at the capacity of the community to face constant socio-economic change (positive and negative) due to modernization.

I use Bhattacharyya's (2004) and Hustedde and Ganowicz's (2002) definitions of community development to guide my analysis of the different processes that took place in the community of Colpar. Results from this research can be used to learn more about the sustainability of development processes in the face of modernization in peasant rural communities taking into account nestedness and heterogeneity within community.

Outline of the Document

This dissertation will analyze ten years of participatory development processes in the peasant community of Colpar, Junin, Peru and how these processes have brought about social changes that have or have not led to more sustainable livelihoods. It is divided into ten chapters. Chapter one is the introduction. The Community Capitals Framework, the theoretical framework used in my research to evaluate progress at different points in time during the participatory development processes in Colpar and at the end of ten years development work. This last analysis aided by the use of appreciative inquiry is presented in Chapter Two. Chapter Three presents the methodological approach I utilize to analyze the processes from a sociological point of view. In Chapter Four I describe the peasant community of Colpar and give an overview of how its nestedness within the greater mother community of Quilcas has had an effect on its entrance into the development process and social changes derived from it. Chapter Five gives a look of external Intervention, specifically the work in the community of the NGO Grupo Yanapai and the type of relationship they have developed with the Community of Colpar and the mother community Quilcas. In Chapter Six I analyze the first participatory community development intervention in Colpar, a process that mostly focused on technology development. Chapter Seven will analyze the shift in approach from a technology driven approach to a learning partnership embedded in a more holistic approach. Chapter Eight looks at the introduction of Advocacy Coalitions around natural resource management to build social capital and respond to external and internal threats and challenges. Chapter Nine consists of the final evaluation of the overall

process, including community members' perception of the positive lessons and actions that have come out of these processes and what skills will remain and/or should be further worked on. Finally, Chapter Ten draws conclusions and lessons learned.

General Research Question

How sustainable is holistic participatory community development in the face of modernization?

Research Objectives

- Analyze the impact of community development through the implementation of different research/development processes on different capitals/assets in a community over the years.
- Analyze how community responses to modernization affect its ability to manage natural resources.
- Study the occurrence of community participation in the presence of visible risks/threats and/or opportunities. I am interested in observing how action reflects on all or each of the community capitals (ripple effect).
- Determine the role of social capital in capacity building efforts in Colpar.
- Test applicability of Appreciative Inquiry in evaluation of the development process in Colpar.

CHAPTER 2. LITERATURE REVIEW

In this chapter I will give an overview of how a community can be seen through the lenses provided by the Community Capitals Framework (CCF). The CCF systems approach can be useful in helping us see changes in a community that occur when an intervention or development process takes place in a community. I use this approach to analyze the sustainability of holistic development in a heterogeneous rural community in Peru. The community of Colpar has undergone ten years of participatory development processes around natural resource management framed within modernization. This chapter looks at the theory behind the CCF, and the elements that play a role in the analysis of the development processes that took place in Colpar from 1995 to 2005.

Understanding the Community Capitals

For social scientists, capital is a term that means more than simply money, it is a resource or asset. In communities of place and interest, resources can be consumed, stored or invested. “Every community, however rural, isolated, or poor, has resources within” (Flora et al. 2004:9). If resources (or assets) are invested to create new resources, they become capital (Flora et al. 2004). Narayan (1999) lays out four types of capital that can contribute to improving quality of life: human, social, financial and natural. Flora and Flora (2004) identify three more capitals: cultural, political and built. Flora (2004) argues that human factors are those that encompass social, human, cultural and political capitals. On the other hand, natural, financial and built capitals are material factors. Capitals overlap. Natural, cultural and human forms of capital are the basic resources that can be transformed into social, political, and financial/ built capital” (Flora 2004: 8).

Flora et al. (2004) developed the community capitals framework as an approach to analyze how communities work. This approach is useful for understanding the dynamics of change within a rural community through change in its capitals. Resources can either enhance or detract from one another. The

objective is to achieve a balance between capitals in order to reach the goals of a health ecosystem, vital economy and social equity; in other words, a healthy sustainable community (Flora et al. 2004) (Figure 2.1). In the case of the Chimalapas context, Gutierrez-Montes (2005) defined the vision of a healthy community as being much more than just economic (financial capital) and/or infrastructural investment (built capital). “A healthy community reinforces connections and relationships (social capital), respect for and inclusion of cultures (cultural capital), access to different levels of power (political capital), sustainable use and care of communal natural resources (natural capital) and development of local skills and knowledge (human capital)” (p. 12). The same applies to the Colpar context. As the same author points out, the dynamics and synergy that occur among the different capitals is what enhances the overall well-being of individuals and households within the communities and will (at the end) allow the community to ensure actions towards a healthy ecosystem.

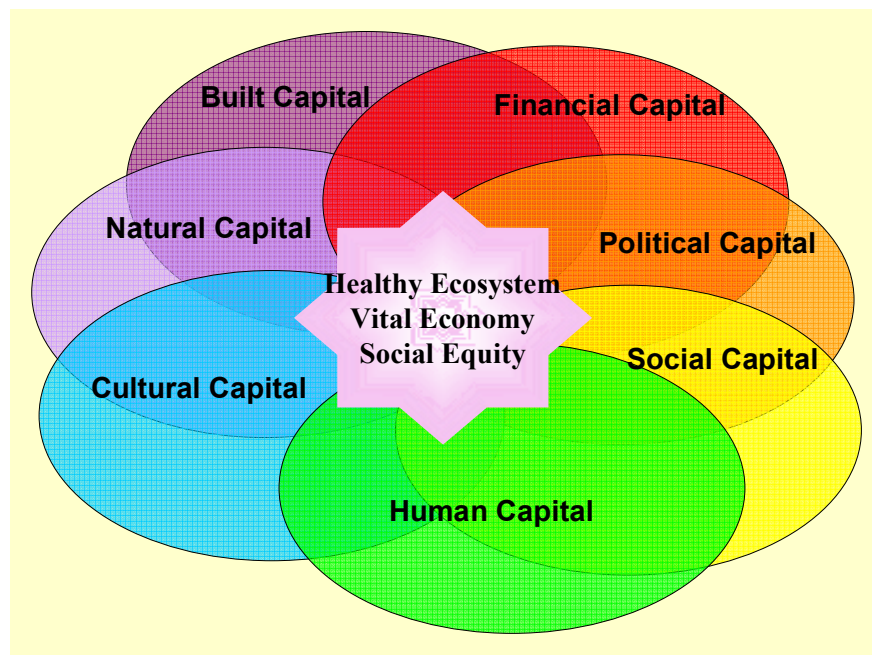


Figure 2.1 The community capitals framework (Source: Flora et al 2004)

Natural capital

“Natural capital includes the environment—altitude, longitude, climate, slope and other geographical configurations that cannot be changed” (Flora 2004). Natural resources such as water (its quality and quantity), soils and biodiversity (flora and fauna) are also part of natural capital (Flora et al. 2004). “Together the environment and natural resources make up the base around which humans act” (Flora 2004:4). Sustained productivity and quality of natural capital is very dependant on how humans use natural resources.

Healthy ecosystems provide multiple community services that underlie community sustainability, such as carbon sequestration, water storage and water filtration (Flora 1999: 405-406). Natural/environmental capital resources can be spent (to a point of extinction), just as financial resources can be spent down (and leave the bank account with a negative balance). The big difference is that once extinction is reached, natural resources cannot be recovered, while with financial capital, bankruptcy can be declared and the business or individual can start over (Flora 1999; Rule et al. 2000).

Conflicts over land use and water use are common in most of the world. In Latin America there is increasing commercial and demographic pressure. Likewise there is growing frustration over state management approaches, such as protected areas and industrial forest or mining concessions. Land tenure legislations and state models of indigenous tenure have been inadequate and unfavorable for the preservation of natural resources and the well being of indigenous groups (Richards 1997). The community of Colpar is no exception. Land and water are becoming increasingly scarce natural resources in this community. This type of situation has led landowners and indigenous groups that live in communal properties to create alliances to ensure the preservation of their private and common resources.

Cultural Capital

Cultural capital is based on a group or sub-group's relation to natural capital and to each other (Flora et al. 2004). It often arises from responses to natural

capital (Flora 2004). Cultural capital includes ways of knowing, the meaning given to symbols such as dress and food, and ways of being, which in turn will affect the choices their children make. “Cultural capital includes the values, traditions, knowledge and symbols reflected in clothing, books, machines, art, language, and customs. It is the legacy families, communities, groups and nations pass on to the next generation” (Flora et al. 2004: 25). Different cultural capitals can exist in the same place, and hegemony means that one group assumes its culture is superior to that of other groups (Flora 2004).

Cultural capital can be viewed as a filter through which people live their lives, the rituals they observe, and how they view the world that surrounds them. By socializing, people or groups transmit values via various forms of communication, verbal and non-verbal (Flora et al. 2004: 25). Culture not only determines actions and shapes what people do, think, feel and belief, it can put constraints to options and people shy away from alternative ways of doing, feeling or thinking (Salomon 1992). According to Bourdieu (1986) cultural capital can exist in three forms: in the embodied state, in the objectified state (forms of cultural goods) and in the institutionalized state. Cultural capital can be converted into financial capital and institutionalized in the form of educational qualifications. It merges with social capital, to the degree that it implies social obligations (Bourdieu 1986: 243).

Human Capital

As a unit of analysis, human capital refers to the importance of human attributes (i.e. measuring education, age, income, occupation). However, it is more than the sum of the aggregated properties (Luloff and Swanson, 1995). Lin (1999) defines human capital as investment in technical skills and knowledge. The investment in people through education, skill enhancement, health care and other social services can produce additional profits or resources. Flora et al. give a compelling definition of this capital: “Human capital includes those attributes of individuals that contribute their ability to earn a living, strengthen the community, and otherwise contribute to community organizations, to their families and to self-

improvement” (2004: 80). Investing in human capital is essential when it comes through the involvement of community in governance (Taylor 2000).

In rural communities in Latin America such as the community of Colpar, human capital is also found in the form of local knowledge and skills gained through experience and legacy. Modernity is present in these rural communities in the form of western scientific and technological knowledge that are brought in by institutions from the state, market and civil society.

Social Capital

There is a broad body of literature dealing with social capital, from the classics (Durkheim 1972; Tönnies 1957), where social capital is not yet named as such, to more recent authors (Granovetter 1973; Bourdieu 1986; Coleman 1988; Portes 1998; Putnam, 1993; Narayan 1999; Davis 1999; Lin 1999, Fukuyama 2001, Flora et al. 2000a and b; Flora et al. 2004, among the most relevant) who have studied the changes that have occurred in the definition of the term as well as its applicability in field studies both in urban and rural settings. According to Putnam “...[s]ocial capital refers to connections among individuals—social networks and the norms of reciprocity and trustworthiness that arise from them.” (2000:19). It refers to the connections and relationships that tie individuals and communities together and permit them to act together in an effective manner in pursuing common goals.

Processes such as forming groups, collaborating within and among groups, developing a common future, and engaging in collective action serve to reinforce norms (Flora et al. 2004). Trust and reciprocity are important components of social capital. Trusting someone means that one person can anticipate what the other will do in the community setting. Reciprocity means that if one individual acts to conserve a clean water supply downstream, the person upstream will do the same, because both, as part of the community, are acting for the good of all (Rule et al. 2000: 376).

The quality of community social capital affects the extent to which people shift from concern about an issue from an individualistic point of view to concern as

member of a community as a whole. Social capital “is a group-level phenomenon” (Flora et al. 2004: 62). Communities can build sustainable social capital strengthening relationships and communication among all community members and encouraging community initiatives and community responsibility and adaptability (Flora and Flora 2002: 562).

Controversy in communities yields positive results if people can disagree while still maintaining mutual respect. Reflecting only the positive occurrences of a local community will not bring to the negotiating table those conditions that need to be changed. “Diverse groups must not only be invited to sit at the table but may have to be encouraged to organize among themselves before participating in community-wide coalitions” (Flora et al. 2004: 73).

There are three types of social capital: bonding social capital (strong ties among individuals and groups from similar background within a community or group), bridging social capital (weak ties among different groups inside and outside the community) and linking social capital (weak ties connecting the community with external organizations: extra local ties) (Bebbington and Carroll 2000; Flora 1999; Narayan 1999, Flora et al. 2004). Building both bridging and bonding can enhance social capital. However, bridging social capital can be a key element to a degree that communities can affect external decision and policy making towards community building. Quality of community social capital affects the extent to which people shift from concern about an issue from an individualistic point of view to concern as member of a community as a whole. Social capital in the community of Colpar is expressed in its traditional government and family structures as well as in its relationship with external agents from the state, market and civil society.

Political Capital

Flora et al (2004) explain that political capital consists of organizations, connections, voice, and power. It is the ability of a group to influence the distribution of resources within a social unit, including helping set the agenda of what resources are available (p. 108). In many rural communities, high levels of bonding social

capital reinforce the current situation and discourage groups with different ideas and agendas from coming forward to offer alternatives.

In small communities, there is a tendency to rely on political connections...to mobilize resources, rather than building the ability of the community to plan and to follow the rules and regulations that determine rational governmental resource distribution (Flora 2004:6).

Rosyadi et al. (2005) define political capital as the attitudes and activities that influence political regimes. According to these authors, the concept can be used to explain political participation (p. 215). The same authors argue that all forms of social capital are useful for the creation of political capital. In the context of the community of Colpar, political capital is expressed in the level of access and control community members have on its communal resources, the power assigned on their communal officials and the level at which the community participates when collective action is needed to face an internal or external threat (Rosyadi et al. 2005). Among excluded groups within a community, political capital is generally built around working collectively to address situations that limit opportunities (Flora 2005).

Financial Capital

Financial capital consists of instruments that express exchange value that have a high degree of liquidity compared to other forms of capital. It includes: debt capital, investment capital, derivatives, taxes and tax relief, and external grants. Investing one's own resources is using private capital. Land and animals owned by farm families, timber companies, or mining companies is private capital. Public and private capital are invested in education, increasing human capital. Public capital refers to resources invested by government entities. The government authorizes the use of tax dollars to build roads, install sewer lines, maintain public parks, and finance schools. This infrastructure is known as built capital or capital goods (Flora 1999; Flora et al. 2004).

Financial capital is important because it can be transformed into more productive labor as it is invested to increase human capital and built capital. Yet for rural communities and businesses alike, there is a crisis of capital availability due to

the increasing capital mobility (financial in the form of money and human in the form of labor). As capital becomes more mobile, rural communities lose control (Flora et al. 2004).

Built Capital

Built capital is private, state or communal infrastructure. Sustainable built capital depends on a locally diverse and healthy economy (Flora et al. 1999). In peasant communities of the Central Andes of Peru as Colpar, the communal house as well as other public infrastructure (schools, health post, church), are built through *faenas*, a system of community labor. These traditional systems of communal work have existed in Peru since pre-colonial times.

Using the Community Capitals Framework Lenses to look at Change

The failure of the dominant positivistic and modernist frameworks found in the transfer of technology paradigm—where scientists made research decisions and technology was developed under controlled conditions to later be handed over in the way of technological package to farmers—has led towards a shift in paradigms to one that can address in a more effective way poverty and inequality, putting farmers' priorities first and assuring their participation in the development process (Pretty and Chambers 1993:2).

The above quote sums up the shift development has gone through over the decades in regions like Latin America. The shift has encouraged development agencies to focus on natural resource and the environment and on community-based efforts rather than on individual households.

Development can be viewed as “organized social change” (McMichael 2000). According to Flora et al. (2000), the CCF provides a theoretical framework to analyze social change as a result of development processes. The CCF focuses on the availability and distribution of the seven capitals within and among communities; and the interaction between these different capitals in adding to or detracting from each other. People's understanding of the natural environment (provided by cultural, human and social capitals) influences how they will manage nature/the ecosystem. Cultural capital affects choices people make individually and collectively about using

and managing natural resources. In many rural communities, high levels of bonding social capital reinforce current power relationships and discourage groups with different ideas and agendas from coming forward to offer alternatives for managing individual or collective natural resources.

The versatility of this framework permits it to address poverty reduction in a place through community-based solutions for individuals who are in a position that does not permit them to access any of the capitals (Flora 2005). Within the CCF approach issues of inequality are considered; it can help in identifying stratification and exclusion by looking at the structure of opportunity that emerges from the availability or lack of availability of resources/capitals (Flora et al. 2004).

Stratification and the resultant structure of opportunities accessible to members within a community could influence how flexible families can be in investing the resources that they have and doing so in a way to reduce risk (Filgueira 2000).

Differential Access to Resources: Issues of Stratification, Exclusion and Heterogeneity

Ignoring stratification and exclusion of members of a community will impact the outcome of community development processes. Visions of small, integrated communities using locally evolved norms and rules to manage resources sustainably and equitably are powerful. Indeed, they have guided community-based conservation and resource management programs and policies sponsored by World Bank, IDRC, SIDA and The Nature Conservancy in India, Nepal, Ghana and Thailand among other countries (Agrawal and Gibson 1999). However, this image hides the existence of differences within communities and how these differences affect natural resource management outcomes (Agrawal and Gibson 1999:633).

In their examination of numerous studies in countries in the developing world, Agrawal and Gibson (1999) found that intra-communal conflicts over resource management are very relevant to understanding how natural resources are managed. These authors concluded, "There is no easy correspondence between social homogeneity and sustainable resource use" (1999:635).

Studies in Latin America (Takasaki et al. 2001; Reardon and Vosti 1995; Crow and Sultana 2002; Holmes 2005; Ruben and Pender 2004, Flora et al 2001) analyze the impact of heterogeneity within community on differential specialization in capital/ resource use and variation in wealth. Takasaki et al. (2001) studied the role of wealth and geographic factors in the Peruvian Amazon and found that there is a positive relationship between possession of productive capital (built and financial capital) and fishing activities in land-poor villages. Likewise, they identified a positive relationship in land-rich villages between land-holding and agricultural activities (natural and financial capitals). On the other hand, Ruben and Pender (2004) observed diversity among rural households in what they called 'less-favored areas' (LFA). For these authors differences are in resource endowments: land, labor and capital (natural capital, human capital and financial capital respectively) and access to markets and institutions (social capital and possibly political capital).

Margaret Graham (2004) published a comparative study of households looking at economic inequality within a small farming community in the southern Peruvian Andes and how this inequality reflected on women's energy intake in that community. She found that "Community members define wealth as a balance of landholding and cash resources [natural and financial capitals] sufficient for meeting household needs and fulfilling community obligations" (2004:2298). The author observed that different levels of poverty are reflected in nutritional status at different periods of the agricultural calendar.

Flora et al. (2001) found a relationship among access to different types of capital by different groups and different ways of managing natural resources in Nanegal, Ecuador, an area of relatively recent colonization. Seven different categories of household producers were identified related with land ownership and crop and livestock diversity in the production system: landless day laborers, landless share croppers, owners of remote steep land, small diversified producers, small diversified producers with cattle, producers of sugar cane liquor and medium diversified producers who make liquor in their own mills and stills, have cattle and over 30 hectares of land. The authors observed that landless day laborers'

(*jornaleros*) households have no control over the use of productive resources. They concluded that access to land is a critical part of developing a stable production strategy (2001:207). The marked social differentiation that exists in terms of access to land and productive resources has negative implications for social and environmental sustainability (2001:211).

Ordoñez and Flora (2001), also examining Nanegal, Ecuador, examined the notion of heterogeneity throughout a gendered lens, within community relating gender to different degrees of access and control over natural resources. The same seven types of producers identified by Flora et al. (2001) were used. The authors concluded that access to family resources and control over economic, environmental, social and human capitals within the household are different for men and women. Implicit control and access determines productive and reproductive roles within the family and the community. Peasant households that have access to their own resources (i.e. land) usually fare better than those that only have access to communal resources. Access to other capitals is needed to overcome lack of natural resources or natural capital (Flora et al. 2004).

Differential access to resources provides the structure of opportunity within which decisions within households are made to overcome prevalent socio-economic and environmental disruptions (Valdivia and Jetté 1997). Access to outside resources can also be useful to gain access to community capitals. Migration to other rural or urban places and kinship are two forms of investment of human and social capital. Migration can be permanent, temporary or circular (Mitchell 1991; Mayer 2002). Mitchell (1991) points out that most households rely on remittances from temporary migration.

Money from temporary migration and remittances from permanent migrants are used not only to pay for food and agricultural production but to buy personal and household necessities and amenities...many have used the money to buy land or the trade of goods used in some commercial venture (Mitchell 1991: 111).

Ties of kinship and ritual kinship (*compadrazgo*) are often used to gain access to other forms of capital (Mitchell 1991). Poor peasants might select rich and

powerful *compadres* who can provide work and political protection. Rich people establish *compadrazgos* with poor peasants in order to obtain labor and political support (Mitchell 1991).

The structure of opportunities can either increase or decrease access to resources as Gutiérrez-Montes (2005) found in her study on the effect of forest fire events in Oaxaca, México. Figure 2.2 illustrates the effect an environmental disturbance (forest fires taking place in 1998) had over the natural capital of isolated rural communities in Oaxaca.

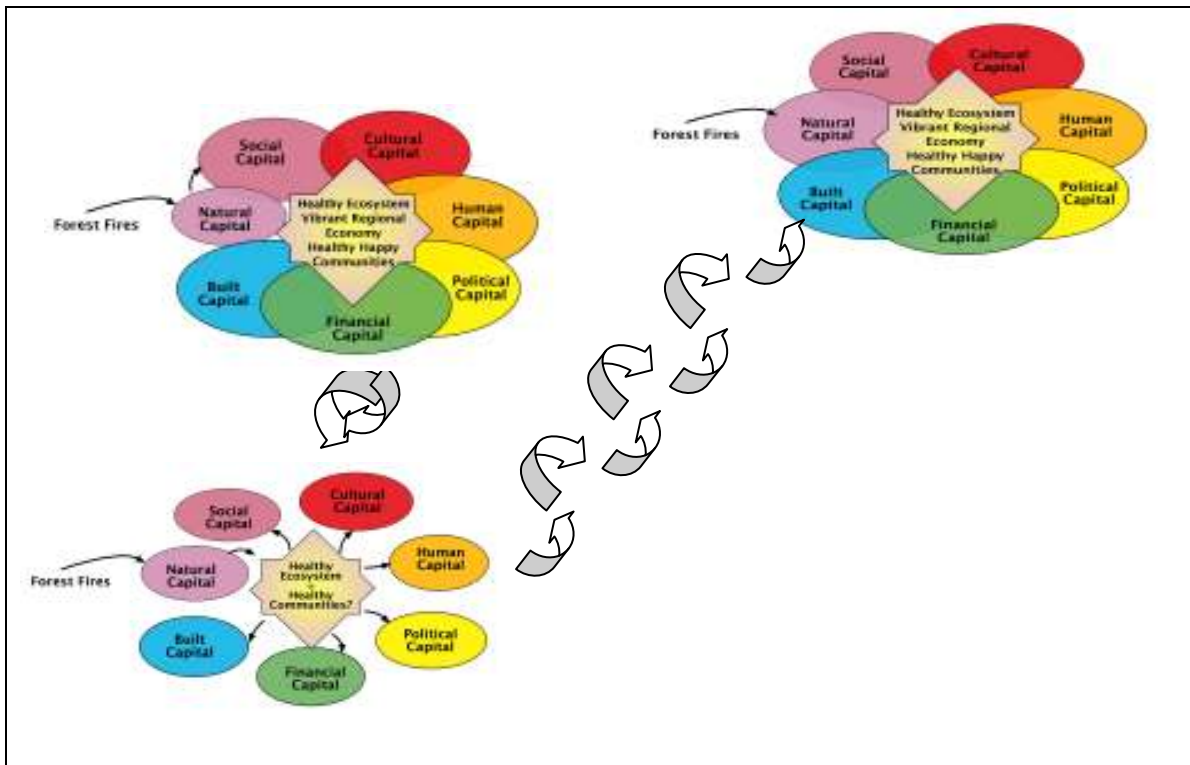


Figure 2.2 Structure of opportunity: increase or decrease of access to resources (Source: Gutiérrez-Montes 2005)

Decreases in community natural capital (represented by loss of forest vegetation) had what Gutiérrez-Montes (2005) called a “domino effect” over the other community capitals. Disruption of synergy among capitals led the community

toward a downward spiral, making it even harder for the affected communities to reach the goals of a healthy community and a healthy ecosystem.

Attention to differences within communities is important when working toward sustainable collective and household natural resource management strategies (Flora 2001). Differential access to community resources by strata within a seemingly homogeneous community can result in ineffectual community-based natural resource management (CBNM) (Leach et al. 1999; Agrawal 2001; Walker and Hurley 2004; Gupte 2003). It can also limit access and control over community capitals, which impact natural resource management.

Collective Action, Participation and Community Development

According to Tilly (1979), in order to achieve social change, communities have to involve themselves in collective action. However this cannot happen if community social capital declines as a result of changes in structural power inside and outside the community. Empowerment brings the grassroots to the level where they can negotiate actions and change. Change also requires establishing links (bridging social capital) with relevant external actors that will play a role in the community's development directly (through projects or programs that will directly affect the community), or indirectly (through policy making). Putnam (2000) attributes a significant portion of differences in government effectiveness, economic health, and community well being to the presence of social capital. Flora et al. (2004) point out that communities can foster lasting social capital by improving communication within and outside the community through bonding and bridging social capital.

Resources within a community must be accessible and mobilized effectively, to generate a synergy among all forms of capital (Flora et al. 2004). An important element for achieving effective mobilization of resources and building of all capitals is the level of community participation. Participatory approaches emerging from the

'third sector'¹ in the 1990s have been rapidly integrated in many research and development programs all over the world. They were later adopted by the public sector in the South as a response, among other things, to conditions imposed by the international community and some donors to implement participatory research and development (Thompson 1995). Probst et al. (2003) identified three prototypical approaches to participatory development: transfer of technology, farmer first and participatory learning. The first has a modernistic perspective. Innovation is seen as a result of a linear process by which scientific knowledge is applied in practice (p. 11). Under this approach participation is contractual-consultative and the local actors (the community) are seen as beneficiaries, target groups or providers of labor. The second approach recognizes that farmers have a stock of local knowledge to contribute. Participation in this approach is consultative-collaborative and local actors are reactive respondents or active participants. Finally, participatory learning and action fits under the rubric of social constructivism. Outcomes from this approach come as a result of mutual learning process between actors with complementary contributions. The type of participation under this approach is collaborative-collegiate and the role of local actors is as creative investigators, active participants and partners of the process. The three approaches identified by Probst et al. (2003) can also be linked to the typology of participation Pretty and Chambers (1994) constructed (Table 2.1). Transfer of technology would include types one, two and four (passive, information giving and material incentive) participation in Pretty and Chambers' typology, while participatory learning and action research would involve participant that fall under type six and seven (interactive and self-mobilization). Communities that engage in self-mobilization are the ones that have the better chance of making the best use of their resources/capitals.

¹ Non-profit and non-governmental organizations

Table 2.1 Typology of participation (Source: Pretty and Chambers 1994)

Typology	Characteristics of type of participation
1. Passive Participation	Men and women participate by receiving information from agencies about what is going to happen or has already happened. It is a unilateral announcement by agencies without public input.
2. Participation in giving information	Women and men participate by answering questions posed by researchers using questionnaire surveys or similar approaches. People do not have the opportunity to influence proceedings.
3. Participation by consultation	People participate by being consulted, and external agents listen to views. This process does not necessarily concede any share in decision-making, and professionals are under no obligation to take on board people's views.
4. Participation for Material Incentives	People participate by providing resources for material incentives. It is very common to see this called participation, yet people have no stake in prolonging activities when the incentives end unless the activity makes economic sense or meets other landowner needs. Cost-sharing may improve prolonged activity because of personal investment.
5. Functional Participation	Women & men form groups to meet predetermined objectives related to the project. These institutions tend to be dependent on external initiators and facilitators, but many become self-reliant.
6. Interactive Participation	Men & women participate in joint analysis, leading to action plans and the formation of new local institutions or strengthening existing ones. These groups take control over local decisions, giving a stake in maintaining initiatives, structures and practices.
7. Self-mobilization	Men and women participate by taking initiatives independent of external institutions to change systems. They develop contracts with external institutions for resources and technical advice they need, but retain control over how the resources are used.

Participatory learning and action research, which is knowledge and interest based, is used in many collective-based approaches. Individual and collective interests are a basis for collective action (Steelman and Carmin 1998). Habermas (1996) argues that there is a plight within the scientific world to accept interest as an element attached to knowledge:

The concept of knowledge-constitutive human interests already conjoins the two elements whose relation still has to be explained: knowledge and interest. From every day experiences we know that ideas serve often enough to furnish our actions with justifying motives in place of the real ones. What is called rationalization at this level is called ideology at the level of collective action. In both cases the manifest content of statements is falsified by

consciousness's unreflected tie to interests, despite its illusion of autonomy. The discipline of trained thought thus correctly aims at excluding such interests. In all the sciences routines have been developed that guard against the subjectivity of opinion, and a new discipline, the sociology of knowledge, has emerged to counter the uncontrollable influence of interests on a deeper level, which derive less from the individual than from the objective situation of social groups (p. 100).

Participatory approaches are now an integral part of R&D (Research and Development). Participatory community-based natural resource management is used extensively in community forestry, catchments and watersheds (Agrawal and Gibson 1999; Leach et al. 1999; Kellert et al. 2000; Nightingale 2003; Ramirez and Fernandez 2005 among others). Inclusion of all groups within a community has been shown to be significant for the effectiveness of collective natural resource management. Westermann et al. (2005) found that collaboration, solidarity and conflict resolution increase in natural resource management groups where women are present and that norms of reciprocity are more likely to operate in women's and mixed groups (p. 1795).

Challenges to be Faced: The Effects of Globalization and Modernization on the Process in Colpar

As Flora et al. (2001) point out; changes in the structure of agriculture over time have come with major environmental implications. According to FAO (2001), structural and sectoral adjustment programs that occurred during the mid-80s and the 90s have caused major changes in national economies. Although food production as well as agricultural exports and imports have grown in Andean countries such as Peru, the gains have been captured by the modern agricultural sector bringing little benefit to the highland peasant producers.

The extreme agro-ecological conditions, fragmented landholdings, poor soils and lack of off-farm employment opportunities have resulted in extremely high poverty levels within the Central Andes high altitude system and render the sustainable development of the system both a necessity and challenge (FAO 2001:295). As globalization has exacerbated inequality among nations, across sub-

national regions, and among individuals and households, development has become a global enterprise (McMichael 2000:15).

Communities like Colpar, under this scenario face a great challenge in order to continue to exist in a sustainable way. The participatory processes I study in this dissertation seek to address this challenge. All the approaches studied tried to take into account heterogeneity within the community and be gender inclusive to enhance collective action. However, the processes were all different and therefore resulted in different outcomes. By using the CCF I intend to analyze these different outcomes.

CHAPTER 3. EVALUATING SUSTAINABILITY OF HOLISTIC COMMUNITY DEVELOPMENT: RESEARCH METHODOLOGY AND PROCESSES

In this chapter I will deal with the method of data collection and analysis for my research. I am interested in four different phases that will help answer my research question “How sustainable is holistic participatory community development in the face of modernization?”:

1. the initial situation in the community
2. the initial situation in the household
3. the intervention process
4. capital outcomes for the community

The first two points will give me the baseline of the study, the situation in the community of Colpar in 1995, before the intervention. The third point will provide a picture of the different interventions that took place over the following 10 years. The fourth aspect is a key element for answering my research question. Data collected in all the different periods of the study will be analyzed using the CCF to look at changes in the community capitals as well as the synergy between the different capitals. In the following section I explain the research methodology used to analyze the data and answer my initial research question. I also give an overview of processes studied to help answer my research question.

Research Methodology

I have two units of analysis: the community of Colpar as a whole and households within Colpar. After identifying my baseline for the community of Colpar and households within it using data from INEI and Grupo Yanapai framed within the community capitals, I analyze my data for the intervention periods. Five research objectives guide my analysis of data collected for the three intervention periods. These research objectives, first presented in Chapter One, are:

- Analyze the impact of community development through the implementation of different research/development processes on different capitals/assets in a community over the years.
- Analyze how community responses to modernization affect its ability to manage natural resources.
- Study the occurrence of community participation in the presence of visible risks/threats and/or opportunities.
- Determine the role of social capital in capacity building efforts in Colpar.
- Test applicability of appreciative inquiry in evaluation of the development process in Colpar.

To achieve these research objectives, I used content analysis of interviews and reports, my own field notes, participant observation, and the material produced by community participatory workshops. During the ten years studied, the NGO Grupo Yanapai gathered information primarily through participatory processes. All projects involved the use of different participatory-action-research approaches (Table 3.1). Therefore during the LEISA program, Agroecological Resource Mapping (AERM) and Stakeholder Analysis (SA) approaches were used initially, while from the second stage onward Participatory Technology Development (PTD) was the sole focus. The Concerted Action (CA) project made use Rapid Appraisal of Agricultural Knowledge Systems (RAAKS), a stakeholder analysis approach. Finally, Advocacy Coalition Framework (ACF) was used during the SANREM-CRSP program as an analytical tool. This last approach is not participatory in nature but Grupo Yanapai added the participatory component to the framework.

Participatory action research (PAR) is one of the most widely practiced participatory research approaches. PAR originates from the fields of adult education, international development, and the social sciences (Khanlou and Peter 2005). This approach emphasizes political aspects of knowledge production and is placed within the long tradition of liberationist movements (Chambers 1994, Reason 1998, Fals-Borda 1982). PAR involves community-based, action-oriented and collaborative research (Garwick and Auger 2003). This approach is “the enlightenment and

awakening of common people....It aims to confront the way in which the establishment and power-holding elements of societies worldwide are favored because they hold a monopoly on the definition and employment of knowledge” (Reason 1998:269).

Table 3.1 Participatory action research approaches in time

Processes	Period	Approaches used
1. Low External Input and Sustainable Agriculture (LEISA) Program	1995-1999	<ul style="list-style-type: none"> • Agroecological Resource Mapping (AERM) • Stakeholder Analysis • Participatory Technology Development (PTD)
2. Concerted Action for Local Development Project	1998-2000	<ul style="list-style-type: none"> • Stakeholder Analysis: Rapid (“Relaxed”) Appraisal of Agriculture Knowledge Systems (RAAKS)
3. Sustainable Agriculture and Natural Resource Management Collaborative Research Support Program (SANREM CRSP)	2000-2005	<ul style="list-style-type: none"> • Advocacy Coalition Framework (ACF) • Participatory-Action-Research (PAR)

According to Reason (1998), PAR can use a diversity of qualitative and quantitative methods to create alternate systems of knowledge production based on the participation of people in setting their own agendas, data gathering and analysis, and controlling the use of the outcomes. PAR outcomes are usually communicated through the description of cases, thus it is sometimes criticized when there is lack of enough details to help readers to really understand the process and learn from it. One of the weaknesses of PAR is its lack of systematic hypothesis testing. Given PAR’s aims to empower, the research components of the methodology (design, data gathering and analysis) take second place to the emergent processes of “collaboration and dialogue that empower, motivate, increase self-esteem, and

develop community solidarity” (Reason 1998:272). Chambers sees that these processes mentioned by Reason come from the active involvement of people in “generating knowledge about their own condition and how it can be changed, to stimulate social and economic change based on the awakening of the common people and to empower the oppressed” (1997:108).

For Grupo Yanapai the goal of the processes was empowerment, rather than research. I use the community capitals framework to analyze the existing data in a way that provides a picture of changes that have occurred in the community reflected in changes in their community capitals and leading towards more sustainable livelihoods/development. I use data gathered for the purpose of empowerment, production increase, and perhaps improved natural resource management (NRM), to analyze the changes those processes produced in different segments of the community of Colpar. What are collective community responses to threats coming from the outside? How does that action reflect on all or each of the community capitals (ripple effect)? How can we better understand the process of intentional change?

Using Appreciative Inquiry (AI) at the evaluation stage, I elicit the voices within the community describing their accomplishments. I interviewed 12 members of the community/annex of Colpar and 10 of the community of Quilcas as well as three members of Grupo Yanapai involved in the processes described in my research. By means of AI, I identify the strengths or positive outcomes of the processes. Appreciative Inquiry comes out of the field of organizational development where corporations interested in creating effective and profitable organizations use it. The theoretical basis of the approach is social constructivism, which originated in educational psychology. According to Watkins and Mohr social constructivism answers the age-old question: How do we know what we know? (2001:26). The importance of culture and context in understanding what occurs in society and constructing knowledge based on this understanding is the core of social constructivism (Kim 2001). Social constructivism first focused on individual learning, and only through AI emerged as a collective construction of a positive future.

Instead of seeing only individuals as constructing their own reality, AI acknowledges the social dynamic involved. Using this tool to encourage people to share their stories about what they feel has created positive change in their communities and in their families can be decisive in making them recognize that they can achieve even more positive change (NCRCRD 2005). The data complements my other measures of the community capitals at different points in time. Appreciative Inquiry complements PAR in that it will draw out on the lived experiences and knowledge of people who participated in the PAR process. It might be argued that PAR is a constructionist approach when it seeks the viewpoints of various participants on what the reality is. However, this approach nowhere acknowledges constructivism, as it stems from a very different intellectual tradition, mostly coming from the work of Paulo Freire (*Pedagogy of the Oppressed*, 1970 and *Education for Critical Consciousness*, 1973) and from the practice and experience of conscientization in Latin America (Chambers 1997). I developed an interview protocol as my research instrument (Appendix I). A Grupo Yanapai member reviewed the protocol to make sure questions were posed in a language that was understandable by all. However, I was not able to do AI with focus groups or during a communal assembly. This would have given the chance to generate collective action based on the positive outcomes that would be generated by the participants. The data gathered during the interviews will be returned to Grupo Yanapai to use as an initial point for a more collective AI process. The NGOs is leaving the community; this would be a good way to plan actions for the new era for the community without Yanapai.

Information collected for the SANREM program and the final AI evaluation are in the form of interviews. This type of information is what Ryan and Bernard (2003) identify as free-flowing texts. Free flowing texts can be narratives, discourse, and responses to open ended questions (Ryan and Bernard 2003). Data taped during the SANREM will be used to identify the different positions and mental causal models of key actors around the NRM issued identified by the community as important. Likewise data resulting from the AI will be used to construct the final evaluation by members of the community and Grupo Yanapai.

Issues of generalizability, as well as validity and reliability, are important. As this research presents just one case study, there are clearly limits to its generalizability. According to Janesick, there is a history of case study research in anthropology, sociology, education, and history that “stand solidly on its merits” (1998: 51). However the value of case studies is found in their uniqueness. My research of the community of Colpar is not just confined to a simple account of a case; I use rich description and systematic concept-driven categories to compare data over time.

There is a certain level of uniqueness in the case of the community of Colpar. Each program or project that was initiated fell in place as a useful piece of a puzzle that was being constructed through the participatory process. An evolution of the participatory approach was expected with the addition of new components to the process. I want to see if this progression of methodologies and approaches led a heterogeneous community towards sustainable practices in the face of modernization pressures. In the following sections I will briefly explain each of the points in time and how data was collected and analyzed for each of them.

Initial Situation in the Community and in the Household

My study analyses ten years (1995-2005) of development processes in the community of Colpar. In order to establish the baseline for the study, I look at the community before the intervention took place relying on information gathered from the National Statistics and Information Institute (INEI) in Peru. This information was complemented by various studies and reports previously done by Grupo Yanapai and information gathered at Municipal and Community level by the same organization.

I use the CCF to analyze the data, identifying the stock of the different capitals of the community and households within the community in 1995. The community of Colpar is nested within the larger community of Quilcas. Thus it has to be looked at within the context of Quilcas to understand how the different participatory action research processes that have taken place in both communities

are or are not leading Colpar towards implementation of sustainable practices to achieve a more holistic development. This nestedness is expected to have an effect on Colpar's entrance into the resulting development and social processes. Likewise, in addition to looking at Colpar both as an independent community and as a nested community within Quilcas, differences within Colpar such as class and gender also have to be considered. The community is not a non-differentiated unit, and households respond to the processes differently. I look at the differences among households and how these differences relate to the type of access each household has to different capitals.

The Intervention Process

I examine the different processes that took place in the community through content analysis of interviews, reports and material produced from community participatory workshops that took place at different stages of the three projects over ten years. Table 3.1 is a timeline showing the processes and the timing of specific external forces intervention during the ten year period. The three intervention processes studied are:

1. Low External Input and Sustainable Agriculture (LEISA) Program 1995-1999.
2. Concerted Action (CA) for Local Development Project 1998-2001.
3. Sustainable Agriculture and Natural Resource Management Collaborative Research Support Program (SANREM CRSP) 2000-2005

Chapter five presents a more thorough explanation of these different interventions that took place in Colpar. All these processes were conducted using Participatory Action Research (PAR). I am interested in knowing if PAR processes lead or do not lead to sustainable practices as measured by access to different types of each capital.

Capital Outcomes for the Community

Results from the interviews and the data gathered from the three different interventions studied will help me in the analysis of social processes and changes that have occurred at community and household level. I analyze changes at both levels using the community capitals framework, which gives me a view of how they have been invested (or not) to achieve this positive change (flows) and how this investment has helped build on the same capital or on others at each point of intervention and two years after all research and development programs ended (ending capital stocks).

Summary

Chapter three describes the research tools and methodology used to analyze the data in order to answer the general research question. Five research objectives guide my analysis of data collected for different phases that include the initial situation at community level, at household level before participatory development processes took place, three intervention periods and finally the analysis of the capital outcomes for the community. In chapter four I start setting the baseline for my study.

CHAPTER 4. THE COMMUNITY OF COLPAR: ITS CAPITALS

Studying one small traditional community (Colpar) nested in a larger officially recognized community (Quilcas) helps one understand local participation in decision making leading to collective and individual attempts to find and implement better practices of natural resource management and sustainable livelihoods. In the following chapter I describe the peasant community of Colpar and give an overview of how its nestedness within the greater mother community of Quilcas has had an effect on its entrance into the modernization process. I look at the community's capitals that Colpar had access to before the intervention period in 1995.

Community Context

The peasant rural community of Colpar, located in a Central Andean valley of Peru was chosen as the focus of my study for various reasons. First, it was the community where the NGO Grupo Yanapai, an institution to which I belong, had been working with for the past 12 years (1994-2006). Second, participatory development processes regarding sustainable livelihoods and natural resource management had been taking place for the last 10 years. Third, the community of Colpar is nested within a larger community, Quilcas, which is typical of indigenous Andean communities in Peru. Fourth, Quilcas and Colpar are experiencing modernization processes. The processes in Quilcas greatly affect Colpar because of its nestedness. Fifth, there is heterogeneity within the community of Colpar, as is typical of all peasant communities. Sixth, years of participatory work have created a rapport between community and NGO which permitted easier access to information that otherwise would have not been available. People appeared to be quite honest in their appreciations. Finally, data are available to analyze the different phases of interventions before they began, during their occurrence and once they have ended to understand the continuity of development processes. Results from this research can be used to learn more about the sustainability of development processes in the

face of modernization in peasant rural communities taking into account nestedness and heterogeneity within community.

The rural peasant community (officially designated as an annex) of Colpar is located within the larger community of Quilcas. The mother community, Santa Cruz de Quilcas (a name that blends Christian and Quechua heritage) is located towards the North east of the Mantaro Valley, approximately fifteen kilometers from the city of Huancayo, the capital of the Department of Junin, in the Central Andes of Peru (Figures 4.1 and 4.2). It is believed that during the Inca domination Quilcas was a storage center for the coca that came to the central sierra from different areas of the Amazon basin (Nuñez et al. 2001). During the first decades after independence (mid 1800s), the Mantaro valley was divided into provinces and districts. These provinces and districts were under the government of Jauja until the beginning of the 1900s, when Huancayo became its governmental center.

Although never under the hacienda system, the community of Quilcas was still dominated by Jauja and Huancayo elites through their political and administrative district representatives who made sure indigenous populations paid taxes, engaged in collective work that benefited the city of Jauja or the city of Huancayo and provided construction material for public services. Despite this domination, communities such as Quilcas had advantages over those areas controlled by haciendas. The traditional community government allocated community members individual plots; additionally other communal lands were used for grazing. Traditional communities had relatively autonomous communal officials, who made and enforced local regulations, including access to communal resources and oversight of the communal responsibilities that such access required (Alberti and Sanchez 1974).

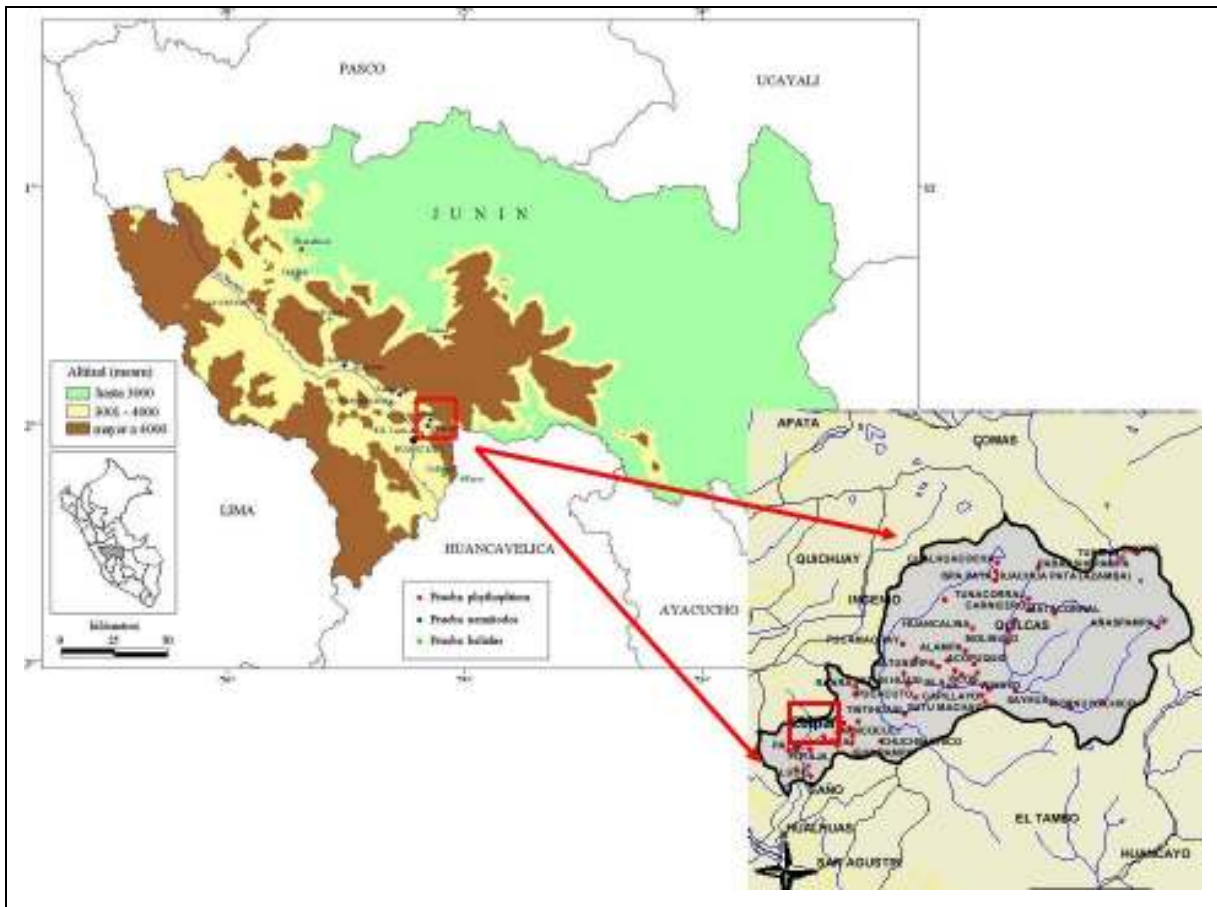


Figure 4.1 Research site (Sources: Zúñiga et al. 2000; INEI 2006)

The community of Quilcas, recognized by the Peruvian government as a legal entity in 1938, is part of the larger Quilcas district, which is one of the 28 districts of the Province of Huancayo under the officials of the provincial government (INEI 2005; Velazco and Cepeda 2000). The community is still an indigenous community with traditional rights and responsibilities. The town of Quilcas is the district's capital. The population of the district of Quilcas almost doubled from 3,506 in 1993 to 5,363 in 2000 (INEI 2004, Quilcas District Municipality 2005), as some of the families that fled from the social violence that plagued rural areas of Peru during the previous decade returned (Figure 4.3).



Figure 4.2 Location of the community of Colpar in the Mantaro Valley (Photo Tourist map 2001 edition)

A large part of the rural population and some of the urban population retain the structural organization of traditional peasant communities. The community officials of Quilcas have decision-making power over all major issues, such as communal land distribution among all its members (among them the community of Colpar), use of grazing land and use of the communal forest (Grupo Yanapai 1999). In the next section I will detail the different resources and assets possessed or acceded by the community of Colpar and by households within it by capitals before the intervention period. In order to facilitate the understanding of the information I will use the present tense though I will be referring to the period before 1995. I will in many cases make reference to data from Quilcas because it is the only reliable data available of what the community had in 1994 and also because it reflects quite

accurately the situation regarding education, population and age distribution in Colpar at that time. Likewise, Colpar is not officially recognized by the state as a community therefore official statistics show it as a part of the total sum of the greater district of Quilcas. Quilcas refers to it as a barrio or annex and has never recognized it as a community although Colpar has been referring to itself as such since the 1960s.

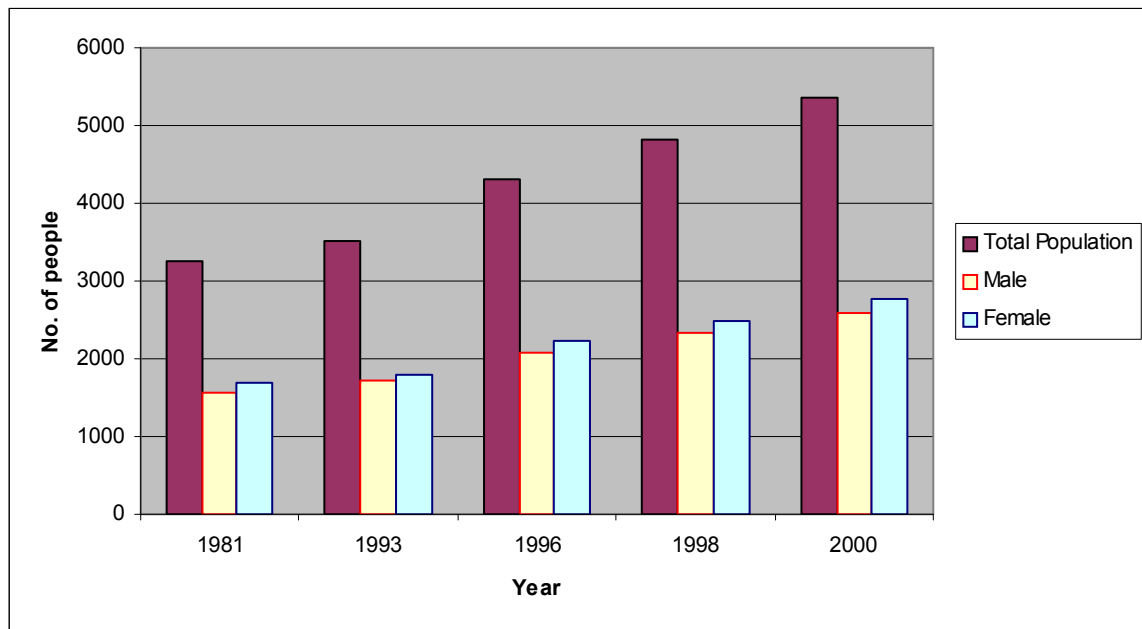


Figure 4.3 Total population and population by gender for the District of Quilcas (1993-2000) (Source: INEI 2004)

Natural Capital

The rural peasant community of Colpar is located in the intermediate agro ecological zone of Quilcas, though its land plots can be found throughout the three recognized agroecological zones: low (3, 200 to 3,300), intermediate (3,400 to 3,800) and high (3,800 to 4,800) (Nuñez et al. 2001). From the 7,858 hectares the community of Quilcas owns, approximately 1,764 hectares are located in the low and intermediate zones and 6,094 hectares (22.45%) are found in the high agroecological zone. On the steep slopes, soils are generally acidic and low in

Once communal cropping land is assigned by Quilcas to Colpar, the Colpar assembly distributes the land among its members. Each *comunero* has a right to 0.8 to 1.0 ha/year for the production of native potato and other Andean tubers such as *mashua* (*Tropaeolum tuberosum*), *oca* (*Oxalis tuberosa*) and *olluco* (*Ullucus tuberosus*). Peasant farmers in Colpar have preserved crop biodiversity, especially of the above mentioned Andean tubers, as a strategy towards food security and to ensure the sustainability of their agriculture. According to Scurrah et al. (1999)

² All members (active and retired) of the community get land allocation. Communal members retire at age 60 for men and 50 for women. They no longer have obligations; however they keep all benefits of an active *comunero*. All residents in the community have the possibility of becoming *comuneros* once they turn 18 years old. However there can only be one active member within each household. To become a member, they present their application to the Communal Directive Board that makes the final vote. Once a new member is accepted, he/she has the right to land allocation. The community has not stopped accepting members but the amount of land it possesses remains the same thus the length of fallow has decreased from seven to five years to cover the demand.

cope with the complex agroecology of their land, droughts, hail, frosts, diseases, and pests.

A family can manage as many as 17 plots of communal and private land that sums up to a total of 0.5 to 1.0 hectares of rain-fed land. Subsistence agriculture dominates, surpluses are sold at the market, and production depends almost entirely on manual labor (Scurrah et al. 2003). Production systems in Colpar are mostly mixed (crops-livestock), the main crop being potato (Olivera et al., 2004; Fernández-Baca and Fernández 2000). Families decide what they will grow on their lands and how they will rotate crops. Each household has plots spread all over the three-agro-ecological zones, with the travel between plots adding to the labor time involved. Table 4.1 shows the private land tenure structure for the community of Quilcas which reflects the situation in Colpar. These data were collected during the 1994 census (INEI 1994) and shows that more than half of production units had less than 0.5 hectares of land. According to this same census, the district occupied 14,342 hectares in 1994. The community of Quilcas occupied 14,079 of these hectares (98%) while the remaining area (2%) was in private hands (INEI 2004).

Table 4.1 Size of agriculture production units in Quilcas for 1994 (Source: INEI 2005)*

Size of production unit	Percentage of individual unit
Household with no land	0.14
< 0.5 Ha	54.38
0.5 - 0.9 Ha	17.94
1.0 - 1.9 Ha	14.56
2.0 – 2.9 Ha	6.35
3.0 – 3.9 Ha	2.40
> 4.0 Ha	3.81
Abandoned production unit	0.42

n=708

* does not include communal grazing land.

Colpar is located within the Suitucancha and the Anya watersheds, and water quantity and quality is a source of concern for the community. The rainy season goes from October to March with an average annual rainfall of 750 mm. The rest of

the year is characterized by occasional rain and frosts and a high rate of evaporation and solar radiation (Nuñez et al. 2001). Though no official information is yet available, we have observed that water has become an even greater concern for peasant farmers in Colpar, as will be discussed in the chapters regarding the identification of issues to address as part of the various development projects that took place in Colpar as part of the modernization process (Chapter six through nine).

Cultural Capital

According to the 1994 rural census, only three percent of the population in Quilcas spoke Quechua as their first language, while the rest of the population reported Spanish as their mother tongue (INEI 2005). Both in the urban and rural sectors of the town, women were more likely to have Quechua as first language. From the total Quechua speaking population, 58 percent were women and the majority could be found in the rural sector. The number of Quechua speaking people has steadily decreased. Most of those who still speak Quechua as their first language are *yernos* and *nueras* (sons-in-law and daughters-in-law) who come from Quechua speaking areas in the Mantaro Valley or departments such as Ayacucho or Huancavelica where Quechua is in common use. Language is inherited through the mother rather than through the father, so in many cases small children learn to speak Quechua before they learn Spanish. Spanish is the official language used in school, and there is no Quechua language course offered at elementary or secondary level.

Local festivals are so important for the community that there is a section within the community of Quilcas' internal rules and regulations (Article 46, Community of Quilcas By-Laws 1999) that identifies the relevant celebrations. Celebrations mentioned are:

- a) *Virgen Santa Inés*- Patron saint of the communal farm
- b) *Santa Cruz de Mayo*-Township Patron Saint
- c) May 27th-Civic commemoration
- d) June 24- Peasant's day

- e) July 28- National independence day
- f) September 2- Anniversary of the recognition of Quilcas as an peasant community

The maintenance of the traditional organizational structure despite the introduction of modern political structures, such as the district, municipal and provincial governments, has helped preserve cultural capital in Colpar. Traditional techniques are prevalent in farming activities. According to Zúñiga et al. (2000) peasant farmers grow native potatoes using techniques markedly different from those of modern agriculture and varieties inherited generations ago. Each family grows its own particular mix of varieties. Traditional agricultural practices include land rotations to preserve soils and intercropping to control pests. Potatoes are planted under a *tikpa* (no-till) system. The seed is placed in a hole dug with a *chakitaklla* (Andean foot plow) and then covered with a handful of manure. This system prevents erosion in terrain that often has over 80% gradient (Zúñiga et al. 2000). Because private land is inherited equally among all children and families tend to be large, with each generation the amount of land available to an individual sharply declines. Some siblings leave the community and give as a loan their allotted land to another sibling that in turn will reciprocate by sharing the production of this plot. In Colpar, the community has been the main actor in the building of its own infrastructure and services through the *faena* system. This traditional system involves organized group work aimed at benefiting the community as a whole. All active members of the community are required to participate in communal work. However, they can pay a fee and someone else will take their place.

Modernity has brought to the community many external foods that threaten to replace local cuisine and impoverish the nutritional value of the household diet. However, Colpar members take pride in their local dishes. Regardless of the introduction of rice, bread and pasta into their diets, the communities within Quilcas have managed to preserve many of the local crops as prominent ingredients in their daily food preparation. Potato, corn and faba beans are found in the family's diet throughout the year, with other Andean tubers and pulses adding up during the

harvest season. According to Zúñiga et al. (2000), native potato varieties play a triple role in the community: as staple food, cash crop and key component of the traditional cropping technology. Native potatoes are a very important component of the family diet. They are rarely sold and are appreciated because of their different tastes and textures according to the variety. Native potatoes are enjoyed either cooked in an earth oven (*pachamanca*) accompanied only by a hot sauce or as sides to meat dishes (roasted guinea pig or sheep) seasoned with local herbs which are mainly prepared for festivities.

Though not used as extensive as in other communities in the Central and Southern Andes of Peru, coca is still of relevance in Colpar. Coca is an important part of communal traditional ceremonies such as the marking of animals or the initiation of planting season. Before it starts, a small ceremony may take place where coca, cane alcohol and cigarettes are offered as *pago* (payment) to the *pachamama* (mother earth) for using her resources. If the community does not fulfill this payment, it is belief crops will not yield or will succumb to diseases, the climate will not be favorable and animals will die or grow sick. Chewing coca, often with a dash of lime to liberate the alkaloids is also common in Colpar. Youth in Colpar do not seem to engage in chewing as much as the older generation (mid thirties onwards), probably because they participate very little in community activities and also because chewing is part of the old ways, making this activity less attractive. Apparently more women than men chew coca in Colpar. As in other Andean communities, coca plays an important social role in Colpar. Mayer (2002) summarizes this role very well when he points out that:

[c]oca plays a very important role as lubricant of reciprocal exchanges, facilitating and propitiating the climate in which these exchanges take place... The ceremony and often ritual act of consuming fresh coca leaves in a group, surrounded by friends, creates an atmosphere of solidarity that is indispensable for carrying out reciprocal exchanges (p. 177).

In 1995, in Colpar it was not uncommon to have people chewing coca while participating in workshops. One person, usually a woman might arrive with a bag of coca and pass it around with the *llipta* (lime) for those who wanted to enjoy the

whole flavor of the coca and liberate the alkaloid. Aside from coca representing the sharing of a good, it also served to somewhat numb hunger and fell less tired though its stimulating effects are not at all like those of chemically processed coca. Although coca has frequently been unjustly attacked, it is an important part of Andean culture as can be seen in Colpar.

Modernity is also present in people's every day attire. Men no longer use traditional outfits unless, for example, to participate in dances at local festivities or contests. Women on the other hand, use a blend of both western and traditional clothes. Their attires are composed of colorfully hand-embroidered skirts and hand-weaved mantas (blankets) combined with knitted long pants to protect against cold.

Human Capital

According to the 1994 census, population distribution by age and gender for the District of Quilcas, as seen in Figure 4.4, is relatively even, with the female population representing 51.4% of the total. The fact that there is a relatively high proportion of people in the age range of more than 65 years probably reflects the migration patterns of the younger population (INEI 2005). It can be assumed that a similar distribution applies to Colpar's population. The majority of those who migrate remain in the large urban areas even as they age.

More than two thirds of the 1,047 children age five to fourteen years in Quilcas attended school in 1994 (INEI 2005). According to the 1994 census (INEI 2005), in the district of Quilcas 55 percent of the total population aged five and above (urban and rural) had only primary education and 22 percent had secondary education. The highest number of people with no formal schooling is found in the rural areas, females being the less likely to get any type of education. Approximately 48 percent of women in rural areas have no formal education compared to ten percent of men. In 1994 less than six percent of women had completed secondary education or more versus ten percent of men who had completed their secondary education or beyond (INEI 2005). Children from Colpar enroll in pre-school and elementary school in their community. Any further studies must either be done in

Quilcas's secondary school or, if their parents can afford it, children enroll in schools in nearby towns such as San Jerónimo de Tunán or Huancayo city.

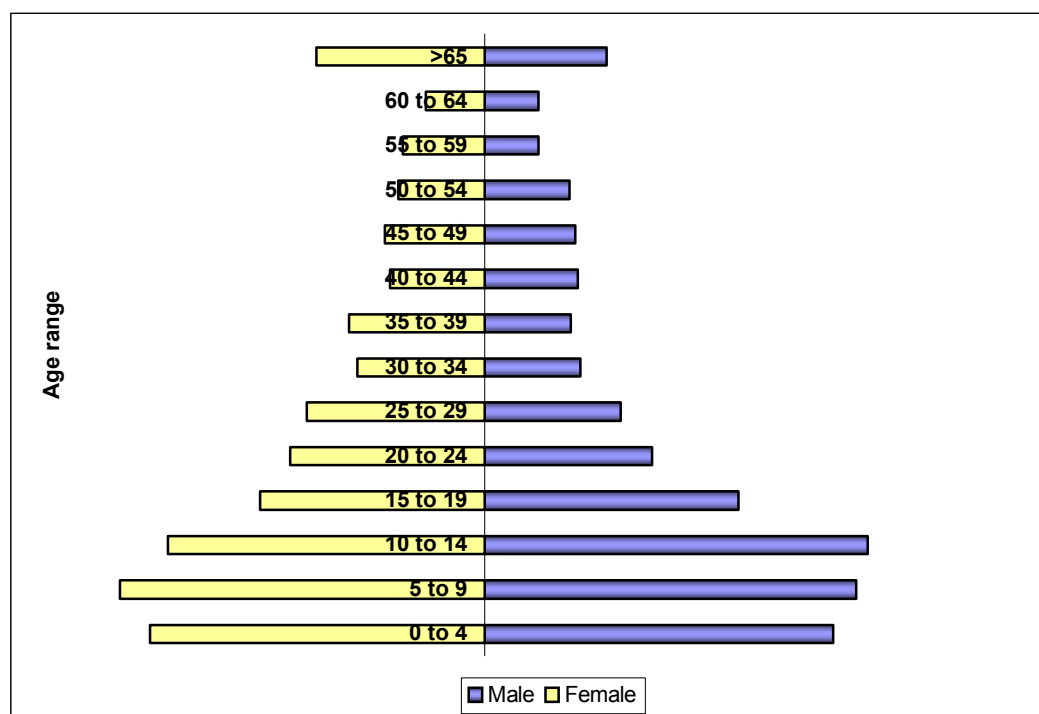


Figure 4.4 Age pyramid for the District of Quilcas (Source: INEI 2005)

Before the intervention period, the estimated total population of Colpar is 463 people grouped in 74 families with five to six members per family. In 1995 Colpar's has 43 registered community members in Quilcas, 27 men and 16 women. These are all active members³ of the community with rights (access to communal resources) and obligations (communal chores and willingness to form part of the directive board when needed) (Colpar Community records 2000). The remaining

³ Quilcas and Colpar's community by-laws interchangeably use the terms active, qualified and integrated members for recognized community members. An active member has rights (access to communal resources) and obligations (communal chores). Members are disqualified as such if they quit or are sanctioned; they no longer have rights to communal goods however they must continue performing communal chores and pay public quotas. Non- community members (living in the community) have access to public goods (i.e. electricity, running water). To access communal resources (crop and grazing land, irrigation where available) they have to pay large amounts of money to the community (Quilcas By-laws 1999).

thirty-one households that do not have active members of the community either were retired or non-active community members or families that had made the decision to not belong to the community. Non-community members reside in Colpar because their house is located there. These residents are engaged in for profit private agriculture practices, mostly outside Colpar or engage in full time off-farm jobs. They are often referred to as the “rich” farmers by other residents.

Access to health care is an issue in Colpar. There is one state-paid nurse assigned to the community that travels two to three times a week from Quilcas to provide attention to Colpar residents for minor ailments. If a Colpar resident needs a doctor, he or she must go down to the medical post in Quilcas, a 30 to 40 minute walk. Very rarely does a doctor go to Colpar. Due to this lack of availability of reliable health services, there have been cases where residents have died due to lack of assistance. In 1994 there were no activities to train local EMT or other local responders. Colpar residents often use local and traditional medicine in the form of a *partera* (midwife) and *curanderos* (healers) as their first option. Only when all other options have failed or there are state-organized health screening campaigns, do they seek state-provided medical attention.

Social Capital

The majority of community members belong to at least one organization other than the community. One of these organizations is the *rondas campesinas* (peasant security body) that were first established to impede the entrance of subversive groups during the period of social unrest in Peru. In time, they have become less involved in protection against social violence and more concerned with common theft that has become widespread once Shining Path, *Movimiento Revolucionario Tupac Amaru* (MRTA- Tupac Amaru Revolutionary Movement) and the military were no longer in the region. Some community members from Colpar and Quilcas belong to the *Sociedad de Criaderos* (livestock producers’ society). The main role of this society is to promote the rational utilization of land for livestock production by establishing rules and regulations regarding the number of animals per family that

can graze according to the carrying capacity of the pastures. It is such a strong society that being a member gives access to grazing lands. Otherwise a non-member must negotiate access to grazing lands by offering their services in activities such as sheep herding, bathing or marking of animals. Though mostly men form the society, it is their wives, daughters or daughters-in-law who stay in the highlands, taking care of the animals, while the husbands are in charge of the politics and building political capital. The *Sociedad de Criaderos* has provided money to pay legal fees for community disputes regarding boundary litigations with neighboring communities.

Other important associations in Colpar are the APAFA (*Asociación de Padres de Familia*- Parent's Association), which has a very active role in making sure that children in the community have the necessary infrastructure and means to study at the elementary school. Another group is the *Asociación del Vaso de Leche* (Glass of Milk Association) formed mostly by women who are in charge of receiving a monthly milk quota from the state and distributing it among all families with small children. Likewise there are *Clubs de Madres* (Mothers Clubs) that were formed under the sponsorship of the Catholic Church and other non-profit organizations such as Grupo Yanapai and a regional NGO, Educational Services, Outreach and Rural Support (Servicios Educativos Promoción y Apoyo Rural—SEPAR). In 1993 Grupo Yanapai brought women together to work in small scale production projects aimed at improving household income by raising pigs, rabbits and guinea pigs or through potato production. Some of these groups continued to exist after the end of the funding of the projects, becoming visible only during festivities or political campaigns, when they were brought together to represent women's organizations in the community.

Political Capital

Colpar is a peasant community with its own elected authorities; however it also forms part of the “mother” community of Quilcas who do not officially recognize its status as community and always refer to Colpar as an annex or *barrio*

indistinctively. Nevertheless, Colpar has the same government structure as that of recognized communities in the area. Colpar has three types of elected officials: community (community board), municipal (municipal agent) and political (lieutenant governor). The first two authorities are elected in general assemblies. The lieutenant governor is elected in general assembly and officially recognized by the Municipal District Governor representing the Country's Central Government. The Lieutenant Governor is in charge of public safety and making sure government regulations are obeyed. The community board is the highest officials within the community. It is in charge of administrating natural resources and is the legal representative to the mother community. The municipal agent is responsible for the "urban area" within the *barrio* and for authorizing opening of small businesses. Additionally, the agent represents the citizens of the *anexo* in dealings with the district municipality (Fernández-Baca and Fernandez 2000). The community also has a water board that is in charge of administration of services, collection of fees and distribution of potable water (Grupo Yanapai 1999).

Though Colpar considers itself as an autonomous community, that autonomy is not absolute. Quilcas makes a number of key decisions on the allocation of capitals that impacts Colpar, decreasing Colpar's ability to invest their existing community capitals. Colpar depends on Quilcas for major decisions such as communal land distribution, use of grazing land, access to land and use of the communal forest. Colpar does not manage the communal forest independently. When the community needs wood for the common good, it has to make a petition to Quilcas indicating how many trees it needs. Colpar's access to water depends mostly on decisions made at the Municipality of Quilcas. In Colpar, there are two forms of land tenure: private and communal. Private land is in the low and intermediate agroecological zones. In the higher agroecological zones, land is allocated by household represented by one person, male or female, registered as member of the community.

Financial Capital

The 1994 agricultural census shows 79% of people in Quilcas consider that agriculture does not cover their household needs (INEI 2004). For those in the community dedicated to agriculture, production is basically for household consumption. Most often than not, production is not sufficient and has to be complemented with the purchase of other food products. Animals are a source of wealth in Andean rural communities, and Colpar is no exception. Having a herd of llamas for hire during harvest season or having sheep, pigs or a cow can determine the difference in the degree of household poverty and its access to resources. Having animals provides traction for agricultural activities in the lower altitudinal zones and transportation for crops and other agricultural inputs. It also provides essential fertilizer, especially for communal fields and in some cases, fuel.

During the harvest, llamas are most the common mode of transportation of products. Transportation can be given in exchange for labor. Three days of potato harvest in the high zone can be exchanged for the use of 15 llamas to bring 540 kilos of potato down to town. If this exchange did not take place, potato transportation would cost the equivalent of slightly more than two US dollars for each 100 Kg of potato, using only three llamas (Edgar Olivera 2000, personal communication).

A herd of animals can be considered the Andean piggy bank. The more animals a household has, the more financial capital will be available for necessities or emergencies. However oversized animal populations may have detrimental effects on communal lands due to overgrazing.

At least one member of the household is pushed to seek income in the community or outside the community as an agricultural laborer, trade or construction to fulfill the household's basic needs. Some community members engage in other economic activities that can be local such as carpentry, construction, cutting timber or mining; or activities that take them out of the community such as metal mining in La Oroya, informal business in nearby Huancayo or other urban city, construction, or others.

There are also those that are exploring new agricultural frontiers by going to the Amazon region to start agriculture of more profitable crops (such as coca). Most of these migrants are temporary ones that can sometimes turn into more permanent ones. In Colpar, men are more likely to migrate than women, though single young girls can also leave the household looking for jobs as maids in cities like Huancayo or Lima⁴. The 1994 agricultural census (INEI 2005) shows that most migration occurred between January to March and the least migration occurs in September and November. This pattern coincides with the agricultural calendar, with farmers absent during the rainy months and returning when agricultural activity needs to take place.

Brick and tile-making are important economic activities. Fabrication of bricks and tiles has been a source of income for a number of households located in the lower agroecological floor in Quilcas, especially families who consider themselves part of the urban sector. People in Colpar can also engage in this activity as hired labor. Such an industry has existed in this area since colonial times and makes intensive use of water, soil and wood. These resources have become less available with time for families who subsist on agriculture as brick-makers have access to the better soils as well as sources of water.

Built Capital

In 1994, Quilcas had one medical center with a permanent doctor and four nurses. The center closes in the evening leaving anyone with an emergency with no other option than to go to the regional hospital in Huancayo. There are two health posts, one in Colpar and the other in Rangra. The one in Colpar has a nurse or health assistant that goes up every day from Quilcas and stays only until around midday. There is a communal phone in Quilcas, installed around 1995, but no internet connection, though there is likely to be one by 2007. Television reaches the town of Quilcas though the signal is not strong due to the mountains that surround

⁴ Note that the population pyramid seen in Figure 4.4, page 41, shows that there are fewer girls than boys age 10 to 14 in the Quilcas District.

the town. Colpar does not receive television signals, but radio stations have relatively clear signals, especially the Huancayo stations. Some stations that originate in Lima and have national coverage can be clearly heard there.

In Colpar there is no playground, but the elementary school has a big patio that is used for festivities and to play football now and then. In Quilcas around two thirds of households do not have sewage but have running water. In Colpar no household has sewage. Almost all households have running water, a service provided by state institutions. In 1994 only 32 out of 717 production units in Quilcas had access to some type of irrigation, such as a river, a well, or a permanent irrigation system.

All households have access to electricity. However, the service is very unreliable, and many of the connections from the public electrification system are done informally and therefore are a constant threat and are not paid. Quilcas has five pre-schools, five elementary schools and one secondary school. One pre-school and one elementary school are located in Colpar. When children finish their elementary studies, they are forced to go down to Quilcas every day by foot to school. Some families opt to send their children to other secondary schools, since there are not enough places available in the secondary school in Quilcas. Football (soccer) is the favorite sport in Peru and Quilcas has a soccer field.

Both Quilcas and Colpar have their own community buildings where meetings might take place. Quilcas shares the building with a non-profit organization, and its communal space is too small to hold assemblies, therefore the municipal hall is usually used for these events. Colpar is connected to Quilcas through a dirt road that cannot be used for vehicle transit during the rainy season. By foot, Colpar is around 45 minutes away from Quilcas. Walking trails connect Colpar to other neighboring communities and crop and grazing lands.

Summary

This chapter describes the setting and the capitals situation in Colpar before intervention. I have described the community of Colpar and its assets in the context of its nestedness within the larger Quilcas community.

Colpar's access to different capitals, especially natural, human and political, greatly depends on the decision made in the mother community of Quilcas, that is, on Quilcas' political and social capitals. Therefore we study Colpar within the context of Quilcas in order to understand the social changes brought about by the modernization process. What affects the community or the district of Quilcas will almost always affect Colpar.

In the next chapter I will introduce Grupo Yanapai, an important external actor in the modernization process of Colpar. I explain the working and research relationship that has developed between community and the external organization and how this relationship has set the type and level of participation the community has had in different development projects. Chapter four and Chapter five set the scenario for my analysis.

CHAPTER 5. EXTERNAL INTERVENTION: GRUPO YANAPAI AND ITS RELATIONSHIP WITH THE COMMUNITY OF COLPAR

This chapter analyzes external Interventions, specifically the work the Non-Governmental Organization (NGO) Grupo Yanapai has done in Quilcas, and the type of relationships developed with the community of Colpar and the mother community Quilcas. It is important to look at this specific organization because Grupo Yanapai introduced participatory action research to the community and facilitating the research and development processes that took place during the 10 year period that I am studying. In this chapter I first look at NGOs in general and their role in development processes. Why have NGOs taken such a relevant role in development worldwide? I will answer this question by going through the existing literature on NGOs. This brief review will give a frame for the existence of Grupo Yanapai and the role it has taken in Colpar. Finally, this chapter gives an overview of the different projects that took place during the mentioned period. Knowing what each of the projects objectives and aims are will help understand the context behind the results presented in the following chapters.

Relevance of Non-Governmental Organizations in Development

According to Clark (1991), voluntary organizations, more formally known as non-governmental organizations (NGOs), have existed as relevant actors in development in the form of self-help community and missionary organizations, even before any official aid agency such as United Nations or the World Bank came into existence. In the late 1980s, Northern NGOs collectively transferred more aid to the South than the World Bank group did (Clark 1991:39). It is important to note that most of the funds transferred by NGOs do come from a variety of governments. They are mostly dependent on governments for their funding. The most important trait of NGOs is that they have pioneered new approaches and challenged development orthodoxy (Clark 1991:3). Farrington and Bebbington (1993) point out that there are six categories of organizations that have been identified as falling

under the label NGO: (1) relief and welfare agencies, (2) technical innovation organizations, (3) public service contractors, (4) popular development organizations, (5) grassroots development organizations, and (6) advocacy groups and networks. NGOs can have their origins in the North and have activities in the South; they can be southern-based branches or affiliates that operate with a high degree of autonomy; or they can be South-based organizations. According to Fisher (1998) in the South, the term NGO is generally used to refer to organizations involved in development. The proliferation in the South of NGOs over the last thirty years has served an important role in nurturing sustainable development and viable civil society as well as in the promotion of political rights and civil liberties (Fisher 1998:13).

Figure 5.1 provides a clear summary of the diversity among NGOs regarding ownership, scale in which they provide services, approaches the organizations use and their operational dimensions.

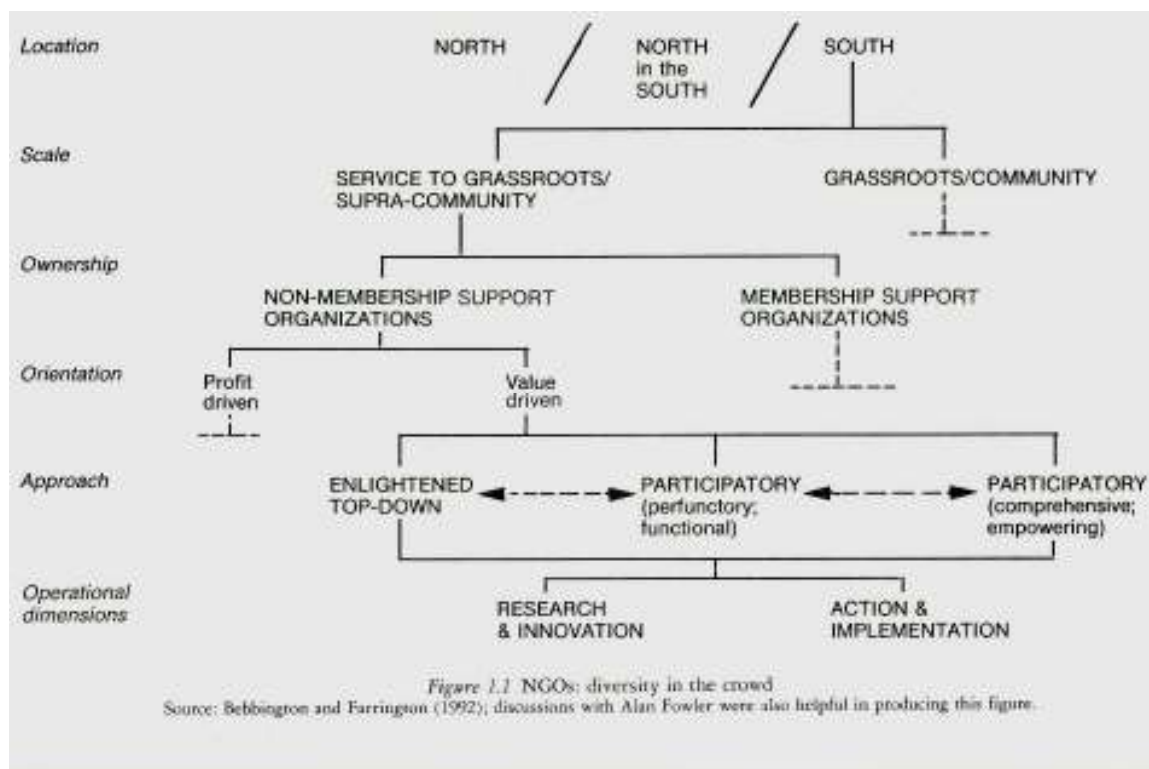


Figure 5.1 Diversity within NGOs (Source: Farrington et al. 1993)

NGOs have frequently demonstrated their ability to help those in need who have been missed by official aid programs (Clark 1991). Farrington and Bebbington (1993) attribute part of the increasingly relevant role of NGOs to a disappointing performance of the state in the past. "Many Southern NGOs have successfully challenged socially or environmentally damaging programs pursued by their own governments" (Clark 1991:3). Economically and politically, many states have shown inefficiency in the implementation of development programs and more interest in controlling and molding society to their own interest rather than responding to the needs of that society (Farrington et al. 1993).

Bebbington et al. (1993) highlight that National Agriculture Research and Extension Services (NARS) did not have the appropriate technology to solve rural poverty on their own. Mechanisms have to be found "for generating these technologies, for ensuring that their continuous generation is institutionalized, and for combining technological interventions with other elements of socioeconomic change" (Bebbington et al. 1993:16). NGOs have become attractive actors within development through innovative ways to transfer and develop technologies and processes. NGOs can exert pressure over NARS to reorient their work towards the rural peasant farmer, incorporating methods, institutional arrangements and technologies developed by NGOs. However NGOs can exert this pressure only if they have funding. In most cases it is the international donors that put on pressure over NARS through the NGOs to whom they are more willing to give funds to.

NGOs can also become partners to NARS and work together to increase effectiveness of both the NARS and NGO's own work. Likewise NGOs may contribute to NARS through their actions in rural society as development institutions that respond to peasant farmer's needs, as capacity builders at grassroots level and as advocates for change of policy detrimental to the rural poor (Bebbington et al. 1993). Farrington et al. (1993) point out that NGOs take a wider view of agriculture and technology than NARS. For these authors, NGOs' efforts to promote technological change in agriculture fall into two broad groups: production-oriented and agroecological approaches.

Non-governmental organizations are not perfect organizations. Though they have strengths, these strengths can also become weaknesses. According to Clark (1991), some researchers into NGO work argue that “the rhetoric of ‘working with the poorest of the poor’ is overstated” (p. 47). Researchers affirm that though NGOs do reach poor people, there is no solid proof that demonstrates NGOs substantially benefit the poor. Other strength for which NGOs are recognized for—that can also sometimes turn into weaknesses—are:

1. **Popular participation in development processes.** According to Clark (1991), popular participation can only occur if it is well understood and desired by the intended beneficiaries of a project. The same author points out that NGOs can find it challenging to “ensure that the discussions and conclusions [to assure sustainability of a project] reflect the views of the poorer and less confident members of the community (particularly women), rather than those of traditional community leaders” (1991:49). In their attempt to foster new leaders from the above mentioned sectors, NGOs may face strong resistance from traditional leaders.
2. **Innovation.** NGOs in comparison to official aid agencies and governments have greater flexibility for innovation. They can experiment, adapt and attempt new approaches. However sometimes these same positive characteristics can be considered a form of amateurism (Clark 1991:51).
3. **Engagement in small-scale activities.** To avoid the difficulties related to participatory projects when they become larger (i.e. complex decision-making processes, greater chances of local elite hijacking the benefits), most NGO programs prefer remaining quite small. The problem of small projects is that they benefit few people (Clark 1991).
4. **Commitment of staff.** NGO staff is usually highly committed to their work. They can work long hours for low pay. However this commitment to work is not always translated to commitment to the organization itself. This is more frequently seen in Northern NGOs. According to Clark, it might be difficult to convince field staff to “follow approaches and procedures agreed centrally by the organization since

those staff prefer to receive their work signals from colleagues at the periphery—colleagues they are able to choose for themselves” (1991:53).

Apart from the mentioned strengths that sometimes may turn into weaknesses, there are other weaknesses recognized by Clark (1991) among which legitimacy is a major one, especially in countries in the South. Anyone can set up an NGO, write a convincing project, and misuse funds granted by donors. Unfortunately this has happened more often than not. Additional weaknesses mentioned by Clark (1991) are that of leadership problems, staff problems, faulty project design, and accountability problems. Grupo Yanapai, the NGO in charge of the development programs and projects that took place in Colpar, has shown many of the strengths as well as weaknesses mentioned by Clark. The following section presents the history of Yanapai and its work in the community of Colpar.

Grupo Yanapai

Grupo Yanapai the non-profit organization involved in my research in Colpar, was created in 1983 with the objectives of: (1) promoting productive, educational and cultural development of the peasant families in the Mantaro Valley; (2) supporting the formation of peasant extension agents and professionals that would be in charge of strengthening organizational structures within the community and improving the peasant family's—especially women's—productive technology.

The NGO relied on the use of participatory action research (PAR) to strive towards these objectives. Yanapai worked with small organized groups of peasant farmers within the community, using PAR methodology to define relevant agricultural issues or problems as they were called then (Olivera 1999). Grupo Yanapai is identified as a South-based organization that has gone from being a technical innovation organization to a grassroots development organization.

The NGO initiated its research and development activities in Aramachay, a peasant community located towards the south-west of the Mantaro valley. Yanapai studied agricultural activities in Aramachay to characterize these activities within communities in the Mantaro Valley. With the community's participation, productive

and organizational problems were identified and alternative technology to improve production proposed and validated. In 1988, Grupo Yanapai had to abandon the area because of the growing social violence that cost the organization the life of two of its members. From 1988 until 1992, the organization kept a low profile, working mostly on testing technological alternatives to modern medicine, use of traditional medicinal plants for the treatment of animal diseases (ethnoveterinary practices), in the confines of an experimental station belonging to a Peruvian National University located in the Mantaro Valley floor.

By 1993, it was safe to return to the communities in the Mantaro Valley, and Grupo Yanapai initiated work, this time on the other side of the Mantaro valley, in the District of Quilcas. There was a demand for technical support by the Regional Women's Center (Central Regional de Mujeres) "Yachaq Mama", which was working with women's organizations in various districts in the valley, one of which was Quilcas. Through participatory diagnosis, a scarcity of potato seeds and declining animal health were identified by women's organizations (mother's clubs) in these districts as the main problems. Though diagnosis was done in five districts in the valley, Grupo Yanapai focused on women's organizations in Quilcas because it was one of the few communities in the Mantaro Valley that managed all three agroecological floors, providing a unique opportunity to work with peasant farmers that used traditional technology and ancestral natural resource conservation practices (Grupo Yanapai 1999). Grupo Yanapai worked with women's organizations in all five community neighborhoods, Colpar included.

In 1994 I was invited to become a member of the organization. At that time I was working at the Veterinary Institute for Tropical and Altitude Research (IVITA by its Spanish acronym) of the Faculty of Veterinary Medicine, University of San Marcos in Lima, Peru (Universidad Nacional Mayor de San Marcos). I was assigned to one of its experimental stations located in the lower Mantaro Valley. Grupo Yanapai was based in the same experimental station at that time though they had initiated their return to the communities. Members of the NGO initially contacted me because I had just finished a survey regarding the current state of livestock

production systems in the lower Mantaro valley and Yanapai was interested in doing something similar in small peasant communities in the intermediate and high zones. We never got to develop a study of this sort though through our conversations I became acquainted with the work they had started in Quilcas and its barrios and annex. Since I had also been doing some filming for a video about IVITA, Grupo Yanapai asked me to film their work with Mothers Clubs and potato production. My interest in community work increased the more I interacted with Yanapai and the community. When ILEIA came to Peru to start identifying partners for their research, Grupo Yanapai and IVITA were invited among other local NGOs and research institutes, to participate in a series of workshops to determine if their visions were similar to those of ILEIA. The president of Grupo Yanapai at that time recommended I be named one of the IVITA representatives. It was around this time that I was handed a formal invitation to join Yanapai as a member. I accepted and my membership was confirmed in the next annual assembly meeting. Being a member of Grupo Yanapai does not involve paying dues though it does mean that when ever it is needed, we give voluntary time to work on proposals. In all my time as member, I have been involved in the collective writing of various project proposals. The acceptance of my membership in 1995 coincided with my leaving IVITA and joining the ILEIA team.

After the series of workshops mentioned above, ILEIA decided to formally invite Grupo Yanapai to participate as one of their partners in a research and development project funded by the Dutch government. This was the opportunity Yanapai was looking for to start working with both men and women in the community. I put my membership hat aside and assumed a supervisory role that year, becoming project coordinator for the Centre for Information on Low External Input and Sustainable Agriculture project (ILEIA). In 1997, Grupo Yanapai and the community, in association with an international NGO, the International Support Group (ISG), engaged in a new project funded by the European Community that permitted the continuation of work regarding natural resource management. My job from 1995 to the beginning of 1999 was to oversee these natural resource

management and sustainable agriculture projects in the communities of Colpar and Quilcas.

An important characteristic of the work Grupo Yanapai performed was that it supported community development processes. Additionally, the NGO took a proactive stance on the participation of women and provided only human resources—technical knowledge and facilitation skills. Rather than engage in transfer of modern technology to the community or providing material incentives, as many NGOs were doing at that time, Yanapai looked at a participatory blend of local/traditional and modern knowledge. The organization sought to involve community members in all stages of collective action projects and programs implemented. For Yanapai, projects or programs were the means by which participatory learning processes leading to change and solution of problems were supported. According to Fernandez (1989), Yanapai's research-extension approach necessarily needed to include a number of objectives to be successful: (i) participation, (ii) sustainability, (iii) collective action, and (iv) group autonomy.

In 1993, the level of participation in Grupo Yanapai's work would be considered functional participation according to the continuum developed by Pretty and Chambers (1994). Women in Quilcas formed groups according to the *barrio* in which they lived and participated in a pre-established project. The groups had to confine themselves to selecting agricultural production activities that were usually identified as women activities. Therefore the two options were raising small animals and seed production. According to Grupo Yanapai's field team, the women's groups decided the type of small animals they wanted to raise—selecting rabbits over guinea pigs—and the type of potato seeds they would plant. Through this first activity with women's groups, Grupo Yanapai began to establish a relationship of trust with the community. Action research projects were done with women. Due to the level of trust developed between members of Yanapai and the Colpar community board, it became easy to negotiate the use of a small area of the land assigned to the community of Colpar (land used for communal activities), for seed potato production. By 1995, when the focus was directed to the entire community, Grupo

Yanapai and the community had started the process of moving from functional participation to interactive participation. Through the last process initiated in partnership with the community in 2000, self-mobilization became one of the expected (though not explicitly identified) outcomes.

Having access to small funds could have both positive and negative consequences. On one hand, it helped set the parameters of what could and could not be done. Neither infrastructure nor equipment were provided; instead, the project provided capacity building and facilitation of processes. Thus Yanapai did not perpetuate a culture of dependency. Attachment with the community was based not on the provision of material goods but on their joint work and common future vision (sustainable community livelihoods). On the other hand, having so little funding meant a focus on day-to-day survival for Yanapai, as it constantly faced the risk of running out of funds before new funds were found. This, of course, is the normal way of survival of many small NGOs.

Before explaining the different processes that took place in the community during the decade I am studying, I think it is necessary to provide some information on the different projects and organizations involved in them. For all projects that served as axis for the community processes, Grupo Yanapai partnered with other organizations or institutions that were also the ones that channeled the funds. This gave these partners a chance to become more involved in the processes, rather than just act as outside observers who received reports and updates. At the same time, the community also had the chance to interact with the partners. Table 5.1 shows a timeline with all projects and programs that took place during the period of time I analyze. The table includes the type of capital or capitals that were the initial targets and that were built on as well as what other capitals were affected as a result of the initial capital investment. I put financial capital with a question mark under ILEIA because in not so explicit terms, one of the objectives of this program was to enhance the ability of peasant farmers to farm sustainably and to produce surplus for sale at niche markets. It is important to point out that access to social and financial capital were critical for Yanapai's ability to work with Colpar.

Table 5.1 Projects/Programs timeline

Processes	Period	Capitals targeted on	Other capitals affected
Low External Input and Sustainable Agriculture (LEISA) Program	1995-1999	<ul style="list-style-type: none"> • Natural • Human • Financial? 	<ul style="list-style-type: none"> • Built (at household level) • Cultural
Concerted Action for Local Development Project	1998-2000	<ul style="list-style-type: none"> • Natural • Human • Social 	<ul style="list-style-type: none"> • Political • Built
Sustainable Agriculture and Natural Resource Management Collaborative Research Support Program (SANREM CRSP)	2000-2005	<ul style="list-style-type: none"> • Natural • Human • Social • Political 	<ul style="list-style-type: none"> • Cultural • Built

Low External Input and Sustainable Agriculture Program 1995-1999.

This program was initiated in partnership with the Center for Information on Low External Input and Sustainable Agriculture (ILEIA), located in The Netherlands. The process initiated as a “learning partnership” and later due on, to internal administrative changes in ILEIA, shifted to a “technology development” process. The ILEIA program started as a collaborative program aimed at “[e]xploring the potential of LEISA within the cultural, socioeconomic and ecological setting of their working areas” (ILEIA 1999). One of the major goals was to assess potentials and constraints of ecologically sound agriculture (Ramirez 1997). Peasant farmers partnered up with researchers from Grupo Yanapai and its other partners within the larger national and international program. These stakeholder groups did an assessment of agroecological conditions using Agro Ecological Resource Mapping (AERM) and participatory soil surveys to learn more about the conditions of natural resources in the area. According to Ramirez (1997) information such as this is a key input for the development of ecologically sound agriculture systems. Understanding how farmers categorized their natural resources became the entry point for dialogue with the community. The first phase of the program aimed at understanding how community organizations can better link with NGOs, researchers, extension workers and universities to ensure exchange of relevant information (Ramirez 1995).

The second phase of the program started in 1997 and was brought about by major changes in the organization that housed the program and with it changes in ILEIA's approach to the mandate. Participatory Technology Development (PTD) became the focus of the program, and with it came a shift towards a problem solving model. The community went through a process of participatory problem analysis, prioritization, experimentation and the identification of possible solutions in trying to find new ways of dealing with their agricultural production problems. The introduction of the PTD approach took place through "an intensive, iterative process of learning by doing in which training and practice followed each other" (ILEIA 1999:57). During this phase Grupo Yanapai first took the role of the link between the community and the external "experts" that came to train community members and the NGO staff on how to use this new tool. Later on, Yanapai became facilitator and back-stopper to the process. Though there were groups of 'experimenting farmers' very active in PTD, there was a feeling by both the community and the NGO of having left a process incomplete when the switch from one way of working to another completely different way of working occurred in 1997. This changed in 1998 when Grupo Yanapai agreed to partner with another organization and start the Concerted Action Project.

Concerted Action for Local Development Project 1998-2000

In 1998, Grupo Yanapai started working in collaboration with the International Support Group (ISG), in the Concerted Action for Local Development Project. This project, funded by the European Union, was coordinated by the Latin American Center for Rural Development (RIMISP – Centro Latinoamericano para el Desarrollo Rural formerly known in Spanish as Red Internacional de Metodologías de Investigación en Sistemas de Producción). RIMISP is a regional non-profit organization whose objective is to promote organizational learning and innovation of policies, public and private programs, inclusion, equity, well-being and democratic development of Latin American rural societies (<http://www.rimisp.org> 2006). The project's main objective was to study the capability of science to evaluate *ex-ante*

the environmental sustainability of agricultural systems. The process to take place in Colpar aimed to fulfill the expectations of the RIMISP and the funding entity as well as to identify a useful tool for community development. The objectives were to evaluate:

- the sustainability of rural community development strategies;
- methodologies that facilitate the decision-making process of local actors.

This project took place in Brazil, Argentina, Chile and Peru. Different qualitative and quantitative instruments were evaluated. Grupo Yanapai was in charge of evaluating Rapid (or Relaxed) Appraisal of Agricultural Knowledge Systems (RAAKS). According to Engel:

RAAKS is a participatory action-research methodology to improve networking among people and organizations relevant to agricultural innovation. It helps stakeholders in agricultural development to ask and discuss among themselves questions related to the effectiveness of their networking efforts (1995:14).

RAAKS can help stakeholders formulate what type of innovation they want, to look critically at the way they are organized to achieve it and it helps them to formulate specific measures to overcome constraints or grasp opportunities. This methodology stimulates reflection and debate to organize team work and stakeholder participation (Engel 1995).

Sustainable Agriculture and Natural Resource Management Collaborative Research Support Program (SANREM CRSP) 2000-2005

SANREM was a research, training and information exchange program⁵ that brought together universities, research institutions, development organizations and rural communities working on ways to address natural resource management issues. Its aim was to support improved natural management decision making at all

⁵ This program was funded by the United States Agency for International Development (USAID)

levels, using an interdisciplinary and interinstitutional approach (SANREM CRSP Annual Report 2000).

Research activities under SANREM take place in the Andes, South East Asia and West Africa. The objective of the SANREM-Andes group is to “advance sustainable agriculture and natural resource management in fragile mountain and hillside landscapes through basic and adaptive research on participatory multi-objective, multi-scale, and multiple stakeholder decision support methods that enhance sound and equitable long-term agro-ecological planning and policy” (SANREM CRSP Annual Report 2000: 47). The North Central Regional Center for Rural Development (NCRCRD) of Iowa State University took the responsibility of studying the social component of the program in the Andes region in partnership with Grupo Yanapai in Peru. The overall purpose of that research is to increase the sustainability of Andean landscapes and lifescapes through improved natural resource management partnerships and decisions.

To address the social aspect of the project, the NCRCRD and Grupo Yanapai used the Advocacy Coalition Framework (ACF), an approach proposed by Jenkins-Smith and Sabatier (1993) which allows building on Stakeholder Analysis (SA) to understand positions of different social actors over time. The objective of the ACF is to:

...provide a coherent understanding of the major factors and processes affecting the overall policy process—including problem definition, policy formation, implementation, and revision in a specific domain—over periods of a decade or more (Greve 2001:272).

Stakeholder analysis permits the study of different people or groups of people in an organization, their stakes in an issue (i.e. social, economic, ecological), and what their different contributions and expectations are regarding this issue (Vaara 1995), while the ACF focuses on desired outcomes and mental causal models of how to achieve those outcomes. The ACF has been especially useful in looking at natural resource management policies in the United States. The study of politics of California’s water policy from the 1930s into the 1980s (Munro 1993); the analysis of the outer continental shelf oil and gas leasing debate (Fenger and Klok 2001), or the

study of policies regarding timber harvest in national forests during the last 30 years (Burnett and Davis 2002), are all examples. Likewise, ACF has been used outside the United States, such as in the study done by Carvalho (2001) in Brazil on the evolution of environmental policy formation, looking at the specific case of the metallurgical development in the Greater Carajás Program in the Amazon area of Brazil. The ACF allows analysis of the intricacy of decision-making and policymaking, identification of the different groups that form around relevant issues, and examination of the interaction that occurs between them when they try to influence decisions. Identification of the actors in each advocacy coalition is important.

The SANREM approach to ACF classifies the actors by sector—civil society, market, and state—and by level—local, state, federal and international—giving it a more multidimensional perspective than that of SA. This is a shift from Sabatier and Jenkins-Smith, who do not agree with the different sector designation and do not look at levels in their research. To them advocacy coalitions consist of actors from different sorts of governmental and private organizations at different levels of government. They do not aggregate actors according to type of institution, an approach they claim most political scientists normally use (Sabatier 1993).

In this research, we took ACF one step ahead by studying the multilevel, multi-sector dynamic interaction among stakeholders in their search to influence the rules, budgets, and leadership in specific state agencies in the pursuit of particular desired futures (Flora et al. 2006). Thus two elements are added to SA: interaction and dynamic changes within stakeholder groups over time. Another twist given to this framework was the use of participatory action research. By adding participation, research went from the study of existing coalitions and how they change/shift in time, to being part of processes of identification of relevant natural resource management issues, emergence of coalitions and the initiation of actions by coalitions to address these issues. One of the questions we had when doing this research was whether ACF can help inform us about how local actions that can enhance sustainability, ecosystem health, social inclusion, and economic vitality,

and therefore quality of life, are facilitated or constrained by decisions made at higher system levels (Flora et al. 2000a). Natural resource management is an important part of rural community quality of life everywhere. The guiding assumption of this research is that for natural resource management to be successful, civil society must participate in deciding how it is done.

Summary

From 1995 to 2005 Grupo Yanapai and the communities of Colpar and Quilcas engaged in participatory action research processes. I follow three consecutive, different projects and discuss how they related to the community. All these projects had the premise of using participatory action-research and were committed to being gender sensitive as well as inclusive. Throughout all processes that have taken place in Colpar and the greater community of Quilcas, Grupo Yanapai has taken different roles: facilitator, stakeholder and linking role. This has helped maintain a vital relationship with the community.

CHAPTER 6. IDENTIFYING NATURAL RESOURCE MANAGEMENT ISSUES: THE FIRST FIVE YEARS OF PARTICIPATORY COMMUNITY DEVELOPMENT

In the previous chapter I gave a brief introduction of the different actors and programs and projects that, together with the community of Colpar, are the key elements of my research. The next three chapters discuss in more detail the processes and analyze the outcomes of each one using CCF. Using participatory approaches to address community natural resource management involves investing time in order to observe any type of positive results. In the case of Colpar, the community had been introduced to participatory approaches three years before the period of my study through the work Grupo Yanapai had been doing with women in the community. Therefore, engaging the community in participatory work did not entail investing much time familiarizing the community to the approach nor in the development of a relationship of trust between community and NGO, given that this relationship already existed. In this chapter I analyze the first participatory community development program put in place to address natural resource management issues. I describe two different time periods and discuss the inputs of each of these efforts in terms of use of new technology as well as the rediscovery of traditional knowledge.

Introducing Low External Input Sustainable Agriculture in the Community of Colpar: The ILEIA Process

The ILEIA process went from a “learning partnership” to a “technology development” approach as a result of internal organizational changes within the Dutch institution managing the program. Though both approaches addressed ILEIA’s mandate from the Dutch Ministry for Development Cooperation (DGIS), the difference in them translated into a shift in the direction the program took in Peru. The mandate was to facilitate:

... [a] participatory assessment of the viability of LEISA technologies in different environmental and socioeconomic settings and substantiate this as far as possible by quantitative data. This participatory assessment should

include an attempt to understand the processes that lead to changes in farmers' livelihood and land-use strategies (Laban et al.1999:4).

Following this mandate, ILEIA saw LEISA as dealing with the technical and social options available to farmers—peasant farmers in the case of Peru—who wanted to improve their productivity and income in an ecologically sustainable way that built on indigenous and scientific agroecological knowledge through the use of participatory methodologies. LEISA involved optimal use of local resources and natural processes and, when necessary and economically feasible, efficient use of modest amounts of modern external inputs. In general, aside from being an approach that addressed sustainable use of natural capital, LEISA was concerned with empowering men and women to use their knowledge, skills, values, cultures and institutions to construct their farming future giving this approach cultural, social and political dimension.

As a conceptual and knowledge base, LEISA provided direction, practical options, and methodologies for developing and achieving sustainable agriculture. It was a development approach with a strong political message (Laban et al.1999). Though the idea of what LEISA meant was clear to ILEIA, two different approaches were taken to address the notion of LEISA as a development tool. The following sections look at these approaches and the impact they had on the community and its members when LEISA was first introduced and later when the shift in methodology occurred. Unfortunately not much information is available from that period aside from reports and publications in non-refereed journals. No direct quotes or comments from community members are available. My reconstruction of the process is based on the information mentioned above and my field notes.

Linking Local Knowledge Systems: Building Learning Partnerships

The first ILEIA team, working in collaboration with Grupo Yanapai and the community of Colpar, initiated their work with the idea that after three years the research would provide a better understanding of how community organizations can better link with NGOs, researchers, extension workers and universities to ensure an

exchange of relevant information through knowledge and information networks. These exchanges would enable community organizations to improve their linkages locally, nationally and internationally. Community organizations could establish what actions to take to achieve more sustainable agroecological practices, drawing from local and external knowledge to which they would have access through the partner network. According to Ramirez (1997), farmer's capacity to control their environment is the result of the resources, such as knowledge and skills, at their disposal. Additionally, local universities and other research institutions became involved in complementary studies on demographic changes, agricultural land use, evolution of the farming systems, climatic and environmental history, labor and markets, agricultural policies and socio-economic issues. Likewise the contexts that would favor or inhibit ecologically sound farming were also to be studied. All these elements would enable the learning partnerships to understand the linkages between the local constraints and opportunities and the regional and national context and thus better plan actions to take at the community and household level (ILEIA 1995). As structured, ILEIA was a collaborative project that based development of ecologically sustainable practices on shared knowledge and information.

At the research site ILEIA and Grupo Yanapai initiated a dialogue with the community about farmers' categories of natural resources. The community named a LEISA working group, formed by members of the community who responded voluntarily to the invitation forwarded to the whole community by Grupo Yanapai. The group was encouraged to describe the prevailing farming systems by using resource flow diagrams and soil classifications based on farmers' own categories of land-use types (ILEIA 1998). The first key activity was a six-day workshop to develop new communication strategies for assessing the potential of ecologically sound agriculture. The purpose of the exercise was to learn to document natural resources as known by peasant farmers in Colpar. The results of these inventories were to become the first inputs in the information base that was to be built by ILEIA and its partners. The active participation of farmers was seen as fundamental to

obtaining and sharing information valuable for them, the researchers and the technicians. This information was to be later used to jointly analyze existing problems and possible steps towards solutions (Fernández-Baca 1996). With the use of these tools community members and researchers were able to obtain an initial view of existing natural resources, how community members perceived these resources, how they were used, and how they were or were not conserved.

The team drew maps showing the community's past and present natural resources, transects, and representations of the community as defined by men and by women. The differences in the maps by gender were notable (Figures 6.1 and 6.2). Men gave more importance to natural and animal resources (natural capital and financial capital), as well as to the natural boundaries surrounding the community, while human and institutional resources had a stronger presence in the diagrams drawn by women. In Colpar, for example, women drew themselves in the map as an organized group in the main town plaza and indicated where their houses were in regards to the plaza. Chambers (1997) would call this the pervasiveness of the gender dimension. He argues that women are socialized more to deal with people (family, friends, neighbors), while men are socialized to deal with things.

Women often depend on informal relations and form strong relations of kinship and friendship. Informal networks based on everyday forms of collaboration, such as collecting water, wood for fuel and child care, provide solidarity and access to household resources (Westermann et al. 2005). This is reflected in women's drawing, where they show the strength of their relationship by having all of the women depicted as holding hands. Women used more color and detail. Men put names on the map to indicate different crops. Women, on the other hand, used colors to indicate each crop. Potato plots showed the different varieties by the color of the potato flower, making it easy to identify the type and variety of potato (improved or native). The river that appears in the women's map in Figure 6.1 depicted not only water but the fish (trout) you find in it. Women were best at depicting biodiversity within crops. Both male and female groups depicted water in the form of rivers and included both communal and private land. Rivers usually were

the first resource they drew in their maps showing the relevance of water sources and their concerns with the availability and quality of these resources, something that came out very frequently in the discussions with members of community. Transects served to depict communal land use.



Figure 6.1 Map of Colpar drawn by women

While men's groups initiated their maps with rivers and streets, all the women's groups started their drawings with the church and main town plaza. Two possible explanations for this are first the importance and relevance of these symbols. The church is seen not so much as a religious symbol but as an institution that provided some form of aid to women's groups, though many times in return for something else (i.e. food, labor or access to communal resources). Therefore there was a relationship between community and church based on mutual benefits.

When the ILEIA program started, the plaza of Colpar was considered the meeting place, where the community got together to plan, discuss issues and

celebrate. The relevance of the plaza as meeting place declined sharply a year later, when the mayor of Quilcas built a new plaza where the grass was replaced by cement and the dynamics of the open space where everyone could fit in and face each other was changed. The mayor did this as part of his reelection campaign in 1997. His idea was that people would be happy in Colpar to have a plaza that resembled so many plazas that were found in urban centers of Peru. This was his interpretation of modernization; however he never consulted the community to see if they agreed with his plans. Up to this date most people in Colpar have not been able to adopt the new plaza as their own.



Figure 6.2 Map of Colpar drawn by men

A second explanation of why women start by drawing the church and the plaza is that it was a way of locating themselves at an initial point that made it easier for them to position all other resources within the map. In Colpar, women took the job of drawing very seriously and went up a hill, to a fallow plot where they could

better view Colpar and thus draw a more accurate map. Among the issues included in transects and historical maps, bad roads and technical and economic problems are mentioned by men and women from Colpar and Quilcas. Women in both communities also emphasized climate and water problems. They pointed out that reservoirs were poorly maintained and that water was very scarce during dry seasons.

Parallel to AERM activities, soil surveys were initiated in 1995-1996 with the International Soil Reference and Information Centre (ISRIC) in collaboration with the Soil Laboratory of the National Agrarian University of Lima (Universidad Nacional Agraria La Molina-UNALM), to correlate scientific systems with local knowledge of agro-ecological niches and land suitability (ILEIA 1998). The objective was to contribute to a participatory process to develop strategies to address soil-related production constraints in farming through Integrated Soil Management (ISM) approaches. Kauffman—the leading researcher from ISRIC—and his team aimed to analyze the possibility of correlating farmers' (indigenous) soil knowledge with formal soil science as well as to learn more about how farmers manage their various soils to produce crops and how they dealt with soil-related production constraints/limitations (Kauffman 1999). Finally, this study would bring scientists and peasant farmers together to look for LEISA solutions for land threatened by the degradation caused by present-day land uses.

Peasant farmers in Colpar and scientists coincided in the identification of three main soil-related production constraints related to water availability, plant nutrients (soil fertility), and soil degradation (Kauffman 1999). Scientists learned that there are several ways of describing and classifying the soil and their utilization. Quechua and Spanish (expressions of cultural capital) terms are used by the community to describe productivity and type of soils (Kauffman 1996). As a first step to identifying strategies to change the soil loss trends, community members and scientists identified factors central to implementing soil conservation. Among these factors the most important were training in integrated soil management (ISM) and organization at the community level to encourage collective actions towards more

sustainable practices and seek support in the form of tools and financial incentives (Kauffman 1999).

Last but not least was the farmer-to-farmer exchange, ILEIA's approach to knowledge and information exchange. Aside from Colpar and Quilcas, the ILEIA program in Peru had research sites in Cajamarca, located in the Northern Sierra. Peasant farmers from Colpar and Quilcas were selected by the community to go to live with farmers in Cajamarca and learn about their livelihood strategies and vice versa. I will give more details of the face-to-face visits when I analyze the program using CCF.

By mid 1996, a crisis was brewing within the ILEIA program in the Netherlands. All work started in Colpar and Quilcas came to a halt until a decision was made regarding what route the project should take. Grupo Yanapai had to try to explain to the community what was happening and why things had come to a sudden stop after a work contract had been agreed upon. It was hard for Yanapai members to explain a situation they themselves did not fully understand, given the lack of information coming from the Netherlands regarding what was really happening. The situation generated a certain loss of credibility and trust that put a small dent into the good relationship Grupo Yanapai had with the community. However, given the story of collaboration between community and NGO, this dent was not enough to adversely affect in a permanent way the level of trust between them. In early 1997, the program was reformulated by ILEIA Netherlands and presented to its partners, among them the community of Colpar, in early 1997.

Participatory Technology Development

With the program's reformulation, the new ILEIA team saw the program returning to its roots, participatory research in LEISA (ILEIA 1998), something they saw differently from what the first team had proposed. Within this new strategy, new research activities included Participatory Technology Development (PTD), a number of locally proposed studies of the agro-ecological, economic and socio-cultural contexts of the research sites and a quantitative assessment of ecological and

financial factors and changes through FARMS, a computer software program. Although the new team said that the information generated and kept by the community from the initial years of the program in the community would be used, in reality this information was not used until much later, and only partially, as part of the Concerted Action project. Boyle and Silver observe that “the mere existence of an official discourse advocating empowerment and partnership is no guarantee that it will actually be translated into practice in an unmediated fashion” (2005:249).

In this phase of the program, the activities that effectively involved the community were all related to Participatory Technology Development (PTD). ILEIA (1999) saw PTD as an approach that would improve farmer innovation capacities through community-endorsed group experimentation, which would in turn create a greater chance for the process to generate viable and replicable agricultural technologies that blended local and scientific knowledge. Likewise PTD would provide systematic LEISA technological solutions that responded to the real problems of agricultural development and farmer economies. ILEIA saw PTD as an approach that permitted gender equality, since men and women would have the chance to develop their own technical solutions in accordance to their expertise which, according to ILEIA, would permit the development of efficient and equitable technologies.

In 1997 ILEIA, Grupo Yanapai and the community of Colpar initiated the PTD process. Members of the community became actively engaged in a process of problem analysis, prioritization, experimentation and the identification of possible solutions to find new ways of dealing with their agricultural production problems. Farmers started implementing and monitoring experiments with support from institutional staff from the Universidad Nacional del Centro del Peru (UNCP), the Universidad Nacional de San Marcos (UNSM) and the Instituto Nacional de Investigaciones Agropecuarias (INIA). These institutions gave some technical support to the community together with Grupo Yanapai field team. Although in the beginning Colpar worked as part of the greater community of Quilcas during the

identification and design phase of the PTD process, it began later to work independently, implementing its own experiments.

The community gave priority to potato pests and diseases, soil fertility and inadequate pasture management and designed experiments to address specific issues related to the main theme. As a result, three different sets of experiments took place: (1) control of potato moths during storage; (2) evaluation of the performance of various varieties of grass grown at different altitudes and (3) manure treatment to improve fertilizing qualities.

Among the many pests identified as affecting potato, community members focused on the 'potato moth' (*Symmetrischema tangolias* Gyen) that especially affected potatoes during seed storage. Community members identified traditional ways of controlling moths using local plants such as 'muña' (*Minthostachys spp.*), eucalyptus (*Eucalyptus globulus*), and 'chilca' (*Baccharis sp.*). Traditional practices such as these had almost been forgotten by community members (Canales and Ccanto 1999). Based on the suggestions of the older, more experienced farmers, three treatments were compared (Table 6.1). Evaluation of results were done through participant observation.

Table 6.1 Potato storage experiment (Adapted from: Canales and Ccanto 1999)

Experiment	
Treatment 1	Traditional practice :Combination of eucalyptus, 'muña' and 'chilca' ashes
Treatment 2	Petroleum traps: traps were placed in every corner of the storage site in white one-liter trays containing 0.25 lt of petroleum.
Control	Common seed storing practice which involves placing the tubers over a straw bed without spreading any product on top

The grass performance experiments were carried out using two different pastures: (1) A red clover-Italian rye grass combination, and (2) alfalfa. Small communal plots were assigned for the experiment. The evaluation of the experiments was based on criteria formulated by farmers and technicians separately. Researchers put more emphasis on quantifiable production factors while farmers focused more on factors that determined the incorporation of different

species into their production system. Using these criteria, farmers observed that the combination of grasses performed and adjusted better to local conditions, although the yields were low.

Manure experiments compared composted manure and non-treated manure. The community was very interested in this experiment, since composting is not a common technology in Colpar or Quilcas. It consisted of two phases. First, compost had to be prepared. Once ready, it was applied to a test field while non-treated manure was applied to a control field. The second phase was the comparison of yield and quality of crops between fields. Those who participated in this experiment concluded that using composted manure was a much better option. Many community members remained interested in this last experiment, and even after 8 years had passed since the ILEIA experience, those who were not able to participate thought that such an experience would be worth revisiting. It is noteworthy that they did not feel empowered to do the experiment by themselves.

In the five years that the ILEIA program remained in Colpar, the effects their intervention had on the community in the form of building capacities was in some ways influenced by the internal struggles that happened within the program itself. I use the CCF to see if this program had any impact on survival strategies at both community and household level reflected in changes in their different capitals.

What the ILEIA Program Left in the Community of Colpar

The approaches taken by both ILEIA teams were directed toward achieving sustainability of the community's agroecological resources. The program sought to impact as much of the community as possible, giving relevance to gender inclusion as reflected in the efforts to make sure men and women had relevant roles in all program activities. Changes in research approaches created by the different interpretations of the mandate by ILEIA Netherlands had an effect on what was achieved in the community. As I pointed out before, Grupo Yanapai's having a history of work with the community was strategic to the maintenance of the level of trust between the two entities, given that the NGO could not assure when or how the

program would reinitiate in Colpar. The new ILEIA team did not find the use of stakeholder approaches to natural resource management necessary to assess LEISA in a participatory manner. According to this new team, these approaches, though interesting, only caused ILEIA to deviate from the original mandate (ILEIA 1998).

Though the community of Colpar had been named a partner by ILEIA, this did not give it the power to decide if changes should happen in the already established research program. The same could be said of Grupo Yanapai, as well as other Peruvian institutional partners, NGOs and a University. Grupo Yanapai was asked to participate in helping establish a new work plan based on a research approach that had already been decided in the Netherlands. This situation brings up the question of how participatory such research really is. Even in the best case scenario, where communities participated from the beginning of a project, in Colpar as well as in Quilcas, there had always been an external actor that brought in the idea of an intervention in the form of development and/or research projects. In the case of the ILEIA program, research was built upon how external researchers' viewed the reality of the community.

Building human capital through capacity building was a major component of both intervention periods. Community members were trained in the analysis of their agroecological production systems and in identifying strategies to improve use of local communal resources. While both ILEIA projects focused on development of LEISA alternatives, each had a different emphasis. The first approach sought local alternatives to address communal natural resource management issues. Local sustainable agroecological production systems (natural capital) could be achieved by building cultural capital (using local knowledge to develop sustainable strategies) and social capital through the formation of alliances with strategic actors external to the community. The first ILEIA approach, a social constructivist approach, gave relevance to knowledge and learning as a social process. Having an array of local strategies at hand, through an inventory of local/traditional knowledge and a network of institutions to go to for knowledge exchange, would help build on all community

capitals. The approach aimed at giving voice, and therefore increasing political capital in the community, by building a network of key actors engaged in decision-making processes regarding natural resource management.

The second ILEIA approach was focused on looking at LEISA alternatives to improve productivity at the farm level. The community as a whole was targeted through the dissemination of PTD practices, starting with pilot experiments and later replicating successful experiences on a larger number of community members' plots. The impact of LEISA would be felt at community level if members always engaged in these practices in plots the community assigned them each year. Likewise, LEISA would spread at the community level as community members that participated in initial experiments shared their knowledge with other members of the community, who would in turn share their knowledge with more members and so forth. The reality is that although community members are very interested in preserving their communal resources, they are less willing to engage in conservation practices in a plot that will the following year be in the hands of another household. Farmers who engaged in experimentation usually replicated successful experiences on their private plots rather than on communal lands and shared their experience with friends and family. Community natural resources, such as water sources and community livestock farm, were not included under this approach.

Despite the goal of equal participation for men and women in the farmer-to-farmer exchange, Grupo Yanapai could not force the inclusion of women in the group that traveled to Cajamarca. It was argued that women had household responsibilities they could not leave to others, such as family care, animal care and the daily provision of food for the family as part of their social role within the community. Additionally, women did not always feel sufficiently empowered to claim their inclusion in the exchange. Men, on the other hand, were more flexible when it came to travel and temporarily assigning their household obligations to their wives or other adult relative living in the household. Grupo Yanapai voiced the need to include women in the group, and when male participants were elected Yanapai insisted that they come from as many different social strata in Colpar as possible.

Nevertheless, Colpar is still a community where women have always had a relevant participation in development programs in comparison with other communities located in the Northern or Southern Andes of Peru.

The exchange between peasant farmers from Colpar and a *caserio* (small town) in Cajamarca resulted in a new appreciation of the community's culture. People from Cajamarca were interested in the *chakitacklla* (hand plough). They did not have this tool in their area, even though Cajamarca was one of the bastions of the Inca Empire. Some areas, such as the *caserios* where ILEIA was working, may have lost many of their traditional tools during the Spanish colonization, when Cajamarca was converted into dairy farming. Community members came to realize that they possessed knowledge that others found valuable, and they were proud to share it with the peasant farmers from Cajamarca. This notion of the value of their local knowledge as well as the importance of their traditional social structure was strengthened further with what Colpar farmers brought back from their visit to *caserios* in Cajamarca. Colpar members found that although Cajamarca peasants have almost double the amount of land resources than *comuneros* in Colpar, they are less efficient and poorer.

After the visit to Cajamarca, members who went started discussing with others in the community, especially in community meetings, about how bigger was not always better and how livelihood strategies in their community seem to be more effective, how they used their resources better, had more diversity of crops and therefore even when production was never enough to maintain the household, it was still more than what Cajamarca peasant farmers had. In the discussions that revolved around the theme, people started mentioning communal resources and the existence of the community organization as the greatest asset that put them in a better position than their counterparts in Cajamarca. Social capital in the form of the communal organization, even if not a strong organization, provided support to its members in their efforts to develop household subsistence strategies. Colpar members saw that peasant farmers in Cajamarca lacked this support and therefore were more vulnerable.

Due to the short duration of the first approach no tangible changes could be identified at the community level from the baseline identified in chapter four. The same could be said of the second ILEIA approach, at least at the community level. Unfortunately no data are available on changes in household strategies brought about by the introduction of PTD for those who participated in the experiments.

Effects at Household Level

Ultimately, PTD became a tool for individual development. Those community members that were chosen or that volunteered to participate were the ones who gained more benefit from PTD experiments that work. The goal of increasing the number of experimenters within the community was not fulfilled. The complexity of the first steps of the PTD process and the high speed at which this approach was “taught” to the community made it hard for people to remember how they got to the point of identifying the experiments they wanted to do, as was seen when a mid-way evaluation of the PTD process was done by ILEIA. Due to the haste in implementing PTD, the program fell into some of the problems that Chambers (1997) identified as typical of some participatory approaches. More farmers did not get involved because, under the pressure of time, not all strata of the community were included in training sessions. Participation by gender in the first workshop was fine; however age, special groups (i.e. disabled), and certain social strata were overlooked. An unintended bias towards elites was set in motion.

The way the project was initiated became the norm by which it continued. Those who participated in the visit to the different experiments where experimental farmers reported their results and the community evaluated which was the best result were the better-off or people who could be considered innovators and who were willing to take the risk a failed experiment could bring, which required they had other surpluses on which they could depend. Other community members did not feel encouraged to participate. Less privileged people felt left out due to their having less education, and resource poor members of the community felt they had no other option but to remain as outsiders. ILEIA was not able to do anything to assure

inclusion, even though it was considered an important component of the development process. Inclusion became a trade-off for implementation of a larger number of PTD experiments to meet donor expectations.

Gender differences were highlighted when it came to execution of experiments. In Colpar, as in other highland Peruvian peasant communities, women are in charge of selection and storage of seeds. It is not a surprise, then, that they were in charge of the potato storage experiments. Men, on the other hand, were more engaged in the compost experiment. If one household had both experiments running, which happened with at least a couple of households, usually men would not be able to offer much information on how the storage experiment was doing. The same happened when women were asked about the manure treatment experiment. The latter experiment involved outside training in compost preparation. Men had access to this training because it was seen as socially appropriate for them to travel to it. The knowledge gained in training was shared by the men, with very few women (usually strong women with some formal education and high self-esteem) learning about the process. PTD experiments had an effect on household strategies in the measure of their successfulness. Usually if an experimenting household found that one of the trials they had engaged in was good, they continued putting it in practice. Sometimes they would share these practices with neighbors, family or friends. With PTD, investment of community capitals was at the individual level. Innovative farmers or risk takers reaped the benefits. Groups of farmers selected by the community assembly were given all inputs needed, and there was a fund to cover losses in case the experiments did not work. Most did not work, and those that did were not shared with the rest of the community. Thus only those who were involved in the experiments owned the knowledge. No mechanism for sharing was developed, and that created certain resentment among those that did not have access to the knowledge, resentment that still exists at present, as will be seen in chapter 9 where I present the community members' evaluation of this period.

Summary

The research and development process that began in 1995 with the ILEIA project went through drastic changes within a year of its initiation. Its shift from a “learning partnership” to a “technology development” approach, caused by differences in interpretation of the project mandate, affected the work initiated with Grupo Yanapai and the community. Both set of actors, despite being considered partners in the program, had little relevant participation if any in formulating the new plan of action with the new ILEIA team even though the community would be the final beneficiary of the plan. The new ILEIA team decided that Participatory Technology Development (PTD) would fulfill the mandate and at the same time promote sustainable development in the community. This was an example of what Hampshire et al. (2005) identify as “the dominance of the forms of knowledge held by outside ‘experts’, and the deference of the laypeople to those that hold the official power” (p.347).

Human capital and cultural capital were built upon by the two ILEIA approaches. Additionally, farmers who engaged in experimenting built on their bridging social capital through the interaction they had with external actors aiding them with PTD. No mechanisms were developed for sharing results between genders and between experimental farmers and the rest of the community and therefore results and use of successful practices only remained within the household and at the most spread to close relations.

It was not always possible to achieve gender equality and inclusion of all social groups in ILEIA activities. Gender differences were noticeable in the type of experiments men and women took charge of. Knowledge gained by men was not always shared with women.

A greater focus was given to technological approaches during the ILEIA program. The lack of relevance of the social processes related to innovation seemed to make the next project, Concerted Action, a good fit for that missing piece of the puzzle. Chapter eight describes the process and analyzes the results of this new project that took place in Colpar from 1998 to 2000.

CHAPTER 7. CONCERTED ACTION: WEAVING STAKEHOLDER ANALYSIS AND AGRICULTURE KNOWLEDGE SYSTEMS TOGETHER

While the ILEIA program was still in progress in Colpar, in 1998 a proposal to initiate a new process that recaptured the first ILEIA approach was proposed by the people who formed part of that initial ILEIA team. The old ILEIA team had formed a new association, the International Support Group (ISG) and had been invited to participate in the Concerted Action for Local Development Project. This project, funded by the European Union, was coordinated by the Latin American Center for Rural Development (RIMISP – Centro Latinoamericano para el Desarrollo Rural). ISG partnered with Grupo Yanapai and the community of Colpar to initiate the project in the community. Grupo Yanapai and ISG used Rapid (or Relaxed) Appraisal of Agricultural Knowledge Systems (RAAKS) to study the capability of science to evaluate *ex-ante* the environmental sustainability of agricultural systems in Colpar.

The present chapter analyzes the process that took place from 1998 to 2000 and how this process affected the community as well as how the process gave Grupo Yanapai a new view and understanding of the community. Through the use of RAAKS methodology as described in this chapter, the community identified their desired future vision and actor networks, including local and external actors, which could be relevant in reaching this desired future. By using the CCF, I look at how they used their existing community capitals and built on new ones. Finally I relate those shifts in capitals to the changes in their future vision as the project progressed.

Identifying the Research Methodology: Rapid/Relaxed Appraisal of Agriculture Knowledge Systems (RAAKS)

In the late 1990s, there was a quest for methodologies that facilitate a better understanding of existing social dilemmas and support community decision-making for more efficient and sustainable strategies of resource management (Engel 1997). Development agencies showed a growing interest in methodologies and tools to

facilitate partnerships between researchers and community groups. As a result, there was a shift towards the active participation of grassroots organizations to collaborate in the design and development of future state scenarios (Engel 1997; Borrini-Feyerabend et al 2000; Ramirez 1997). To this end, development specialists sought methodologies aimed at making social dilemmas and trade-offs more evident to community members as well as those that might aid them in the identification of actions in which social actors with diverse agendas would be willing to join to achieve sustainability (Engel 1997; Lightfoot et al. 2000). This created the ideal scenario for ISG, Grupo Yanapai, and the community of Colpar to work together, revisiting the Rapid/Relaxed Appraisal of Agricultural Knowledge Systems or RAAKS process that had been initiated during 1995 with the ILEIA learning approach.

RAAKS—an Agricultural Knowledge and Information Systems (AKIS) approach—is a participatory action research stakeholder analysis methodology. The approach focuses on the role and actions of the social actors as innovators of their own practices to improve performance in agriculture, natural resource management and rural development (Engel 1997). Improvement of practices is enabled when social actors search, construct and maintain relationships and form networks with other actors identified as relevant to innovation of practices. According to Engel (1997), RAAKS provides a way to improve the generation, exchange and utilization of knowledge and information for innovation. In this way, RAAKS concentrates on building social capital through bridging and linking with other stakeholders (local and external).

RAAKS requires team work, focused collection of information, qualitative analysis, and strategic decision making (Engel 1997). One of the challenges in applying RAAKS is the time that is needed to do the whole exercise. It often takes several months to go through the 16 windows (used to look at problems or relevant issues from different angles), an important part of the methodology, time that usually is a scarce resource in rural peasant communities such as Colpar (see Appendix 2 for more details on the different windows). Likewise though the process is thorough and can generate very transparent information, it can also be very complex for all

stakeholders to understand the concept of windows. An outside facilitator trained in the RAAKS methodology is needed, and this is the role Grupo Yanapai took. A very positive aspect of RAAKS is that as a participatory methodology, it gives relevance to the inclusion of women and other groups of stakeholders who are often forgotten. (<http://www.iirr.org/PTD/Readings/General/RAAKS/RAAKS%20Its%20Concept.htm> 2006).

Building the Path towards Holistic Development: Colpar's Vision of the Future

In November 1998, ISG and Grupo Yanapai held a workshop to evaluate project progress and discuss with Paul Engel, one of the creators of the methodology, what changes Yanapai should make in the process they had begun with the community of Colpar. One conclusion reached was that we should work with a holistic view, considering the multiple community issues that limit development. With this in mind, Yanapai went back to the field and worked with the community identifying relevant issues by initiating the RAAKS process.

Phase A: Identification of Relevant Actors and Their Linkages

Workshops were organized with men and women working in separate groups on different days. Working in separate groups made it easier for each group to express their ideas and to build confidence among the women so that their participation in the community-level workshops would be more active. This was the most effective way of insuring that both men and women could contribute to the future vision from their own points of view. Participants were divided into small groups (4-5 people) for brainstorming followed by plenary sessions where each group presented the results of its deliberations. Criteria for group formation were left to the participants. In the first workshop two of the five women's groups were made up of women of all ages who had few animals, limited crop land and were involved in wage labor. Two more groups brought together women with more animals, and larger cropping areas who were also involved in trade. The fifth group was composed of young single mothers, with limited land and animals who maintained

their families by engaging in wage labor. Most of the women had little or no previous experience talking in public, and in a mixed group their opinion would be lost, since they tended to let men take the spotlight even when they knew more about the issue being discussed. Men and women were asked to explain why they thought women participated so timidly in workshops where both genders were present. One male community member said:

Ellas a veces no tienen costumbre de vida social y se chupan y los varones prevalecen sobre ellas porque hablan más fuerte. Se necesita oír su voz y opiniones y saber mediante estos talleres que piensan para que los varones puedan cambiar sus actitudes.

Women sometimes are not accustomed to having a social life, they are shy and men prevail because they speak with a louder voice. Their [women's] voices and opinions need to be heard and known through these workshops so that men can change their attitudes (Colpar male community member 1998 workshop).

A woman on the other hand had this to say about women participation in *faenas* and workshops:

Los varones no se dan cuenta que las mujeres no pueden trabajar con la misma fuerza ni a la misma cantidad de tiempo porque también tenemos que ocuparnos de la familia y nuestras otras ocupaciones en la casa. No sentimos ganas de participar en las asambleas [comunales] y en las faenas porque los varones critican nuestra poca participación y al final nos acaban excluyendo muchas veces del trabajo comunal.

Men don't realize that women cannot work with the same strength than men, and that we don't have the same amount of time because we have to take care of our families and the household. We don't feel like participating in communal assemblies or in the *faenas* because men criticize that we do not participate enough and they many times end up excluding us from communal work (woman participating in workshop in Colpar 1998).

Because of this difference in voices in Colpar, working with separate men's and women's groups during phase A made it possible to have a broader view of all the systems and their components within the community. Following the steps Ramirez (1997) describes for RAAKS, one of the first activities that took place in Colpar during this phase was mapping the community, highlighting major production

systems, enterprises, infrastructure and tenure. After this, the different actors that participate in the various activities were also identified.

In Colpar, the productive activities within the community were identified and ranked by importance. Activities were identified by gender. Table 7.1 shows the results of a list generated by the community members of Colpar of the different household strategies. This table was elaborated using the separate results that men and women produced during the workshops. The different strategies were ranked by male and female groups according to their importance for covering basic household needs. The aim of all households in the community is to satisfy their consumption needs. As part of this effort and regardless of class, both men and women within the community and within the household have specific productive and reproductive roles.

Discussing productive activities with men and women led to insights into the strategies people engage in to sustain their households and the community as well as conversation about the history of innovations in the community. Analyzing livelihood strategies brought up the identification of issues that hampered further development in Colpar. When asked to rate the importance of their economic activities, both men and women considered crop production highest on the list. Although animal production is of great importance to women, they rated it second. This is most likely because the question focused on “the most important activities for the subsistence of the family and/or community”. Men, on the other hand, rated trade as the second most important activity. Once the community and NGO identified the different enterprises by gender within the community and the order of their relevance, the next step was identifying obstacles and opportunities and relevant issues to improve these enterprises.

The community identified various agricultural production issues they considered obstacles to improved livelihoods. Both men and women chose lack of economic resources as their main obstacle followed by pests and diseases in crops, limited cropland, rain-fed lands and lack of technical support. Community members were asked to describe any major changes they had experienced and the strategies

they had developed in order to overcome the challenges related to the issues identified. The next step was to discover the source of information that had led community members to adopt new strategies.

Table 7.1 Most important activities by gender identified by members of the community of Colpar (Source: Fernández-Baca and Fernandez 2000)

Activity	Male	Female
Agricultural Production	Potato, maize, ulluco, mashua, oca, faba beans, oat. Pre-harvest, post-harvest and harvest.	Same crops. Helps with all activities though men have most of the control over what is harvested and where with women giving some input. Women's main specialty is seed selection and conservation
Livestock Production	Baths, draught, marking and detailing.	Cattle, horses, sheep, pigs, camelids, small animals (chicken, guinea pigs, rabbits). In charge of selection, animal husbandry.
Artisanry	Ropes and use of sewing press, wood work	Weaving, knitting, embroidery
Wage Labor	Crop production inside and outside community. Non-farm labor outside community, temporary and permanent migration.	Agricultural production within the community and outside. Non-agriculture labor outside the community (day jobs).
Business	In charge of sale of produce to markets outside the community.	In charge of sale of produce in local community peasant market.
Grazing activities		Those who have large animals, spend most of their time in grazing lands, they only come down to help with crops or sell meat.
Music	Famous for their folkloric groups and bands that are hired by neighboring communities during festivities	"Santiago" singers (they are hired by neighboring communities or towns during the Santiago festivities)

The community and Grupo Yanapai found that there were few actors outside Colpar from which most of the community obtained information. Few people (with the exception of a couple of women who had contacted a state agency to buy guinea pigs) had contacted other NGO, state or university research organizations. Most who had initiated outside contact were male farmers. Likewise, community members that had participated in PTD experiments had had the chance to interact with state and

university research institutions. Those that had knowledge of these other actors or had in some moment made use of their services had not shared the links with the rest of the community; the knowledge and the networks were thus individual rather than communal. The workshop became the venue for community members who had not linked with external actors from the state and private sectors to gain the knowledge of the existence of these sources from those who had accessed them. The community built an initial list of actors (external state and private actors) that would eventually grow as the community continued discussing in the following phase the strategic nature of achieving their collaboration.

The first list generated by farmers included:

- Two innovative farmers from Colpar to whom women mostly went when they had problems with their animals or crops.
- Private supply stores in Quilcas and Huancayo city (to which women went).
- Grupo Yanapai, as the only NGO that gave them technical support.
- Two government entities: The National Agricultural Health Service (Servicio Nacional de Sanidad Agraria-SENASA) that only came twice a year to the community during the drenching campaign; and the National Program for Watershed Management (Programa Nacional de Manejo de Cuencas Hidrográficas-PRONAMACHS) that works on soil conservation, and that, according to farmers knowledge, had planned activities to achieve fixed institutional goals in a certain period of time. These activities did not always fit community/farmer needs.
- Two Research Institutes: The National Institute for Agricultural Research (Instituto Nacional de Investigación Agraria-INIA) that is a government institution and the Veterinary Institute for Tropical and Altitude Research (Instituto Veterinario de Investigaciones Tropicales y de Altura-IVITA) that belongs to the University of San Marcos. Both institutions have collaborated with Grupo Yanapai in the ILEIA PTD research project terminated the end of the first quarter of 1999.

A series of institutional actors from the list were selected to be interviewed by community members. The objective was for community members to learn more about these institutional actors.

Phase B: Analyzing Linkage Performance

In phase B community members identified strategies that could in a longer term be more sustainable. During a plenary meeting, there was a discussion on the value of implementing new strategies towards innovation. This was done to entice people to start developing a holistic view. As a result, the vision was broader than only crop and animal production issues and the future vision redefined.

Colpar arrived to a new vision of the community's future based on a discussion of how would community members like to see their community in 10 years. Quilcas communal and municipal authorities were also invited to participate. Since Colpar is nested within Quilcas, Grupo Yanapai suggested that inviting the authorities could be strategic in attaining their collaboration when needed. Many of the issues that Colpar was dealing with had to do with communal resources, and therefore depended on decisions made in the community of Quilcas. Assuring that Quilcas' authorities participated in and felt a part of the process could insure a greater collaboration from their part. As a result of this meeting, the community ended up identifying three main issues that influenced and impacted local development: (1) strong communal organization, (2) sound and sustainable resource management, and (3) infrastructure that facilitates social well being and intercommunication and networking between communities and with the market.

New potential actors identified as important to local development priorities and possible collaborators in the community's quest to reach its future were added to the already existing list. Table 7.2 shows the final list of community and external key actors. Actors included in this list were identified as important to local development priorities. New interviews with these actors took place to learn about their vision of the future.

Table 7.2 Key social actors for Colpar (Adapted from: Fernández-Baca and Fernandez 2000)

Actor	Importance	Present relationship with Colpar
Community families	They are the ones that give impulse to local development	Very active
Mother community (Quilcas)	Organizes access to resources and is the legal representative for community families	Respects Colpar's autonomous development efforts
Municipal District	Looks after all people's needs within the population, including those who do not belong to the community.	There is still very little coordination and unclear responsibilities towards the community
Institutional Coordination Board (Concerted table)	A space for dialogue and negotiation among local key actors.	This space has not been consolidated
Ministry of Agriculture PRONAMACH	Has provided ideas for soil conservation and reforestation that are being implemented by the community on its' own.	Has withdrawn from community
Ministry of Health	Responsible for district health services	Has interest but very few resources
Ministry of Education	Responsible for education activities	Provides a limited professional support
Commercial agriculture establishments (local and regional)	Source of external inputs and advice for agricultural sector	Still gives priority to conventional production systems
NGOs (Grupo Yanapai, SEPAR)	Follows local development process and provides organizational and technical advice	They are accepted by community insofar as they give support
Research Institutes (INIA, CIP, IVITA, UNCP)	Source of alternative technologies and scientific knowledge	At present, only CIP and INIA are active in the community

Based on the new information generated through the interviews, the community made a final reformulation of the future vision and designed a plan of action. The reports on the different actors gave the community a view of the context in which these institutions worked and of potential partners with whom to form strategic alliances for innovations. The degree of the relationship the community and its authorities established with these actors depended on the coincidence of their

agendas and the degree to which they shared common vision. Finally, the community and the NGO reformulated the objective of the process:

To achieve a solid organization in a community that has sustainable production and capacity building programs at communal, family and school level and basic infrastructure. (Plenary decision: Colpar Community Assembly 1998)

The new objective guided the selection of those actors with which to form coalitions or alliances to address the relevant issues identified by the community: solid communal organization, sustainable production and basic infrastructure. Phase C would serve to solidify these alliances through planning of interventions or actions.

Phase C: Action Planning to Modify Roles and Improve Linkages.

The last phase of RAAKS (Phase C) had two desired outcomes: a larger network of actors that could collaborate with the community in their quest for change and formal agreements with these actors affirming their engagement in change strategies proposed by the community. Plans were elaborated guided by simple questions such as: What are we going to do? What actions can we take? What actors have greater power to contribute? Can we form strategic alliances with them? What have we decided we will do and whom will we do it with?

As with the ILEIA program, the concerted action project funds could only be used for capacity building. Grupo Yanapai facilitated the RAAKS process through all three phases with the idea that the community, if they found the process useful, would identify the actions that they needed to engage in to reach whatever future they identified as ideal. Grupo Yanapai would serve as the major link between the community and other institutional actors that were identified as potential collaborators. In a beginning, the members of Grupo Yanapai who facilitated the process did not feel confident enough to deal with themes that did not relate to agriculture, their field of expertise. This situation changed gradually as both community and the NGO facilitators saw the need to build new communication and knowledge networks with relevant actors in a diversity of non-agricultural areas. The facilitators, who are agricultural technicians by formal training, understood that they

do not need to be experts on all of the issues they explore with the community. Furthermore, they learned the value of building a solid network of diverse people, in and outside the community, who can contribute their expertise on proposed innovation when needed.

Grupo Yanapai expected that after a while the community would take the process as their own. That slowly occurred and by the end of the project, the community, through its authorities had taken total charge of the project and its different components. The RAAKS process allowed the research and facilitation team to interact with the community in co-construction of future goals and the strategies to reach those goals. The next sections discuss the effect the RAAKS process had on the community and its households. At the same time the process permitted the research and facilitation team to learn more about heterogeneity within the community and how it might affect the level of participation of certain community members.

The Evolution of the Process: What We Learned at the Community Level

The community of Colpar examined the current situation of the community and desired future visions from the perspectives of the household and the community. The purpose was to obtain a better idea of the interactions between individual, family and community level visions, and how changes in one affect the others in terms of opportunities and trade-offs, as well as strategies, tasks and key actors needed to reach this future vision.

In Colpar, there are gender and class differences between men and women and among households related to size of farm and type of resources possessed. The community of Colpar, as explained in chapter four, depends on Quilcas for the distribution of communal land for the community per se and for its individual members. Quilcas allocates communal land to Colpar, and Colpar authorities distribute this land equally among all *comuneros*. This means every household in the community, regardless if it is male or female headed, receives the same amount of communal land.

One of the important outcomes of the RAAKS approach under the Concerted Action Project was the identification by researchers of five different types of households in Colpar. These households are differentiated according to their access to communal and private resources and their access to natural capital, especially land for agriculture and biodiverse germplasm. The household types are 1) Biodiverse Systems, 2) Livestock, 3) Agricultural Laborers, 4) Artisan/Business and 5) Single Mothers. Table 7.3 shows the general characteristics of those that compose these five groups of households. The Biodiverse Systems group has the most capitals and is composed of households that have a diverse income producing system that includes management of all three ecological zones, crops and animal production, and off-farm income generation activities. Agricultural Laborers follow in frequency but are second to last in amount of assets/capitals within the community. Young laborers, mostly new members of the community, compose this group.

The Livestock Production group, the third largest group, does not possess much diversity in terms of natural capital, as will be discussed in the case study. Whatever they have lost in biodiversity within their natural capital, they have replaced with financial capital in the form of livestock. They tend to have the most individual assets, and they have control over many community resources. The power of this group is found in their affiliation to the *Sociedad de Criaderos* (animal producers' society), an association that has strong political and bonding social capital within the mother community of Quilcas.

The majority of members are men, and this association is one of the most powerful in Quilcas and Colpar. Women lack the political capital to influence decision making in natural resource management, as Flora (2001) and Valdivia (2001) when studying women's access and control of resources in Latin America, Asia and Africa, found that women manage the animals, see that grazing rotations take place and engage in selection and breeding. However, they do not have real control over the animal or land resource. The Society makes the final decision on how many animals members can graze, who can graze where and when to rotate to other fields and

has the social and political capital to enforce their edicts and allocations, while women remain isolated in the highlands.

Table 7.3 Typology identified in the Community of Colpar (Adapted from: Fernández-Baca and Fernandez 2000)

Biodiverse Systems (33%)	Agricultural laborers' (28%)	Livestock production (23%)	Artisan/ business (3%)	Single mothers' (13%)
<ul style="list-style-type: none"> ○ This group manages an average of 7 different crops and 5 different animal species (their herds averages 28 head). ○ They manage all three ecological zones. ○ They own private land, rent land, do sharecropping and use communal land. ○ Aside from agriculture they engage in artisanry, woodcarving, weaving, music (they belong to music bands that go from town to town during festivities) and other activities that fit within their agricultural calendar. 	<ul style="list-style-type: none"> ○ This group is characterized for having very little land and/or being very young, usually a new <i>comunero</i> just starting. ○ They manage 4 different crops and have only one large animal and two species of small animals (guinea pigs and chicken). ○ Their main income comes from the sale of their labor. ○ They have very little family labor to count on. 	<ul style="list-style-type: none"> ○ Their main economic activity takes place in the highlands. ○ Usually belongs to Sociedad de Criaderos. ○ They make greater use of communal land through sharecropping with other comuneros. ○ Diverse livestock (average of 91 large ruminants including llamas). ○ Usually one member of the household engaged in extra-communal activities (business or paid labor). ○ Manage two ecological zones (high and intermediate). 	<ul style="list-style-type: none"> ○ This group only uses lands in one ecological zone. ○ They manage an average of 5 crops but in very small amounts due to lack of access to more land. ○ They usually have a cow, or donkey and a couple of sheep. ○ They are assigned communal land every year but rent it to other <i>comuneros</i> or in exchange for products. ○ They have other sources of income such as artisanry or business. 	<ul style="list-style-type: none"> ○ Composed by single mothers with small children. ○ They live with their parents or close relatives with whom they share natural capital. ○ They manage an average of 5 different crops; have a couple of livestock and one small animal species (guinea pig). ○ Their main source of income comes from field labor. ○ Most take advantage of government assistance programs.

Though the community set an objective for the process and identified relevant actors with which they could collaborate in the process, soon enough members of the community learned that they could go to the list of actors and find those that could collaborate with them in other issues that were not explicitly identified in the plenary meeting. In fact some community members were already starting to use information generated from the methodology even before objectives and action

plans were formulated. There are two clear cases in which this has happened. These examples are presented in Boxes 7.1 and 7.2.

Box 7.1 Irrigation projects in Colpar

One of the workshop participants learned that a donor agency was interested in giving support to irrigation projects. One of the requisites to applying for funding was that the community had to present a written proposal. The community member searched among the relevant actors list generated during the workshops, and looked for an institution that might help with the proposal preparation. He identified one and through Yanapai, made contact with the institution. The institution agreed to help out with the maps and plans that had to be drawn but told this community member that they didn't have all the tools necessary for this job. Therefore, the community member went back to his actors list and found another institution that could lend him the missing tools.

The irrigation proposal did not end up being funded in the way the community had expected; they received just a small fund to repair existing irrigation channels. However, the effort and collaboration managed by the community member shows how the network of actors works well when there are community actors willing to make things happen. Unfortunately neither the community nor Grupo Yanapai made a new attempt to present the proposal elsewhere. An idea could have been to increase the network by identifying actors that could fund such a project. The case below shows how the community can indeed manage to take action when they access and use their social capital in an effective way to increase their built capital.

Box 7.2 Repairing the local primary school.

Community members contacted an institution regarding material they needed to make some repairs to the primary school in Colpar. This institution put them in contact with another institution that was to provide them materials to fix the school wall and put roofing to other areas. Community representatives made contact and this institution told them that they could collaborate, but first they needed a diagnosis of the area, indicating its problems and needs. To elaborate this diagnosis, the community representatives decided to use the maps drawn in the workshops. They ended up getting some of the material asked for from the institution.

Not all workshop participants had a complete understanding of the process or used the tools in the same manner. However, the fact that in such a short time some farmers were already using the tools was encouraging. Class and gender difference played an important role in participation levels. For example many of the participants

that did not benefit as much as expected from the process were women and those from less privileged groups within the community.

An important aspect of the process was the identification of a future vision by the community. The idea of looking at the future vision was not an alien concept for the community; they had done this during the ILEIA process. However, that first time they stressed technical and agricultural actions to achieve change. The Concerted Action project sought a more holistic approach towards change. Looking at the community future vision became relevant not only because the visioning tool helped identify demands and actions, but also because we were able to monitor shifts in priorities as the process evolved in Colpar. Table 7.4 shows these shifts in the future vision starting from the ILEIA era to the end of the Concerted Action project in Colpar and in Quilcas. Including Quilca's future vision was relevant because desired changes there will also have an effect on Colpar (negative or positive). We can see the commonalities and differences between visions. It is clear that the main components of the vision throughout the four years of the study are present in the three visions sketched by Quilcas and Colpar: (1) strong communal organization, (2) sound and sustainable resource management, and (3) infrastructure that facilitates social well being and intercommunication and networking between communities and with the market. However, priorities have somewhat shifted in the vision revised every 2 years by the community members in Quilcas and in Colpar.

As goals were met through innovations and changes in strategies, new and more defined priorities were identified to fit the changes in the future vision. Natural and human capital (through capacity building for better management and increased production) are the main components of the 1996 vision of Colpar. Quilcas on the other hand, was interested in building social as well as human capital—by learning about conservation and production diversification—to improve their natural capital.

By 1998, Colpar's vision clearly indicated value and action in all capitals, placing great relevance on sustainability. Their vision depicts sustainable holistic development. Similarly, Quilcas emphasizes political (concerted table), built (road infrastructure and irrigation system), financial, natural and cultural capital in their

vision. In 2000 when the project reached the end of its funding, both communities maintained their holistic vision, adding some new elements and making all capitals clearly present in the vision.

In summary, the use of RAAKS as the development approach in the Concerted Action Project helped the community analyze their current situation and envision desired futures. The weaving of RAAKS with AERM tools (Agroecological Resource Mapping) made the process easier to understand for the members of the community. RAAKS could not be conveyed to the community without some modifications.

Table 7.4 Desired future (Source: Fernández-Baca and Fernandez 2000)

Quilcas Community 1996	Colpar Annex 1996
A coordination process between Municipality and Community where tasks are well defined to improve organization. Conserved soils and irrigated areas within the barrios to increment and diversify agricultural production.	Improved management of natural resources, reforestation, soil conservation and improved production through the use of organic resources. Design and implementation of agrosilvopastoralist system. Conserved fauna. Reservoir for small irrigation of vegetable gardens and cultivated pastures, and another reservoir for drinking water. A fish farm.
Quilcas Community 1998	Colpar Annex 1998
Peasant community families in better socio-economic and cultural situation, with good road infrastructure and irrigation system. Community families with capacity to industrialize agricultural products. Greater interest on part of financial institutions to support the execution of the District Development Plan. The concerted round table strengthened and united, with common goals and responsibilities assumed by members.	Sustainable agricultural production, through a solid communal organization. Access to basic infrastructure and capacity building for human development. Designed plans to stimulate eco-tourism to improve community members' livelihood.
Quilcas Community 2000	Colpar Annex 2000
Conserved soils through pits, reforestation and pasture establishment. Communal farm functioning in full capacity: stable and fish farm implemented. Established irrigation system that permits every family to have a small family vegetable garden. To reach a final arrangement on land boundary conflicts. Establish rules for land use in the Highland area (for crops and pastures) and agree on distribution of responsibilities with the District Municipality.	Protected soils through reforestation, terraces and infiltration pits. Strong and solid communal organization. Irrigation infrastructure for pasture and vegetable production. Improved animal production, giving priority to organic production. Better elementary education. Negotiations for the establishment of an agricultural school. Increased communal areas. Pre-Hispanic remains restored, fish farm in operation. Road that connects Colpar with Llacta and Casacancha. A parabolic antenna to improve communication. An urban area with sanitary infrastructure.

Members of the community, especially those in official positions, developed skills for negotiation, and the hope was that once the communal organization was strengthened (part of the future vision), it would be able to have a stronger role in decision-making at local and regional level (build political capital). However, the strengthening of the communal organization was a challenging task that was not possible to achieve with the Concerted Action project. Colpar managed to build a network of linkages with relevant actors outside the community; however, members did not always have the sufficient political capital to use those linkages effectively.

Table 7.5 Community directive positions by gender by year

Position and period	Men	Women	Total
Communal board			
95/96	6	0	6
97/98	5	1	6
99/00	4	2	6
Water board			
1998	5	1	6
1999	3	3	6
2000	3	3	6
Community government			
1997	3	0	3
1998	3	0	3
1999	2	1	3
Municipal agency			
1998	4	0	4
1999	3	1	4
2000	2	2	4

An increase in the number of women in positions within the community and the municipality was clearly seen by 1999. Was that change an unaccounted result of the process Grupo Yanapai and the community of Colpar were following? An increase in the political capital of women within the community occurred. In chapter nine I will show that this increase in number of women participating continued in the next research and development process—SANREM—and beyond it, providing more evidence that there is a relationship between changes in presence of women in

political positions and the two holistic development processes that took place in the community.

An increase in participation of community members in communal activities was also reported. While in the period of 1995-1996 the presence and participation of all members of the community of Colpar only occurred when there were assemblies in the mother community of Quilcas; by the period 1997-1999, the community reported that all members of Colpar not only participated in assembly meetings in Quilcas but also in those assemblies that took place in Colpar, in the *faenas*, and in other non-assembly activities in Quilcas.

Finally, the community managed to move other projects and proposals besides those presented in boxes 7.1 and 7.2. Table 7.6 gives a summary of the different projects that were executed from 1997-2000. How much did the Concerted Action Project have to do with the increase in number of executed projects in Colpar? Each period shown in the table corresponds to the two year period of the communal board. Three explanations can be given for the increase in number of successful project executions. First, the new officials that entered during the 99/00 period was much more active and made a better use of the community's political capital and the president's or other members of the board's individual political and social capitals to successfully negotiate projects. The second possibility would be that the process initiated with CA really had an effect on building the community's social and political capital to achieve mobilization of resources. The third possibility is a blend of the previous two. Table 7.5 makes it clear that the new communal board for the 99/00 period was a much more innovative one, which attempted to achieve a gender balance by increasing the number of women with positions of officials in the community. That, added to an increase in number of successful negotiations, proved that authorities had made the Concerted Action process their own. Authorities used the actor network lists, making it possible to believe that a blend of active community leadership and good use of the approaches and tools acquired through the Concerted Action process were possible explanations for these successes.

Table 7.6 Executed projects and activities in the community of Colpar

Period	No. projects executed	Description
97/98	4	<ul style="list-style-type: none"> • Rehabilitation of potable water supply network • Construction of a sport field • Rehabilitation of the main square • Purchase of a loud speaker
99/00	11	<ul style="list-style-type: none"> • Repairs to the elementary school • Provision of restrooms for the pre-kinder school • Installation of wood floors and general improvement of the community center • Negotiation for Colpar-Quilcas road • Implementation of communal library • Communal potato cultivation • Initial attempts of communal soil conservation • Initial communal reforestation plans • Participatory plant breeding and integrated pest management (IPM) trials • Increase in active participation in <i>faenas</i> and general assemblies in the mother community of Quilcas • Opening of the <i>Juzgado de Paz</i> and naming of Judge of Peace.

Although Grupo Yanapai had the role of facilitator of the process, the NGO soon became an active participant in the learning process, building both human and social capital at the same time the community was building these capitals.

One of the weaknesses of this approach, as with other participatory approaches occurring in the community, is that some social groups within the community were excluded. In the beginning, when Yanapai was in charge of organizing workshops and activities, the field team made sure that everybody was included. By having separate workshops for men and women, they also assured gender participation and within the different genders, different economic strata. Once the community started to take over the process and even though all members of the community had the obligation to attend workshops and activities, space for those with less voice, as well as those who were poor, was no longer prioritized.

Summary

During the first attempts to use stakeholder analysis techniques in 1996, the facilitators had tried to involve the whole community at one time and to identify stakeholders involved, directly and indirectly, in all agricultural and non-agricultural enterprises. The result was a comprehensive view of the complexity of relationships that the community members were involved in. However, neither Grupo Yanapai nor the community leaders could figure out how to deconstruct the complexity. In the 1998 the Concerted Action project, the facilitators and the community were able to move beyond the identification of existing agricultural systems to a future desired vision. With RAAKS the community and Grupo Yanapai went through a learning experience. Learning from small-scale farmers and local resource managers led all actors involved to recognize the importance of community and of the complexity of the collaborative work. The process was designed to be an inclusive one. However, as the community board took over the process, the members with less voice in the community were relegated or relegated themselves to the periphery of the process.

By building networks and linkages (bridging and bonding social capital) with actors inside and outside the community they are able to form alliances for innovation. One of the weaknesses of the CA project was that it did not provide the necessary elements to build on political capital effectively. Political capital that was built was mostly among a few members of the community such as authorities and better-off farmers. The CA project was reaching its final phase when SANREM initiated its actions in Colpar. The approach used in this project, the Advocacy Coalition Framework would build on the stakeholder analysis approach (RAAKS) used in the CA process as a support instrument for community organizations to recognize those stakeholders in decision-making positions and form alliances with them to increase the community's negotiation power regarding NRM issues. In chapter eight I will present the project and its effect on the community capitals.

CHAPTER 8. ADVOCACY COALITIONS AROUND NATURAL RESOURCE MANAGEMENT: A TOOL TO BUILD SOCIAL CAPITAL AND RESPOND TO EXTERNAL AND INTERNAL THREATS AND CHALLENGES

In this chapter I analyze the SANREM project initiated by the end of 1999 in the community of Colpar. The implementation of SANREM began just as the Concerted Action (CA) project was reaching the end of its funding period. The project used the Advocacy Coalition Framework (ACF) approach developed by Jenkins-Smith and Sabatier (1993), which allows building on the analysis of stakeholders to understand positions of different social actors over time. The best way to have an impact on policies or have a voice as peasant farmers is through organized groups that have a common objective; this gives them more power to negotiate. Alliances between farmer organizations/communities and a range of actors, such as NGOs, research institutes, international donors, and the business community can increase negotiating power (Flora et al. 2000a). More information on the objective of ACF and on previous research done using this framework has been provided in chapter five.

The Peru SANREM project was part of a larger attempt to adapt the ACF to a variety of Latin American contexts. We carried out the first research using the ACF in Cotacachi Ecuador. In Cotacachi, there are indigenous organizations/federations with strong ties within the community (bonding social capital), and ties (mostly weak ties) with organizations and actors outside of the community that share their beliefs and goals. Coalitions emerge from these existing networks and around these common beliefs (Flora et al. 2000b). As part of my Master's research, I studied advocacy coalitions formed around two relevant issues in Cotacachi: mining and the management of an agroecological reserve. In my research I explored questions regarding how advocacy coalitions form around relevant natural resource management issues, and the characteristics of emerging coalitions (Fernández-Baca 2004).

SANREM addressed similar issues in the Colpar study. Grupo Yanapai and the community of Colpar were appropriate partners to initiate a new SANREM

project in the area. They had a history of participatory action research in the community, a relationship of mutual trust between the community and the NGO, and were engaged in natural resource management. The new project in Peru would be different from the work in Ecuador in that SANREM and Grupo Yanapai would use the participatory-action-research process with CA as a platform to initiate an advocacy coalition process. SANREM would integrate both approaches—PAR and ACF—using the strength each one had to go beyond merely identifying relevant actors that might be involved in decision-making in natural resource management. Integrating ACF and RAAKS would provide a tool to aid the community to increase their capacity to build learning and action alliances and explore different scenarios for negotiation.

As researchers, the SANREM team and Grupo Yanapai would have the chance to observe and analyze how coalitions emerge; under what circumstances this formation occurs (i.e. the existence of a perceived threat); and the dynamic that comes from the formation and actions. Coalition building with key actors might strengthen the communal organization, and lead to community concerted collective action to address those natural resource issues that are relevant to the community. In the following sections I will describe the process of project entrance into the community of Colpar, the identification of relevant issues and the actions that started evolving around them. Finally I will look at what community capitals were strengthened or, if it is the case, decreased as a result of the project.

Introduction of the SANREM Project and the Advocacy Coalition Framework to Grupo Yanapai and the Community of Colpar

The members of Grupo Yanapai discussed how to link SANREM to the Concerted Action Project (CA) still in progress in Colpar, although external funding had already ended. It was agreed that the SANREM project fit well within Yanapai's institutional objectives. For Yanapai, ACF could become a tool that could:

- promote community participation in identification of relevant issues, alternative solutions and strategies;

- improve the peasant family's capacity for innovation and experimentation;
- revitalize Andean knowledge and culture;
- facilitate exchange and diffusion of knowledge and experience generated during the process; and
- aid the community to increase its negotiation capacities.

Once this was agreed upon, the following step was to work with the community identifying one or two relevant issues regarding natural resource management. In the ACF, relevant issues and an initial list of relevant actors related to the issues are generally identified through the analysis of documents (i.e. reports, newspapers, and other secondary sources). Through these documents the researchers get an initial idea of the position these actors have and tentatively identify their desired futures and mental models. In Colpar, given that this was a participatory process, Grupo Yanapai guided the community through a similar process as that followed with CA. The participating members of the community identified the issues based on an initial list previously generated by its members and later on, the communal authorities identified the relevant actors. As the CA project had been dealing with basic infrastructure and crops, for the ACF approach Yanapai turned the discussion towards the selection of relevant issues associated with a more sustainable agriculture. The list of problems/issues under this item was reviewed, and farmers were asked to add any new issue they thought relevant. The only issue added was privatization of lands. People were asked to indicate which of the items in the list they considered most relevant. To learn relevance according to gender, women were asked to mark their selection with a brown marker while men marked theirs in blue. Women's votes were spread throughout the problem list, while men's votes were more concentrated on two issues: water and pastures.

Two items were prioritized by both genders:

- water issues (quantity of water and irrigation channel); and
- overgrazing and lack of pastures.

Additionally, there were four issues that only women considered relevant:

- rain-fed land;

- land erosion and loss of fertility;
- markets and low prices for products; and
- privatization of lands.

Grupo Yanapai later discussed the implications of the selections made and concluded that, although land issues per se were not selected as the most relevant, they would come out as components of pasture issues. One of the main causes for lack of pastures is exceeding the carrying capacity on communal grazing lands. Additionally, community members identified a direct relationship between water and availability of pastures and soil. Water issues, as has been seen throughout the previous chapters, are very important for the community.

The Inclusion of Quilcas in the SANREM Process

Once issues and relevant actors were agreed upon, the process went as follows:

1. Interview with relevant actors in decision-making positions within key institutions
2. Collection of secondary information, land use study
3. Feedback and negotiation workshops
4. Emergence and strengthening of coalitions

At this point in the process, Grupo Yanapai decided to expand its research area and include Quilcas. The authorities and even some members of the community of Quilcas had approached Yanapai to ask to be included in the process because they felt they were being left out. At the same time Yanapai had already been planning expansion of their area of work to include a larger population. As Quilcas entered into the process, Colpar still was involved but took second place to Quilcas, becoming a part of the larger mother community. Land access and control greatly depended on Quilcas, since the mother community has ultimate decision-making power over distribution and management of all communal land. Therefore its inclusion in the process was strategic.

One of the drawbacks of the expansion of the research was that the community of Colpar became less involved as a whole and was represented only by its elected officials. A large proportion of members felt misrepresented, because they perceived that the communal board was weak. Lack of good leadership and weak communal organization was something that they had pointed out in many previous workshops. In a way Colpar community members felt the community was left behind when Quilcas took over the process. Their main issue of concern, availability of water, had been overlooked and replaced by land issues, their second choice. Colpar members recognized the importance of land in relation to the sustainability of the community in time. However, they were also confronting an alarming decrease in the few water sources they had, which was a threat to the persistence of the community. During an evaluation of the ACF in 2004, Colpar authorities expressed this sense of “having been forgotten”. I will touch on this point again further in this chapter. From this section onwards, I will present the process as it continued in Quilcas, and later on I will discuss how this process affected Colpar.

Interview with Relevant Actors in Decision-Making Positions within Key Institutions

The selection of interviewers within the community was done with as much participation as possible. Since mostly elected officials participated in this part of the process, they sometimes excluded those with less voice within the community. Yanapai could not always intervene to assure inclusion of these groups, because the NGO wanted the community to take this process into their own hands. Interviewees were selected from two different levels—local and regional—and from the civil society and state sectors. Later on in the process an actor from the local market sector (a mining company), an international civil society actor and one from the national government were included as a result of the information generated during the interviews and gathered from secondary sources. Twelve relevant actors were selected to be interviewed (Table 8.1). Knowledge about the issue and decision-making power regarding the issue were the criteria used for selection.

Table 8.1 Selected interviewees

Actors selected	Level	Criteria for selection
Four community presidents (former and current ones)	local	Decision makers, knowledge of theme
One private land owner	local	Decision-maker, involved in land disputes with community
Two key informants	Local	Knowledge of the theme
One district mayor	Local	Decision-maker
Four public/state institutions	Regional	Decision-makers, knowledge of theme

Interviewing these institutional actors provided the community and the SANREM team with mental causal models, rules of evidence (what type of evidence guided or persuaded the different actors) and desired future visions for each institution/actor. After the interviews were completed, the information was shared by interviewers with the community in plenary sessions and Grupo Yanapai transcribed the taped interviews and handed copies of the transcriptions to the communal authorities. Parallel to the interviews, Grupo Yanapai and the community carried out a land use study, at request from SANREM-Georgia, to further learn about the issue. What they discovered in this study made the community gain a new perspective on the issue and, as a result, plan new actions and identify new relevant institutional actors.

Collection of Secondary Information, Land use Study

The study looked at changes in land use over the previous 40 years. The study took place in 2001. The difference between this study and the one done by Kauffman and the UNALM in 1996 was that the former gave greater importance to the historical changes in use of land and the reasons behind those changes. Kauffman's study was more basic and focused on soil types and quality. Sharing of information generated by Kauffman's study did not result in the community gaining greater awareness of the need to change land use strategies. It was difficult to reconcile the findings and recommendations by the scientists with the reality of the

community. The community could not make such drastic changes as those recommended while continuing to produce part of their subsistence from farming. With the study done under SANREM, community members suddenly had a clear view of what they were losing in terms of land and how this loss was affecting their water resources, flora and fauna.

Researchers and community members mapped Quilcas' communal lands using their memory, aerial photographs of the area from 1960, and by ground truthing reconnaissance (walking the area). People were able to construct present land use and soils maps and superimpose them over an official map (used by the Ministry of Agriculture) of the area. They found that there has been a loss of approximately 44% of the total land area of the community (Nuñez et al. 2001). According to this study, the community owned 7,858 hectares in 2001, compared to the 14,079 hectares in 1994. Though loss has occurred in all agroecological zones, the greatest loss (51%) was found in the high zone (Nuñez et al. 2001). Nuñez et al. (2001) found that this loss of land could be traced back to the following events:

1. Land Ownership Legalization Act (PETT-Proyecto Especial de Titulación de Tierra). This law was issued in 1997 by the Peruvian state. According to this law, each community had to re-register its crop and pasture land titles. Pasture land was shared with the neighboring communities of Rangra and San Pedro de Saño. The division of this land was made by PETT officials without making physical verification of the area or consulting with all communities, and as a result Quilcas lost pasture land. The PETT was the cause of a persistent conflict between Quilcas and San Pedro de Saño regarding boundaries between communities.
2. Further loss of land to other neighboring communities through litigations. This was primarily a result of age-old land conflicts between communities because of unclear boundaries between them.
3. A local family appropriated themselves of over 360 ha of communal land, claiming they possessed a 16th century title to them. Most families in Quilcas believe this allocation was illegal. They claim that while holding a

position in the Municipality of Quilcas, a member of this family found the title and made illegal appropriation of it. Unfortunately for them, no proof exists of this act, and the title is legal.

4. Municipalization of Quilcas. This created a rift between the municipality and the community (modernization).
5. Disputes over communal lands between the different *barrios* in Quilcas.

The outstanding example is Colpar. Not recognized by Quilcas as a community but structured as such, Colpar has claimed from Quilcas the right to land for the exclusive use of its members. The community of Colpar already took over one sector of Quilcas communal land keeping it as its own in the early 1960s. According to Quilcas this incident consequently affected the equal distribution of land among all five *barrios*, disrupted the community's sectoral management scheme and affected the relationship between the different *barrios*. Colpar had even proposed to separate as an independent community. but during the SANREM process, Colpar decided this would not be possible, unless Quilcas gave them control and ownership over more resources so they would have natural capital to provide for all members.

As a result of land loss, the sectoral fallow system in the high zone went from nine sectors or *turnos* (equivalent to nine years rotation) in the 1960s to only five year rotation in 2001. As a result, land was not given a sufficiently long period of recovery before it was put into production again. The study also revealed that quality and quantity of soil has been affected. Pasture lands had started to show alarming signs of degradation due to increased animal pressure. The disappearance of practically all pasture land in the intermediate zone was blamed on government-sponsored forestation projects where eucalyptus was introduced on 163 ha that were formerly pasture land. The number of highland herders (*estancieros*) has grown considerably, from 33 in 1960 to 57 registered *estancieros* that formed part of the *criandero* society in 2000 (Nuñez et al. 2001). But the most alarming datum is that of the increase in the number of animals. In 1962, according to the community

inventory record, 7,843 animals grazed an area of 10,200 ha. By 2001, there were only 6,000 ha of communal pastures and 10,104 animals grazed in them.

In the intermediate zone, Nuñez et al. (2001) report that community members found that the loss of water for irrigation was alarming. While in the 1960s the community had approximately 400 ha of irrigated land, by 2001 it only had 57 ha. A large number of water sources (*puquiales*) had gone dry. The authors reported that community members recalled that in 1960 they had 20 *puquiales*. By 2001 only two were reported still flowing. There is no agreement among researchers from Grupo Yanapai and community members about the role of the eucalyptus introduced by government projects in the drying up of water sources; however it is obvious these trees are responsible for loss of soil due to degradation of the steep slopes where they were planted. Eucalyptus are notorious water users, very practical in the high water tables of Australia, but very dysfunctional in the semi-arid highlands of Peru.

The other important finding in the land use study was the effect of mining in the high zone. Researchers and community members found that in 2001 an open pit talcum and silica mine had opened a new road, destroying 300 ha of communal pastures, polluting rivers and endangering local fauna. Miners were also harassing female shepherds, creating an even more unsafe environment for women who usually had to spend many days even week in the isolated high plains with only their animals as company (Nuñez et al. 2001). Most community members had previous knowledge of the mine's existence; however, they had never really analyzed the impact it was having on their community. They were further shocked when they investigated more about the mine and found out that another 3200 ha were under claim by private mining companies in the mining registry department (Ministry of Energy and Mines).

The land use study provided very relevant information to understand why the community had lost such a large amount of land resources, information that otherwise might have not been found so quickly. The study paints a bleak picture of the community resources and depicts the threats that come from the outside as well as from within the community. Not addressing these issues would result in not

reaching the community's desired future vision (how they would see themselves in 10 years time), possibly even in the disappearance of the community. Thus the study provides the platform to start introducing changes in management of resources. Box 8.1 shows the topics related to land use and access the community and Yanapai decided were the most relevant regarding land issues.

Box 8.1 Land use and access issues of greater concern for the community of Quilcas (no ranking)
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- | |
|---|
| <ol style="list-style-type: none"> 1. Boundaries between communities 2. Communal vs. private 3. Mining 4. Land use for grazing vs. land use for crops |
|---|

The period of 2000-2001 was a very active one in terms of collective learning (for the community and Yanapai). The interviews were providing information that answered questions on loss of land to other communities and the magnitude of the mining industry issue that arose from the maps derived from the walks and conversations with elders regarding land resources over the years. Particularly revealing were the interview with the private land owner that had appropriated land that previously belonged to the community and the interview with the representative of the Ministry of Energy and Mines.

Feedback and Negotiation Workshops

As a result of learning about the extent of mining on communal lands, Quilcas members and Yanapai set up an interview with a representative from one of the mining companies. By adding this company from the market sector, all three sectors (market, state and civil society) were now included in the research. Additionally, interviews were arranged with three other relevant institutional actors that were actively working in the defense of the environment and of indigenous communities affected by mining. The idea was that a coalition might emerge to negotiate with mining companies and their allies in the district of Quilcas (and as some suspected

in the community) that included these last three institutional actors (OXFAM, CONACAMI and CONAM).

As a result of the land use study, interviews became more focused on specific themes within the broad issue of land access and control. Greater relevance was given to gathering information on the mining and intra-communal boundary issues. These themes were the ones posing immediate threats to the sustainability of the community through their potential impact on the future of communal natural resources. Interviewers prepared themselves before each meeting by reviewing official documents referring to community laws, land delimitation and titling laws (*deslinde y titulación de tierras*) and laws on mining rights. With the new information in hand, the community of Quilcas began looking for ways to negotiate with the mining enterprises. One strategy implemented was to affiliate with the National Coordinator of Peasant Communities Affected by Mining (Coordinadora Nacional de Comunidades Campesinas Afectadas por la Minería- CONACAMI) and to send a proposal to Global Green Grants (GGF) asking for funds for capacity building in negotiation. The latter activity was born out of the meeting with OXFAM representatives who informed Quilcas interviewers about the grant.

Grupo Yanapai, at the request of the community representatives, followed up on the GGF link and helped the community formulate the proposal which was funded. Yanapai was also asked by the community to administer the grant funds, which they did until 2004 when they gave to the community the remnant that was used to buy pasture seeds, another side activity for which GGF assigned a small amount of money. The GGF funds were used to produce an internal document assessing damages caused by mining. The funds were also used to finance several trips by community representatives to meetings with CONACAMI, two capacity building workshops on citizen rights, and one on pasture improvement.

With the information gathered from interviews, the study, the capacity building, and the negotiations with new partners such as CONACAMI, coalitions started emerging in response to the mining threat and to the pasture land issues.

Emergence and Strengthening of Coalitions: Engaging in Action

Information was shared with the community through a general meeting. However, not all community members were present in these meetings. Time constraints are always the main issue. Community members cannot always attend due to household subsistence obligations. Likewise, some members might not attend because they do not feel a strong sense of belonging to the community or they might not feel sufficiently empowered to make a difference in the community. They do not see their presence in a meeting resulting in change for the community and much less for them. Many times these members are the poorest in the community, and therefore the ones that feel the less adequate to voice their opinions. Grupo Yanapai was not always able to facilitate the participation of all groups within the community, especially of those frequently excluded (i.e. the old, the disabled and illiterate women). As in the other processes before SANREM, it became easier to work with elected officials, innovative farmers, and respected former officials.

The objective of meeting with the community was to present the findings from the interviews, to discuss whether or not it would be strategic to form coalitions with some of these institutional actors and to analyze the impact the ACF approach was having. By 2003 alliances had been formed with key institutional actors (Table 8.2), and the emerging coalitions had started to take action regarding mining and community boundary issues. Likewise the community of Quilcas strengthened its relationship with the Municipality of Quilcas and managed to initiate a dialogue with the communities of Rangra and San Pedro de Saños with the intermediation of the People's Defender (Defensoría del Pueblo) to look for ways of solving boundary conflicts.

Table 8.2 Institutional actors in coalitions with the community

Sector/level	Institution	Issue
Civil society/ National	Grupo Yanapai	Mining/ Boundaries
Civil society/International	OXFAM Andes	Mining
Civil society/Local	Community of Quilcas	Mining/boundaries

State/National	People's Rights Defense Office	Mining/boundaries
Civil Society/National	CONACAMI	Mining
State/Regional	Mining and Agronomy Schools (UNCP)	Mining
State/National	Master's program on Innovation (UNALM)	Research and learning

The case of the relationship between Quilcas and the People's Rights Defense Office is a good example of bridging social capital. Before SANREM, the community had no knowledge of the People's Rights Defense Office, an entity that makes sure that the citizens' rights are not abused. The intervention of this office proved to be very useful in negotiations with mining companies. The community had repeatedly tried to meet with representatives of one of the mining companies in the area. That company had not honored appointments and always had excuses to avoid meeting with the community's committee in charge of overseeing the mining issue. The committee contacted the People's Rights Defense Office, and an officer visited the mine with the committee. Seeing that this officer had come, representatives of the mining company immediately agreed on meeting with the community's committee and agreed to negotiations (more information found in the community acts included as Appendix 3).

The coalitions around the mining issue are shown in Figure 8.1. This was the first opportunity for the communal authorities to negotiate in an open manner with someone in the mining sector. Before this, every agreement between mine owners and Quilcas communal officials or municipal officials was done without the rest of the population either understanding the real dimensions of the agreements or directly benefiting from them. Two mining companies seemed to be the ones that caused the greatest damage to the community's land resources and were in greater conflict with the community. In Figure 8.1 I show how these mining companies (market) have links to the community (civil society) and municipality (state).

The story behind those links is told differently by each coalition. The miners say they have paid benefits to both community and municipality, while community minutes (actas) show that since 1977, mining companies have given contributions,

not because they had the obligations but rather as “donations” to the community. These donations consisted mainly of building material, primarily bags of cement, for the community to use (if the material ended in its hands) to repair local bridges and public infrastructure and received by what I have called in the figure key Quilcas community members. These key members could belong to the community board or the municipality or, in some cases did not belong to either but had sufficient political capital to influence board and municipality to receive donations without complaining.

Until recently, this continued to be the form of relation that existed between community and some mining companies. If there were any monetary contributions given by the mining companies, some community members affirm that it has stayed in the hands of previous community or municipal authorities with whom mining companies have made private agreements for them to be blind regarding the damage that was occurring to communal lands.

[p]or las puras llevaron a Lima a toda la directiva...y como le digo allí le han invitado, restaurantes...y luego se hicieron los ciegos. Cambio al otro presidente...igualito así lo estaban buscando.

[t]hey [the communal officials] were taken to Lima for nothing...and as I am telling you they took them to eat at restaurants...and afterwards they [officials] took a blind eye [to the mine issue]. A new president came in it was the same, they [the mining enterprises] were looking for him. (Colpar male community member 2005)

According to the new owner of one of the largest mining companies, they have approached the community to try to sign formal agreements (very weak link shown in Figure 8.1). The previous administration of this mine had for 29 years greatly damaged communal land. This new administration insisted that they wanted to work in harmony with the community and decrease environmental damage. This is the same company to which the community had to go with the People's Rights Defense Office representative to demand that they meet with the community. Nevertheless, his explanation of what is impeding his company from sitting at the negotiation table with the community is the following:

Como Empresa desde que iniciamos nuestras acciones siempre hemos tratado de formalizar con la directiva comunal, pero al parecer la directiva

comunal no esta inscrito en Registros Públicos esto desde hace un buen tiempo, por lo tanto no podemos registrar ningún acta que acordemos y por tanto para nosotros es importante que se formalice esto. La Empresa puede asesorar en lo que respecta a los Registros Públicos.

Since we began our activities as an enterprise we have tried to work in a formal manner with the communal board, but it seems that for some time now, the board has not registered in the Public Registry Office [when a new board is elected it needs to register]. Therefore we cannot formalize any act/agreement we make, and to us it is important that this be formalized. The [mining] company can give advice to the community regarding the Public Registry. (Interview administrator/owner mining company 2003).

The administrator also affirmed that they could not reverse 28 or so years of really bad management and contamination of the land; however they wanted to work in an ecological way, not damaging the area more than it was already damaged. In the end, the community and the company signed an agreement included in the community's minutes, where the company would be responsible of performing an environmental study of the area and follow any recommendation that came from it. Likewise the company would employ two sociologists to evaluate the effect the mining company was having on the community. In 2005, when I came back to the community to do my appreciative inquiry, I heard that to that date, the company had still to honor the signed agreement.

The relationship developed by the community with CONACAMI became very important for their negotiations with the mining companies, basically because CONACAMI provided information on community rights. CONACAMI meetings and workshops also served as a venue to contact and form alliances with other affiliated peasant communities. Quilcas learned that through coalition formation with other strategic organizations, they would have more negotiating power with mining companies. As a result of their affiliation with GGF and the training social and political capital it provided, Quilcas was named representative for communities affected by mining in the Mantaro valley. The community of Quilcas was to be a leader in the first meeting to take place in the Mantaro Valley for peasant communities affected by mining, financed by CONACAMI.

Regarding land demarcation issues with other communities, the communities of Quilcas and Rangra started a series of meetings to try to solve the conflict that resulted from PETT's intervention. So far no real solution has been reached. Each community has its own interpretation of what lands correspond to their communities, as can be seen in the communal minutes.

[t]here are problems regarding the way each community interprets and recognizes where their communities' limit is, an area called Shurapuquio. For the Quilcas authorities the Shurapuquio point corresponds to the *puquial* (water source) while for Rangra authorities Shurapuquio is found a little below the *puquial* (Quilcas communal minutes January 2002).

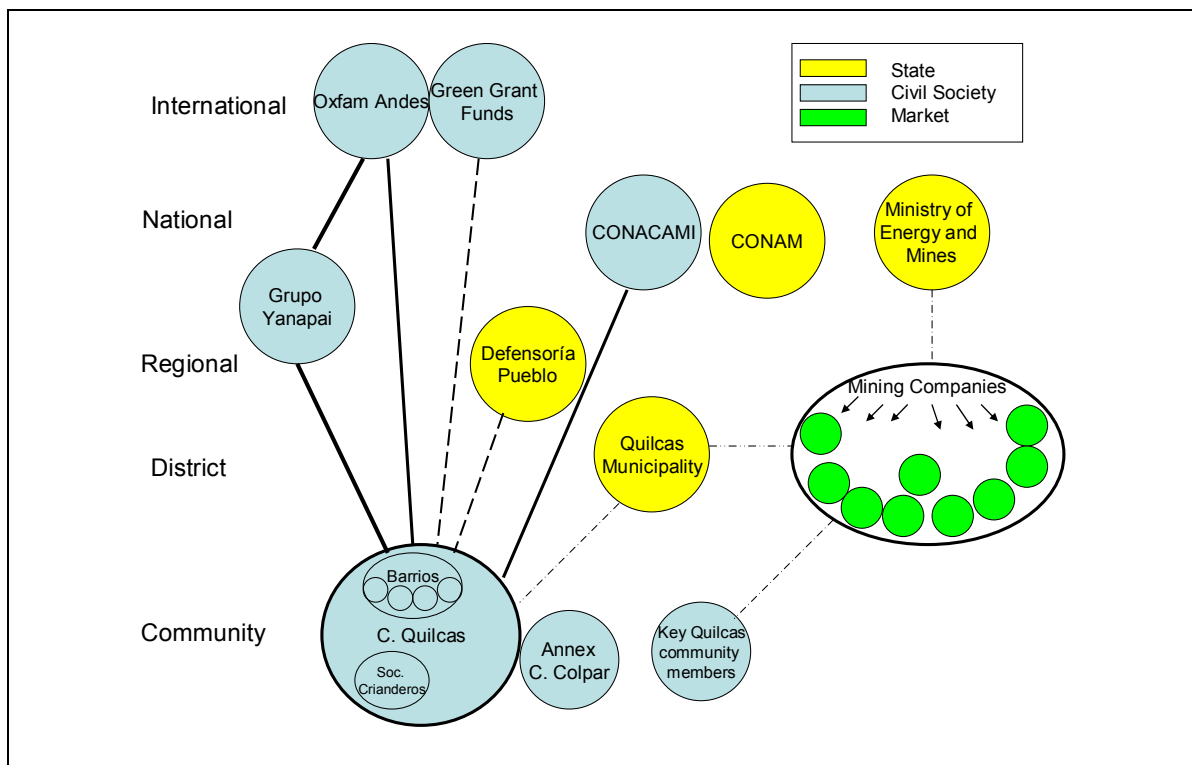


Figure 8.1 Coalitions around the mining issue

The People's Rights Defense Office, acting as referee in this negotiation, urged both parties to look for solutions out of the court of law. Both communities agreed to try solving things through dialogue. PETT representatives were to participate in a field tour with authorities from both communities to verify on the spot where the limit was physically located. One conflict that was agreed would be left

without really being addressed was that of grazing versus crop land. This was an intra-community conflict and involved the most powerful group in the community: the *Sociedad de Criaderos*.

In 2002, the community held a series of meetings to discuss what they should do with pastures in the highlands to reverse the degradation process. Participation was obligatory for members of the society but voluntary for the rest of community members. By establishing these conditions, the importance of inclusion of all representatives of the community in decisions affecting it as a whole was disregarded. Not giving the same relevance to the presence of non-society members reinforced the recognition of non- *Sociedad de Criaderos* (the Society) members that their voice was not relevant. Their exclusion implied that, because they did not utilize these pasture lands (mainly because they did not need to because they were too poor to possess animals), they were not concerned with what was happening to those lands, despite the impacts on the lowlands of soil degradation and loss of biodiversity on higher lands.

No decisions on strategies to deal with the pasture issue could be reached. When it came to putting in the balance the benefit of the whole versus that of the few (the Society), the Society would usually impose their perspective. Changes in management strategies that could benefit the community (i.e. fewer animals per member, smaller lots per family, organized rotations) were rejected by Society members. In the end, after several attempts in this meeting and others to address the issue, the community chose not to work on problems that would cause internal conflicts, such as the effect increase in animal pressure was having on pastures.

Nevertheless, according to Grupo Yanapai's observations, the ACF approach set forth a series of activities to strengthen and increase capacities within the community to face threats. The best example of this was the way the community approached the mining issue. The process initiated with SANREM improved the community official's response, initiative and sense of responsibility regarding the different activities that took place to increase the community's negotiation powers. The process had strengthened cultural identity because community members have

recognized the value of their knowledge, customs, practices and rituals—through the land use study—as very important to their community’s resilience.

Other Activities that Derived from the SANREM Project

The SANREM Project was indeed a process that kick-started a series of activities in Quilcas indirectly connected to the actions the community was taking to address land issues. Other outcomes came from the coalition formed with Grupo Yanapai, Iowa State University, the University of Georgia (part of the SANREM CRSP), the UNALM Graduate program of Technological Innovation and the Institute for Sustainable Small Scale Production Systems (Instituto para la Pequeña Producción Sostenible-IPPS). Appendix 4 lists these different activities. One activity worth mentioning is the first international ACF workshop with the participation of leaders from the community of Quilcas, leaders from neighboring Casacancha and Rangra and two researchers in charge of the Ecuadorian SANREM research. In this workshop the Peru and Ecuador SANREM teams exchanged experiences regarding the processes in both countries. Leaders of the different communities were especially interested in learning about the second degree organization in Cotacachi, UNORCAC. They were impressed with the role they had in the issue regarding the management of the Cotacachi-Cayapas Reserve and had many questions regarding the structure of the organization. A fascinating discussion arose regarding cultural differences between indigenous groups in Peru and Ecuador. Participants agreed that in Peru having indigenous blood was not a source of pride like in Ecuador and that in a way was an impediment for peasant organizations to have more representation within the central government and thus more political capital.

By 2004, the funding from SANREM had reached its end. However, SANREM-Georgia provided Yanapai with extra funding which the NGO used to reflect on the process at two levels. The first one was from the NGO’s own view of the process and its future after the end of the SANREM project. The second was from the community’s past and present official’s own perspectives. In this last level

both Colpar and Quilcas officials participated; therefore I will look at the similarities and divergences among outcomes perceived by each community.

Changes in Community Capitals as a Result of the use of ACF

Information is a powerful tool. The multiple activities that took place within the SANREM program gave many in the community access to this tool. The study on changes in land use provided possibly the greatest means for people to come to terms with the loss of natural capital that was happening in their community. Being faced with the reasons behind land loss and decreasing quality, made people realize that some type of collective action was necessary. The community became more aware of the damages that external and internal threats (i.e. mining and overgrazing) were causing to their land and their agroecological landscape. Likewise the community became aware that these threats could eventually lead to the loss of their native crops and fauna. Native crops have always been a relevant part of community members lives. Awareness of the richness they had in their biodiversity had increased (thus cultural capital was built) as a result of the biodiversity fairs⁶ started during the CA project which continued throughout the SANREM project.

The solutions to external and internal threats no longer were defined as technical. Addressing the issues within the community that were more complex than choosing a new crop, introducing “improved” breeds of animals or “improved” pastures. It required a different approach. Obviously there was a technical component, but this component was encompassed in a larger strategy in which the political component had the greatest weight. But to act, the community needed partners that had sufficient decision-making power to effectively support the community in their task of convincing other actors in opposing coalitions (i.e. pro-

⁶ Biodiversity fairs were first organized in Cajamarca and brought to Colpar in 1999. They were introduced to the community of Colpar by Grupo Yanapai as a way to celebrate world's food day as well as to celebrate the peasant woman. By creating a space where women could show their the different varieties of Andean crop seeds they manage, Grupo Yanapai sought to recognizing women's role in agriculture. The fair became a celebration of the community's local culture and knowledge. It became so popular that the Grupo Yanapai continued to organize it every year. Until 2004 Yanapai and the Community shared organization. In 2005 Grupo Yanapai gave full control of the organization to the community. Currently the fair has lost some of its luster but plans have been made by community members to revitalize it.

mining coalition) to sit around a negotiating table and set the community's agenda geared towards a more sustainable community livelihood.

Quilcas' leaders sought to use the ACF just for this purpose. Using a participatory ACF approach built bonding but mostly bridging social capital. A number of key decision-makers around relevant natural resource management issues were identified by the community and evaluated in terms of similarity in their mental causal models. Thus when it came to the issue of mining, the community formed alliance with organizations such as OXFAM and CONACAMI because they shared not only a similar desired future vision but similar ideas as to how to reach that desired vision. The following quote extracted from an interview with the president of CONOCAMI summarizes to me what could be a vision and means by which they seek to reach this vision similar to that expressed by OXFAM Andes:

Buscamos el respeto al derecho a la vida, al territorio, a los recursos naturales, a la consulta y otros, para lograr un desarrollo integral y sostenible mediante la participación ciudadana, el diálogo, la concertación y la generación de propuestas, en coordinación con las organizaciones locales, nacionales e internacionales involucradas.... [a] través de plenarias regionales, congresos regionales y talleres de capacitación que le permiten recoger los problemas y conflictos de las comunidades con las empresas mineras y, a partir de ello, define sus actividades a nivel regional.

We seek the respect for life, for the territory, for resources, for the voice of others, to achieve holistic and sustainable development through citizen participation, dialogue, concertation and the coordinated generation of proposals from local, national and international organizations...[t]hrough regional plenary sessions, congresses and capacity-building workshops that help everyone learn about all problems and conflicts communities face with mining companies and to use this information to define actions at regional level (Interview President CONACAMI 2002).

The relationship with both OXFAM Andes and CONACAMI helped the members of the community involved in the mining issue, to increase their human capital through the capacity building workshops, exchange of experiences to which they were exposed through their relationship with both organizations. The community learned about their rights and the existence of laws that supported their position vis-a-vis the mining companies. By learning about the different institutional

actors that could support them, community members were able to identify other possible partners that could help them overcome impasses. The best example is the intervention of the People's Rights Defense Office. Before using ACF, the community did not have the necessary tools/ information to identify this institutional actor as fast as they did and solve the impasse.

Building coalitions has given the community a certain increase in both bridging social capital and political capital that has been useful in achieving a certain number of actions that they might have not been able to achieve otherwise. However there are still questions regarding who can build on both capitals in the community. Can any member of the community access these capitals? Or, do only those in leadership positions in the community have the possibility to build on these capitals. Communities expect their leaders, the communal officials, be the ones in charge of any type of negotiation, as that is what they are elected to do. Something similar was observed by Echave (2001) in a study he did in various Peruvian Andean communities affected by the mining industry. In his study, Echave found that community is represented in negotiations with mining companies, mainly by their communal president, followed by a special committee to negotiate, and with less frequency the community can be represented by the mayor or other type of municipal or communal official.

Quilcas was represented by the President in many of their first negotiations with the mining companies and later on, when Grupo Yanapai introduced the ACF, Quilcas named a committee—that included the president of the community—to negotiate. Having had the bad experience of finding out that previous presidents and mayors had negotiated with some mining companies and suspecting that these negotiators had obtained more individual benefit than benefit for the community, it was decided that a committee would be a better strategy. This seemed to work better and a line of communication—though weak—was established between the community and some mining companies. The strategy also seemed to work better when it came to keeping negotiations in place even when a new president entered.

The strategy, however, did not seem to work with the problem of overgrazing. The community decided to leave this issue out of the discussion. The *Sociedad de Criaderos* exercised pressure when it came to deciding how to approach the issue of degradation of pasture lands due to overgrazing. Clearly they have decision-making power over this resource and unofficial veto power over proposals they feel would not benefit them. What we see is that there is strong bonding social capital in this group. Culturally, they are a strong group and other community members, especially the less privileged ones, would not dare oppose in public any proposal this group raises. They are very powerful within the community as many of their members have been former presidents and/or occupied other positions of authorities in the community. This group has grown in number from 33 associates in 1960 to 50 associates in 2001, which has also meant an increase in number of animals while pasture land has decreased considerably (an approximate loss of 49% compared to the area possessed in the 1960s).

In 2004 Yanapai and the community evaluated the use of ACF in the development process in the community. The outcomes of meetings and focus groups provide me the information to analyze how the different capitals have been or have not been strengthened. Likewise I analyze how building on one capital has resulted in some cases in unexpected building of other capitals. Table 8.3 provides a summary of the focus group done in Colpar with former presidents and the current one from the periods of 1999 to 2004. I include the different activities, expected outcomes, difficulties and unexpected results identified by the focus group. In parenthesis I have added what capital has been strengthened when another capital is invested in. We did a similar exercise with former authorities in Quilcas, but, given that there are many similarities between both tables, I will only mention the differences when they exist as I discuss the highlights of the evaluation done by Colpar participants. Another reason why I give greater relevance to Colpar here is because I want to see what has happened in Colpar during a process where they were not the main partner but rather part of the greater community. How has the process taking place in Quilcas as a whole affected Colpar?

First of all, the Colpar focus group expressed their feelings of having been left behind during the SANREM process. Their main issue was water, and land use was second in priority. When the research and development process grew to encompass Quilcas, the focus turned to land use problems. In very soft terms, the former presidents of Colpar let Yanapai know that the way in which the project suddenly shifted did not leave them happy. However they continued to work as part of the greater community of Quilcas. Despite these comments that give the image of Grupo Yanapai abandoning all work with Colpar, the reality is that the NGO had various processes going only in Colpar and that were linked to the ACF.

Three of these activities have had greater impact on Colpar (where they took place) than on Quilcas. These are the biodiversity fair, the selection of potato clones (both natural capital and resulting from bridging social capital) and the establishment of a library (human and built capital resulting from bridging social capital) in Colpar's primary school. The first and third are unexpected results. Interestingly enough all three occurred in the phase when the CA project was reaching its end and SANREM was beginning, a period of time in which a new president had been elected in Grupo Yanapai. The convergence of events apparently created the right environment for changes and actions to occur. Yanapai's new president and the availability of funds injected Grupo Yanapai with new vitality. Added to this, the introduction of the ACF seemed to provide a needed addition to the CA in the way of a tool for building political capital and maybe more effectively engaging in collective actions.

The new president also brought into Yanapai her links to different institutions that the NGO had not accessed before or had disconnected from; thus Yanapai built new social capital and renewed old links. The community benefited from this social capital. One result was the joint effort to initiate a biodiversity fair. I have already made reference to the biodiversity fair in Chapter seven.

During the biodiversity fair, which took place in the school's sports field, one of the invited guests had a conversation with the school teacher and members of the APAFA (Parents Association- Asociación de Padres de Familia). From that conversation the idea to implement a library was born and put into action. In less

than a year the library was functioning. It is now the best library in the area, even children from other barrios in Quilcas go to this library. It is constantly growing through book donations. Every time members from the APAFA have the chance, they look for ways to get new material. It is a source of pride for the community, and they take care of their books and magazines. Bridging social capital (connection with the person who helped get the library running) led to built capital (room, furniture and reading material) which provides the necessary elements to build human capital not just children but also adults.

The potato clone selection was research initiated by the new president of Yanapai. The idea was to have the community, instead of the researchers at CIP and INIA, select the varieties of seed that would better adapt to the community's conditions. The community had the right to name the clones they selected. The name recognized their role in the selection. INIA presented the two varieties the community selected, *Wankita*, resistant to nematodes, and *Colparina*, which is frost resistant. Participating in the selection of clones built on the community's cultural capital because their local knowledge was a key factor in selecting varieties that would be used. So far research centers had based their clone selections on their scientific criteria that most times did not match the criteria of peasant farmers, disregarding what they considered important selection criteria. Many varieties of potatoes released for public use fail to be accepted because of this reason. The community's criteria were given first priority in the selection process.

In Colpar there was a good amount of repair of infrastructure as a result of negotiations between the community and institutional actors at regional, national and even international level the community had formed bridges with. Colpar was not as involved as Quilcas in actively participating in the mining issue that was reflected in the recollection. They were less likely to mention it in Colpar compared to Quilcas.

Table 8.3 Analysis of SANREM project in Colpar (Rapid evaluation by focus group in Colpar)

Activities (what capital was invested)	Results (what capital was built on as a result of investment)	Difficulties (what capital still needs to be invested in)	Unexpected results
AGRICULTURE: Natural Capital - Potato clone experiments	<ul style="list-style-type: none"> Memorandum of understanding with Yanapai-INIA (SC, PC) Identifying desirable clone var. (NC, CC) Learning to recognize pests and diseases (NC, HC) Learning procedures for selection and diffusion of varieties (HC) 	<ul style="list-style-type: none"> Pests becoming harder to control and appearance of new pests (NC) Price increment of fertilizers (FC) Overgrazing continues (NC) 	<ul style="list-style-type: none"> Identifying drought resistant potato varieties (colparina and wuankita) that are now recognized as belonging to Colpar (NC, CC) Increase in number of potato varieties (NC, CC)
ORGANIZACIÓN Human, Cultural and Social Capital	<ul style="list-style-type: none"> Changes: Institutions directly working with the community (PC) 	<ul style="list-style-type: none"> Lack of leadership (weak org. structure) (PC) Reluctance becoming <i>comuneros</i>, numbers have decreased (CC, HC) Migration (HC, FC) 	
MANAGEMENT: Social, Built and Political Capital	<ul style="list-style-type: none"> Renewal of school infrastructure: Improvements (wall, roof) for better learning environment for children through agreements with Municipality and CTAR (Transitory Regional Commission) (BC) Road: negotiations with institutions such as CTAR, FONCODES and provincial municipality (BC) Fish farm: Positive results, technical proposal pre-approved. (FC-BC) Biodiversity fair: created space to learn about comm. existing varieties, Colpar is recognized as organizer of the fair (since Colpar initiated fair, new fairs have spread throughout the valley; more external participation (CC)) Exchange of experiences: <ul style="list-style-type: none"> In Peru: with communities (i.e. in Puno, Cañete, Huancavelica) and inst. With Ecuador: Ecuaurunari, UNORCAC, Heifer-Ecuador, (HC, SC, PC) 	<ul style="list-style-type: none"> Official recognition of Colpar: lack of coordination at municipal level, negative attitude of politicians and candidates at district and provincial level towards the recognition. (PC) Education: Failure to nominate two school teachers (new director) (HC) Fish farm: Lack of funds and of continuous technical support (FC, HC) Land use study: Only 20-30 % of community acquainted with the study Water monitoring: Lack of continuity, its importance not properly communicated to members, committee failed (NC, SC) 	<ul style="list-style-type: none"> Renew school infrastructure: Concrete floor for school patio Education: <ul style="list-style-type: none"> Agreement with NGO Every Child (they pay 4 teachers for summer school program) (HC) Library (HC, BC) Land use study: learned of extent of mining in communal lands, learned to distinguish soil types and understand soil analysis, community members now recognize their community's boundaries (NC, HC)

NC= Natural Capital; CC=Cultural Capital; HC=Human Capital, SC=Social Capital; PC=Political Capital, FC=Financial Capital; and BC=Built Capital

The participants in the focus group were aware of the results of the land use study; some even participated in it. However, they felt that community officials had failed to share it appropriately. Most of the community still is unaware of the magnitude of changes in their community and the threat many of those changes posed for their future. The focus group calculated that only around 30 percent of members of the community of Quilcas was aware of the study.

Strength of the communal organization was a major discussion for both Colpar and Quilcas focus groups. One problem they raised was that many young people are not interested in becoming community members. Likewise those who are members are more interested in the personal benefits they get by being member (access to communal resources) rather than in their contribution to the community. One participant pointed out that migration is a major reason for the growing weakness of the organization: *“La gente tiene que salir a trabajar”* (people have to leave to work). Everybody agreed in both focus groups that the community had decreased. This was also seen in the land use study where Nuñez et al. (2001) report that membership in the community of Colpar has decreased from fifty-one to thirty-nine household in the four years previous to 2001. On the other hand the community of Quilcas had only 280 out of approximately 400 families with members registered as *comuneros* (qualified community members), including families in Colpar (Fernández-Baca and Fernández 2000; Olivera 2004).

There were other focus group participants in Colpar that blamed weak organizational structure on leadership in the community. There was no continuity from one communal board to the next:

[c]uando hay cambio de una gestión a otra, en vez de continuar/terminar lo que la gestión saliente inició, generalmente se abandona y se pasa a cosas nuevas. Hay desperdicio de recursos y necesidad de desconocer los logros de otras directivas.

[w]hen there is change from one administration to the next, instead of continuing [work/negotiations] what the previous president was doing, the new administration generally abandons it and starts new processes. Resources are wasted, there is a need to ignore what ever achievement other community boards have had (Focus group Colpar 2004).

In Quilcas there were similar discussions regarding community structure. The theme was even more relevant at that moment, as that the president at the time had been kicked out of the position accused of making profit from selling lumber from the community forest. There were constant speculations if that was the right reason or if he was thrown out because his ideas went against the views of a powerful sector within the community. As time has passed and I have talked with diverse people in the community and Grupo Yanapai, all seems to indicate that both reasons contributed to his dismissal. When the focus group took place, there was a silent battle going on between two factions to take over the board. The focus group indicated that they wanted to clean that bad image this dispute had created; it debilitated the negotiation power of the community, decreasing their political capital.

Both focus groups in Colpar and Quilcas agreed that they built substantially their bridging social capital. In Colpar they said that their relationships with other institutions had grown. One participant's reason was simple: "We are not so scared anymore" (*ya no estamos tan asustados*). That fear was based on insecurity of knowing what to say or how to relate to an institution. The level of verticality in the relationship between community and institutional actors from other levels and sectors (i.e. state) has decreased. There is more horizontality in these relationships, as in some instances the community has approached the other institutions with a different attitude than that expecting to receive whatever the other has to give. The ACF has been a knowledge utilization approach for the communities of Quilcas and Colpar as well as for Grupo Yanapai. As Jenkins-Smith and Sabatier (1993) argue, the ACF approach has an enlightenment function. In the Peruvian case, ACF researchers were not just observing from the outside processes that were already in place. In this process, researchers became facilitators, especially in getting the process going, who then observed how coalitions were formed as the members of the community became enlightened by the knowledge they gained with each new visit to the diverse institutional actors. This promoted community members to start their own analysis of the pros and cons of working with these institutions in a coalition.

The focus group in Quilcas was the only one to recognize the relevance of the inclusion of women in the process. Grupo Yanapai, during their own internal evaluation of the process, also found absence of women in the process to be one of its weaknesses. As the community took ownership of the process and Yanapai shifted from its role as facilitator to that of ally, women's participation decreased. Participants agreed that women's organizations should be included. They stated that community authorities could learn from them how to have strong organizations and leadership. Women had a more visible presence in the committees that were negotiating the resource issues, and there was an increase of women in positions within the community board and even in the municipality. Up to my last visit to Quilcas in 2005, Quilcas had yet to elect a woman as president of the community. But there were more women in positions in the board. Even in the municipality, there were women from the community, not just the town, who held elected positions. However the most relevant presence of women in power happened in Colpar, where all positions except one, was held by women including that of president. Colpar might not be a recognized community; however they seem to have become more gender equal. I discuss more on women's current role in the community as well as other themes that came out from the evaluation that I did in Colpar and Quilcas in Chapter nine.

Summary

In this Chapter I have discussed the SANREM project initiated in late 1999 in the community of Colpar. In the project, Grupo Yanapai with the help of its ISU partners implemented the Advocacy Coalition Framework (ACF) approach proposed by Jenkins-Smith and Sabatier (1993). Through the combined use of the ACF and PAR tools, the community identified land access and control as an issue they needed to address to reach their desired future. Identification of key actors related to the issue and participatory interviews with these actors were done. Parallel to these activities, researchers and community members engaged in a study that looked at changes in land use in the last forty years. A result from this study was that people

identified three important land access and control related areas: (1) Boundaries between communities; (2) the occurrence of non-metallic mining in communal pasture lands; and (3) use for grazing vs. land use for crops.

The AFC process initially gave emphasis to all three areas. To avoid creating conflict between the community and the *Sociedad de Criaderos* a powerful group within the community, the third area relating to conflict between pasture and crop lands, was not addressed. Mining companies had existed for more than 40 years but awareness of the impact they had on natural resources in the community did not become evident to the whole of the community until they carried out the study and initiated the subsequent ACF process around the issue. As a result of the ACF, Colpar and Quilcas gained a number of new relationships with relevant actors and formed a coalition around the mining issue building both bridging social capital as well as political capital. By making use of the knowledge provided by ACF, the community and Grupo Yanapai have been able to make informed decisions on how to approach the boundary and the mining issues. Boundaries between communities and private owners are being negotiated. Likewise, as a result of the process taking place, communities affected by mining are now demanding environmental studies. By the end of the SANREM project, Grupo Yanapai was leaving its role as facilitator of the process to take a role as link to other institutional actors while the community, in the form of committees and board officers, were taking ownership of the process.

CHAPTER 9. FINAL EVALUATION USING APPRECIATIVE INQUIRY: PERSPECTIVE OF THE ACTORS DIRECTLY INVOLVED IN THE DEVELOPMENT PROCESS

In chapters six through eight I presented three different research/development projects that took place in the community of Colpar. The information I have presented is based on the data and notes gathered during the different intervention periods. It reflects my analysis and perspectives of the evolution of these projects. A year had passed since the last project ended, and I wanted to hear the voices of people within the community reflecting on what they felt were the outcomes of the processes that took place in Colpar. In this chapter I bring out these voices using Appreciative Inquiry. Using this approach the community and members of Grupo Yanapai could reflect on the overall process, the perception of the positive lessons and actions that have come out of these processes and what skills and approaches they continue to use as well as the areas where they would like to see further work.

Appreciative Inquiry has five stages/phases. Some refer to these phases as the five “Ds”⁷:

1. Define: What is it that we want to focus on, what we want more of.
2. Discover: what is it that has been working so far.
3. Dream: How we can use what we learned to create an even better future.
4. Design: Find innovative ways to get to that better future (provocative propositions).
5. Deliver/Develop: Making innovation happen. Who does what, when, where and how to develop that future.

Other use four Ds, not engaging in a define phase. For the purpose of this dissertation, I did not go as far as the delivery phase. As I analyzed the data, it became evident that the process was going to differ from a traditional AI. Even before the interviews took place, as I prepared the protocol, it was with the idea of

⁷ <http://www.vancouver.anglican.ca/Portals/0/GetFit/PDF%20files/> accessed 10/6/06; Hammond, Sue Annis (1996) *The Thin Book of Appreciative Inquiry*. Thin Book Publishing Co. Plano, TX.

conducting an evaluation of an R&D process. Appreciative Inquiry had not been used for this type of evaluation; that made adapting the approach for this purpose a challenging task. An interesting and enlightening series of stories told by men and women from different strata within the community emerged that helped me build a picture of what had remained in Colpar (and Quilcas) from the different R&D processes that had taken place there. Many times I found common thread between stories, similar discovery processes and lessons learned. Other times I found very different perceptions and analyses of what worked and why.

Getting community members to enter into a positive frame of mind was testing. In the dream phase people would come up with what they needed rather than how they could use what they had learned—the tools and how to use them to make things even better. The reflections people provided are enlightening in the sense that they give me, the researcher a picture of what the processes that took place in the community, learn what capitals had been built on, and what capitals appear will be invested to strengthen others. However, before I go into the actual data relating to the different phases, I identify who is speaking to me during the interviews so, although I do not present names, we know that this group of people speaking is a heterogeneous group both in terms of gender and social position.

The Process of Reflecting on Change: Knowing who Speaks

Critical to the AI process is voice. The AI evaluation process is further enriched when it can count with the voices of men and women from different social groups within the community. As mentioned in the methodology chapter, I interviewed 22 people in total, 12 from Colpar and 10 from Quilcas. The purpose was to hear what they had to say about the last 10 years of work within the community, and how they viewed the different processes that took place. In addition to interviewing community members, I was also interested in learning how Grupo Yanapai viewed the same process. I was particularly interested in discovering their views of the last five years, when we added a stronger social component to the work

being done with the community in contrast with the first five where they were more focused on technological support for the development process.

All interviewees were active community members, except one woman in Quilcas who was a retired community member and one man in Colpar who had lost faith in the community and decided to terminate his membership. People interviewed came from different strata within the community. I used the typology presented in chapter seven to identify what strata interviewees would place themselves in, based on responses to questions regarding livelihood strategies. Table 9.1 presents this typology for both Colpar and Quilcas. Seven out of twelve interviewees in Colpar belonged to the Biodiverse Group, while for Quilcas only one was in that group. Four out of the total number of people interviewed in Colpar and six of ten interviewees in Quilcas belonged to the Agricultural Laborers group. There were more women than men in this group in Colpar, while in Quilcas there was an equal number of men and women. Females in this group were married or had partners (except for one who was a widow) that worked outside the community. Two interviewees, from Quilcas, were in the category of Livestock Producer. Both were also members of the *Sociedad de Criaderos*. Finally, one person in Colpar and one in Quilcas (both females) belonged to the Artisan/Business group. There were no representatives of the Single Mothers' category; however, the two women in the Artisan/Business category were once classified as Single Mothers.

Table 9.1 Typology under which interviewees were classified

Type	Colpar	Quilcas
Biodiverse Systems	5 male, 2 female	1 male
Agricultural Laborers'	3 female, 1 male	3 female, 3 male
Livestock Production		2 male
Artisan/ Business	1 female	1 female
Single Mothers'		

Differentiating people into Biodiverse Systems or Agricultural Laborers' was more difficult than expected. The deciding factors were number of agroecological

zones the interviewee had access to and if s/he worked as a laborer outside the community. Nevertheless, the differences are very subtle and a household shift from one category to the other can happen very quickly depending on how their capital assets are invested.

People ranged in age from 30 years to 66 years. The Presidents of Quilcas and Colpar were among the people interviewed. In Colpar, the president, was a 31 year old woman, the first woman to be elected as president in Colpar. She helped identify the people I interviewed in the community. Most of those interviewed in Colpar had different levels of participation (from very active to only being present in the workshops that took place) in the three projects Grupo Yanapai led. Only two people living in Colpar, both women, had married into the community, though they both had lived more than ten years in Colpar and already considered themselves “*colparinas*”. All men had been born in the Quilcas district. All interviewees living in Quilcas had been all born there.

In Quilcas, three interviewees, the current president, an additional male, and one female community member (all in the Agricultural Laborers’ category) had never worked with Yanapai. Both men had spent most of the time laboring outside the community; thus they were not present when Grupo Yanapai held workshops. The female interviewee had also spent a good time of her adult life living and working in a mining town about five hours away from Quilcas. She had a small food service (*pensión*) for miners, while her husband worked as a miner.

People interviewed in Colpar and Quilcas were asked the same questions (Appendix 1) to elicit their views of any changes that they might have seen in the last 10 years and how they visualize their community in the next 10 years. I also wanted to know what people perceived as the positive lessons and tools they might have acquired during the 10 years of development processes they had gone through. Would it be possible to identify assets they had built on and learn how they were planning to reinvest them to build more on the same capitals or to build on new ones? The following sections show the outcomes of these questions.

Define Phase

People in the community are aware of the need for change. They are aware that their resources are being threatened—their natural, cultural and human capital being lost—mostly by practices brought about by modernization. Men and women identify the evidence that exists in the community of loss of natural capital related to the entrance of non-metallic mining to the communal pasture area:

Todos los pastos naturales que tenemos en las alturas al lado de las mineras ya van contaminándose...Antiguamente yo recuerdo que teníamos una buena cantidad de truchas en esas lagunas, en esos riachuelos, hoy en el día no se les consigue. La fauna era mas hermosa, allí teníamos las plantas nativas como el paracsho, la huila, todas esas cosas están perdiéndose prácticamente...

All the natural pasture we have in the highlands near the mining areas is being contaminated the same as our fauna. I remember in the past we used to have a great amount of trout in those lakes and creeks; now they have disappeared. Fauna used to be more beautiful with native plants like the paracsho (*Loricaria ferruginea*⁸), huila (*Senecio canescens*⁹); all those things are practically being lost. (Interview President Quilcas 2005).

People are aware that they have to take care of their resources to be able to sustain their community as such. There is a concern that if nothing is done, the community might end up disappearing, something the majority of those interviewed did not want to see happening. Taking this into account, the AI process posed the question, “What does the community need to continue doing right to keep people in the community and that they can gain their livelihoods within the community?” In other words, “What do we need to do even better to continue the revitalization of the community and continue enhancing its community capitals?”

The Discovery Phase

The discovery phase looks at what people identify has worked best for them and for the community. They do this through story telling. The men and women

⁸ www.scielo.org.pe/img/revistas/rpb/v11n2/anexoa12.html (accessed 10/3/06)

⁹ Ibid.

interviewed in Colpar and Quilcas identified what they liked from the last ten years, the positive core that can be identified from that experience. One question asked to get to this positive core was how they, their families, and the community had benefited from changes that might have happened in the last ten years. I asked them to tell a story of a good experience they had working with Grupo Yanapai and why they thought it had been positive. A good number of people who to the first question answered that nothing really had changed or that things are worse. However once the conversation continued and they started remembering positive experiences and things they had learned.

Examples of how they learned can be found in the words of men and women from Colpar who learned integrated pest management practices (IPM) and who have adopted the practice while others did not. One interviewee in Colpar explained that by learning to use treated manure, they had seen a decrease of pests in potato fields. Another male *comunero* in his early sixties, who belonged to the Biodiverse Group and was a farmer-experimenter that had participated in all activities Grupo Yanapai had introduced to the community, expressed the highlight of his learning experience with the NGO:

Con Yanapai lo que me gustó mas es la inquietud de que nos ha instruido a hacer el recojo manual, poniendo trampas [para atrapar] el gorgojo y después otro es en las polillas...y también hay que decir en los nemátodos donde a veces no podíamos nosotros distinguirlo bien y allí cuando ellos han traído esa lupa con eso hemos identificado bien los nemátodos. O sea hay cositas que me ha gustado, después nos dio la iniciativa en lo de la biodiversidad eso era bastante acogido por todos nosotros...porque aquí ni conocíamos del gorgojo entonces hemos logrado conocerlo poniendo esas trampas....nos fue beneficioso porque nosotros desconocíamos y con esas trampas hemos bajado la cantidad de los gorgojos. Por ejemplo en esos concursos obligado si quería ganarse un premio teníamos que recoger los gorgojos una cantidad...hasta en mantadas....eso también nos ha dado mas adiestramiento, mas acogida dentro de la comunidad...

What I liked most about Yanapai was the teaching we received on the control of insects, such as the manual picking of weevils and the use of traps for catching moths...also I must say that in the case of nematodes we were not able to distinguish them properly, but when they introduced the use of the magnifying lens [microscope], it was much easier too identify them. So, I liked these small things. They also gave us the initiative on biodiversity, which was well accepted by all of us.... we did not know much about weevils, but with

the use of the traps we learned about this parasite.....it was very beneficial for us, because with the use of traps we have decreased the amount of weevils. For example in the contests where we participated we had to try to pick up as many weevils as possible to get a prize...we would fill sacks...that gave us more training and was better received by the community. (Colpar male community member 2005)

At least five out of 12 prepare and use their own compost. Most had participated during the ILEIA phase in PTD experiments involving use of compost. Others had also been involved in another activity, Yanapai-led “Field Schools”, financed by FAO in 2004, where compost preparation was also included. One female community member was in her mid forties and belonged to the Biodiverse Group. She pointed out an important aspect that makes any learning experience useful. She said that in order to learn we must be willing to sacrifice something. In her case it was time:

En lo comunal otros nos tomábamos interés y otros decían, ‘No eso es en vano’. Yo decía ‘¿porqué no creen si estamos encontrando los gorgojos que nos indican?’ Es que perdemos tiempo decía la gente. Pero se pierde tiempo pero se aprende algo yo decía.

Within the community some of us were very interested [in IPM] while others were not. I used to argue ‘why are you reluctant when it is evident that we are finding the weevils as we were told?’ Some people would say ‘It is a waste of time’. I would say it takes time but we learn (Colpar female community member 2005).

The community has learned to apply what they have learned with Yanapai and are using this knowledge now that Yanapai no longer is constantly present in the community:

...[e]n la granja comunal, nosotros mismos hemos tenido que llamar a los que han sido capacitados por ejemplo en la dosificación de animales y hemos hecho saber a esos señores...ahora que ya no esta Yanapai ahora nosotros somos [los] que debemos defendernos”.

[f]or [treatment of the animals in] the communal farm, we have had to call on those in the community that had been trained in animal drenching [for internal parasites] and we have told these gentlemen...now that Yanapai is no longer here, we have to take care of ourselves.

Networking was directly related to learning. In Quilcas one community member was very grateful to Yanapai for helping the community establish relationships with other organizations (i.e. OXFAM Andes, CETAR Junin, UNALM, IVITA ISU) at the communal, regional and even international level. By connecting with these institutions, many questions the community had regarding rights and obligations were answered. One example given in the interview with an ex-president of Quilcas was the issue regarding Colpar's wish to become recognized as an independent community. Visits to certain institutions while gathering information for the land use study helped to inform representatives of Colpar to see that it is not possible to separate from Quilcas, because Colpar did not have enough land to administer as a community. Exchange trips (farmer-to-farmer exchanges and visits to institutional actors) were mentioned by three people in Colpar. One woman said that these activities should continue because "*si sales a distintos lugares, como dicen, te estas capacitando mas*" "If you go out to different places, you are, as they say, building your capacities even more".

The ex-president of Quilcas was one of the few to mention Yanapai's role in the activities the community undertook regarding the mining issue. Any other links between Yanapai and the mining issue were found in Quilcas rather than in Colpar, since it is there where the greatest body of work and capacity building at the community level was done regarding this issue. However, interviewees in both communities were well informed about the mining issue, and in both communities only two people had not participated at least once in meeting or activities related to the issue. Of the interviewees, one male in Colpar and one male and one female in Quilcas had not worked with Yanapai in any of the three intervention periods. All were well informed about the mining issue and at least the male interviewees had been or were currently involved in actions dealing with the mining companies. Only one female interviewee had not been involved in actions against mining.

These findings show that the community has taken the negotiation process around mining as its own. Ten years ago, the mining issue was not a topic of conversation in the community. Some might have commented on it, but not

everybody was informed. And the mining companies were present in the community ten years ago; the changes in land study by Nuñez et al. (2001) shows that mines have existed for at least the past 40 years. Learning together with Grupo Yanapai about land issues led the community to collectively identify the mines as very real threat to the future of their natural resources. Those that participated in this learning process shared the knowledge with those that did not, as the community took ownership of the process and continued to deal with the issue.

Collaboration and participation were seen through the examples given by another female and a male community member in Colpar. Women were able to work together and enjoy the work they were doing “...*teníamos alegría, alegrábamos todas las madres reuniéndonos, trabajando en las alturas todas..preparando platos para vender*” “...there was joy, all of us, the mothers were happy, getting together to work in the highlands...preparing food to sell”. Such work increased the bonding between women that worked together, and at the same time the mothers managed to earn sufficient money (through potato production) for their individual and group (mother’s groups) needs. A male community member talked about working with Yanapai to get the community to engage in a *faena* (communal work) to produce potato. The money earned from the sale of this production provided sufficient funds for different communal projects (i.e. repair of infrastructure in community). Another example given by interviewees is that of community participation in capacity building in organic crop production and in selection of potato clones. This last activity empowered the community because they became the ‘discoverers’ of a specific variety. It also falls under recognition because, although The National Institute for Agricultural Research (Instituto Nacional de Investigación Agraria-INIA) did not recognize the community’s role in identifying disease resistant potato clones in a public ceremony, the potatoes will always be identified with the community due to its name and history, especially the variety the community liked the most, the *Colparina*.

All of the three previous examples were related by interviewees to an improvement in communal organization. If the community had not had a fairly strong

organization, all those things would have not been possible because of lack of participation. The collaboration occurred through the side-to-side work done by the community, the NGO and other external organizations like INIA and CIP (International Potato center). If we look at these examples that relate to the CCF, what we see is synergy among various capitals acquired by investing in natural capital and bonding social capital, the community had sufficient financial capital to invest on built capital. To continue this synergy among the different capitals, the next step would be for the community to use what they learned as inputs in visioning a future where things worked even better.

The positive achievements and experiences mentioned above came out of people's stories. They can each be summarized in one word or a short phrase that describe what men and women in Colpar and Quilcas have gained from the different processes. These words define the assets that can invest to build their natural capital as well as all other six capitals. These words are our positive core:

1. Learning (Human capital)
2. Networking, getting to know new people and institutions (Social capital)
3. Collaboration (Human and Social capital)
4. Participation/involvement (Social capital)
5. Recognition (Political and cultural capital)

The Dream Phase

In the dream phase members of the community were asked to reflect on the future ten years. This is the phase where people picture how things could be (Cooperridger and Srivastara 1987). Taking into account what worked for them in the past ten years, how they could use what they learned then to make the next ten years even better. Table 9.2 shows the ideas on which dreams revolve and identified by the different interviewees. In the same table I show how these ideas relate to the positive core identified during the discovery phase.

Table 9.2 Relationship between the positive core and the dreams

Positive Core	Dream
<ol style="list-style-type: none"> 1. Learning (Human capital) 2. Collaboration (Human and Social capital) 3. Participation/involvement (Social capital) 	<ul style="list-style-type: none"> • A community that is like before, when everybody could live out of what they produced. • A community that produces organically. • A community that has agroforestry. • A united community, with strong organizational structure. • Youth want to become members of the community and can make a living in the community. • A community in which its male members do not migrating outside because of economic necessity.
<ol style="list-style-type: none"> 4. Networking, getting to know new people and institutions (Social capital) 	<ul style="list-style-type: none"> • A community with social and political capital to invest in the sustainable management of its natural resources and to effectively negotiate when there are external threats.
<ol style="list-style-type: none"> 5. Recognition (Political and cultural capital) 	<ul style="list-style-type: none"> • A community with social and political capital to invest in the sustainable management of its natural resources and to effectively negotiate when there are external threats. • Youth want to become members of the community and can make a living in the community.

People had a number of dreams; the first one was that the community prevail. Even the man who had not registered as a member after having been disappointed by the lack of collaborative action among fellow members wanted the community to continue to exist; there just needed to be some changes. Other dreams revolved around the ideas shown in Table 9.2:

1. ***A community that is like before, when everybody could live from what they produced.*** One of the older ladies in Colpar remembered how her mother would kill a lamb once in a while and they would make their *charki* (dried meat) and eat it with *chuño* (dehydrated potato) or fresh potato. Another community member, but from Quilcas, pointed out that if they reverted to the old agricultural practices, diseases and plagues in their crops would not be the problem they are now. Another member said that if all the community used IPM practices both for their individual crops as well as for the communal plot, incidence of pests like the weevil would continue to go down.
2. ***A community that produces organically.*** “[q]ueremos también consumir lo que es un producto sano, no químico y también cultivar nuestras tierras naturalmente con guanos de nuestros carneros, no echando fertilizantes químicos”. “[w]e also want to eat a product that is healthy, with no chemicals and we also want to plant our lands in a natural way, with manure from our sheep, not using chemical fertilizers”.
3. ***A community that has agroforestry.*** “Para el futuro también vemos reforestar. A veces en el turno de las dirigencias que entran por una necesidad, se vende pero no reforestamos...necesitamos entonces reforestar”. For the future we also see reforestation. Some times with the changing of community leadership, the community board will sell timber out of necessity but fail to practice reforestation...we need then to reforest”.
4. ***A community in which its male members do not migrating outside because of economic necessity.*** This meant having job available that paid well for a family to subsist. One male member said he would like to see Colpar as an ecotourism site where people from Huancayo or other urban areas came to enjoy the weekend. People would have businesses (food, lodging, crafts) to cater to the tourists and would earn part of their living from them. Another member from Quilcas said that the community

could make better use of different institutional actors (social capital) and negotiate with them alternatives for increasing productivity and open markets and eventually reduce migration.

5. ***The youth want to become members of the community and can make a living in the community.*** To achieve this dream, tied to the previous dream, the community has to build cultural, human, social and financial social capital. The entrance of modernity to the communities has had an effect on identification with place. Agriculture, the main source of living for a community member, no longer provides enough for subsistence and is not attractive for youth born into a *comunero* family. These new generations are more in tune with what life is in the urban part of Quilcas and feel detached from traditional communal life. That is why the future of the community depends on making staying in the community attractive for these youth. Youth that leave to become professionals should have something to attract them to return to the community.
6. ***A united community, with strong organizational structure.*** “*si no hay organización no hay una buena comunidad*”. Without a good organization there isn’t a good community”. This was manifested by all interviewees. A strong community and strong leadership is essential and if the community uses the social capital that it has. With Yanapai as a link, they can continue to build their organizational and leadership capacities.
7. ***A community with social and political capital to invest in the sustainable management of its natural resources and to effectively negotiate when there are external threats.*** This point has to do with the future of the relationship between the community and the mining enterprises. “*Estamos esperando un nuevo convenio que van a firmar.*” “We are waiting to sign a new agreement [with the mining enterprises]. While community members do not want the mines to claim more communal lands for exploitation, they want mining companies to respect the agreement they have signed with the community, which states that 70

percent of their working force should come from the community of Quilcas and that the company assures that the environment will not be damaged. A community member in Quilcas explained that mining enterprises should talk with the community. Almost all community members found something positive about using what they had learned in the past ten years and applying it to the future. The dream is to have a dialogue where mining enterprises and community are at the same level, and the mining company will honor all agreements with the community without the use of force.

Design

As men and women discussed the positive and negative outcomes of the last ten years and built mental pictures of how they would like the future to be, they begun thinking of provocative propositions. Most men and women interviewed were eager to share their ideas of what actions would help reach their desired future/dream. Some were not very specific, only saying things like more job opportunities, or increased production. However there were others that gave examples of what could be done.

In Colpar, a woman said that they had crafts, nature and traditional cuisine that they could offer to tourists. This would make the idea of Colpar becoming a site for tourism possible.

On the same subject, a male in Quilcas talked about adding value to the timber they sell from their communal forest. The interesting thing about this proposition as well as some others is that he mentions adapting a machine that the community received so that the motor can be used to cut the timber as well as for other uses.

...[F]ujimori regaló una máquina para moler...en una reunión yo dije que eso podía usarse para bombear agua...lo tienen allí guardado. Se esta talando bastante la madera y no se están haciendo tablillas. Tenemos esa máquina ese motor se debe preparar tablillas y se genera empleos para los comunero aquí mismo.

[F]ujimori gave [the community] a milling machine...in a meeting I told them we could use it to pump water...they have it just stored there [in the communal building]. A lot of trees are being cut down but they are not being made into planks. We have the motor from that machine that can be used to produce the planks and that generate jobs for the community members right here.

He believes that if they made wood planks instead of selling it as timber to an intermediary, the community would be able to gain more. Likewise he also talked about people in the community engaging in guinea pig farming to provide for restaurants and others. Another Quilcas resident said that the community should make use of more technology, use the “knowledge” of professionals from the university and state research institutions to improve their production. According to him the biodiversity fair should be exploited by the community. He believes that the community needs to make better use of the different institutional actors (social capital) that are available and negotiate with them alternatives to increase productivity and open markets and eventually reduce migration. Finally, another man believes that to make things even better, what should happen is that Yanapai broaden its area of work, *“Quisiera que los mismos trabajos que hizo Yanapai se hagan a nivel del pueblo, ya no con comuneros”*. “I’d like for Yanapai to do the same processes at the town (municipality) level, not just with community members”.

Among those I interviewed, women had opinions and insights that were as valuable and very complementary to those men had. They coincided in their opinions on what has worked and what has not worked in the community. They had very good and updated knowledge about the mining issue and identified the threats it posed on the future of the community.

In Colpar I found that women within the community gained political capital, as the community board is composed mainly by women. The next section presents a brief analysis of changes in the position of women in decision making positions in the community.

The Increase in the Presence of Women in Relevant Roles

Figures 9.1 and 9.2 show the changes in gender composition of three relevant community official structures in Colpar. Though Colpar is not an independent community, its organizational structure follows the same line of legally recognized communities as Quilcas, therefore these are elected officials. Having this communal structure permitted them to be one of the better organized *barrio-anexos* in Quilcas. Over time, Colpar has become more inclusive of women in decision making positions. As can be observed in Figure 9.1, ten years ago only one woman was on the elected board. Ten years later the situation is reversed; only one man serves on the board.

In Quilcas, at least through 2006, there has never been a woman in the position of president of the community. In 2005 Colpar elected the first female president. During the interview with the President of Colpar, she said that currently the majority of community members are women.

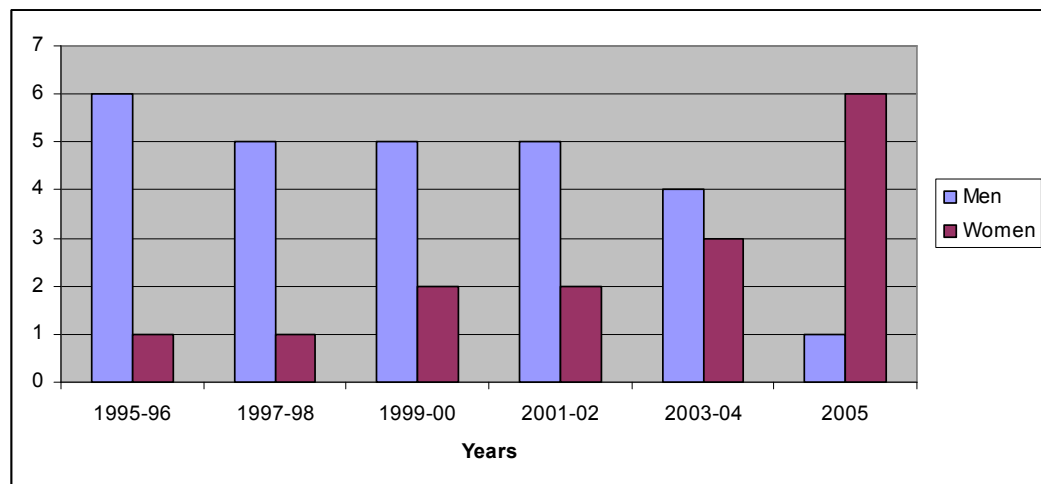


Figure 9.1 Changes in communal board structure over the last ten years

The main reason is because men tend to migrate for work, and their wives are left in the community in charge of the household. These women then become the registered community member of that household. She was initially reluctant to accept the position but ended up having to accept, although her husband replaces

her when she cannot manage to go to a meeting or travel with the board for the assignment by Quilcas of the communal plots:

Como estaba yo de comunera...me han elegido yo me he opuesto todavía que no voy a poder porque no estoy en esas y me dijeron que si, todos que pasar el cargo, así saben o no saben tienen que pasar el cargo, y puras mujeres somos en la directiva...mi vicepresidente es el único que es varón...claro puedo ir a las asambleas todo, pero a veces acá tengo para atender a mis animalitos y ahora que van al colegio salen muy temprano [los niños] y hasta que hago eso ya se va la hora ya y por eso mi marido dijo yo voy a participar y a veces se van a Añas también y a veces yo también no puedo ir.

As I was a community member, I was elected (as President).....I was opposed to be elected because of my lack of experience, but I was told that every community member has to assume the responsibility and learn....we are all woman in the board, only the vice-president is a man.....I can attend to all the meetings, but sometimes I have to devote time to my animals and my children. Children return from school rather early. Because of this some times I cannot get to the meetings on time; that is why my husband goes to represent me...Some time they also go to Añas but I can't. (President of Colpar 2005)

Assuming a decision making position in the community usually requires more sacrifice for women than for men. As the president said, aside from the obligations due to her position, she had to juggle between her productive and her reproductive responsibilities. Men who do not work outside the community have more time to spare for communal duties. This was the case with her husband. As with the communal board, the presence of women in position of municipal officials¹⁰ has also increased over the last seven years from no women on the board to twice the number of women then men in the year 2005.

The community of Colpar has mobilized itself to improve their response to certain health emergencies. Recently, a woman in her late thirties died two days after childbirth due to its complications. The women in the community decided to assign someone in the community to go to train as a midwife. The president of the

¹⁰ Both the community board and the municipal agents are elected in general assemblies. For more details refer to Chapter 3.

community, aside from her normal duties and her duties as president, is also training to become a midwife.

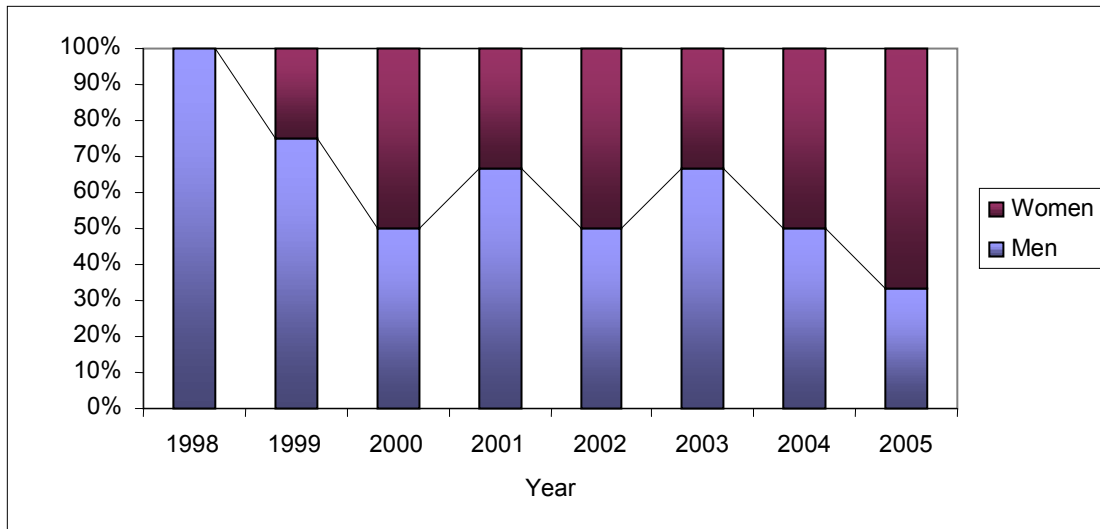


Figure 9.2 Municipal Agency by gender composition from 1998 to 2005

Women in Quilcas, although not having reached the presidency of the community, have also managed to have key positions within the municipality. A woman in single mother category in 1995 used her social capital, through her links with Grupo Yanapai and other organizations working with Mother's Clubs, to take advantage of all training and capacity building programs available, building her human capital. Now she holds the position of Judge of Peace for the District, a three year position within the Municipality of Quilcas. This has helped her build her political capital.

The use of Appreciative Inquiry to learn more about how the men and women in the community perceive the positive changes in the community has brought about much reflection on part of the people interviewed. Not all lessons learned and changes happening were put in a positive light by those interviewed. However some of the successful processes started with Yanapai have become a part of the community's repertoire for collective action. Integrated pest management practices, use of local knowledge—or mutable immobiles as Kloppenburg (1991) calls them—

and modern technology adapted to the local conditions are part of what has stayed in the community from the learning processes initiated by Yanapai. Aside from these elements, Grupo Yanapai also facilitated the process of awareness of threats that came from outside the community and how the community itself could build social and political capitals to face these threats and increase the resilience of the community. In the next section of this chapter I will discuss how Grupo Yanapai saw the process and the lessons they learned from it.

Changes at Community and NGO Level from the Perspective of Grupo Yanapai

Members of Grupo Yanapai shared their perspectives of changes that have occurred during the ten year period I am studying. The questions I asked them were similar to those I asked community members. However, when reflecting on what they had learned, Grupo Yanapai members immediately made a distinction between two learning periods: one where they worked with groups and one where they learned to work with the community as a whole. In the define phase the questions that guided the AI process were the same that I used with the communities of Colpar and Quilcas with a twist to it: “What do we need to do even better to continue the revitalization of the community and Grupo Yanapai and continue enhancing their community capitals?” My interest in this section is to see what members of Yanapai think about the future of Yanapai.

I interviewed three members; two of them had been in Yanapai for the whole ten years my study encompasses. The third had returned to the organization (after having been abroad for nearly a decade) in 1998, so she was mostly present during the end of the RIMISP project and during the whole duration of the SANREM project. The three had similar views regarding what had happened in the community.

Discovery Phase

The members of Yanapai believe that a shift has occurred from people being more concerned about solving their immediate needs to concern with the community building a semi-structured collective conscience regarding the importance of

preserving their environment and their resources. The greatest success, one of the member points out, is that people have changed their thought process (impact on cultural and human capitals). Another member of Grupo Yanapai added that the most positive change for the NGO and the community alike was shifting from working with small organized groups during the first six years of their presence in Quilcas and Colpar to working with the community as a whole. The line of work also changed as the purpose of the process shifted to holistic development rather than just technical training. From Yanapai's point of view, there were certain activities that they found the most rewarding and had greater impact at community level. One such activity is the biodiversity fair. Ownership has been taken in its totality by Colpar and has been the vehicle for the building social and cultural capital that has led to further parallel activities:

[h]ace 6 años hemos empezado con las ferias de biodiversidad pero los reportajes son de que ya eso es para siempre y ellos lo siguen pero nos utilizan como capital social para algunos premios y algunas conexiones pero para nosotros es la lección de que cuanto mas responsabilidad les damos mas lo toman pero ellos la siguen. Creo que la gente tiene una actitud bien diferente hacia las cosas nativas la toman con mas aprecio mas revalorado, tenemos ocas revaloradas y un pequeño proyectito cocinándose. El tipo de la bioferia posiblemente les mande maquinaria para un valor agregado y puedan tener fuente de ingreso y eso va fortificar el cultivo de oca. La wankita se ha lanzado con ellos. Es un experimento interesante de investigación participativa. Tengo dinero del SENASA para hacer un folleto sobre la variedad y a ver si podemos hacerles productores de semilla.

Six years ago we initiated the biodiversity fairs, but it is evident that they will continue forever run by the community. The community organizes the fairs now, but they use us as social capital to find sponsors for the prizes; but the lesson for us is that the more responsibility you give them [the community], the more they take charge and follow it through. I think people have a different attitude towards native things as they appreciate and give more value to them. We have revalued the oca, and we are brewing a small project. It is possible that the guy from the biofair¹¹ will provide equipment that will help add value to the product, resulting in increased income from the production of oca. We promoted the wankita [potato variety] with this group [of comuneros]. This is an interesting participatory research project. I have

¹¹ The biofair is an organic producers market that takes place in Lima every weekend. Apparently this member from Grupo Yanapai had contacted one organizer of the biofair.

funds from SENASA to prepare a brochure on that oca variety. We hope we can turn them into seed producers.

The work with women was also mentioned by one of the members of Yanapai as something very positive. Yanapai worked with organized women's groups that produced potatoes, managed biodiversity and engaged in activities that were taken to the community level and not to the individual one. They have stopped working with mothers' clubs in Quilcas but are taking this experience to Chopjas in the Department of Huancavelica, where they have been working for the past two years and where there is high gender inequality.

The members of the NGO consider the activities around the mining issue and the building of Advocacy Coalitions as a highlight of the ten years of work. The process has continued and had recently been followed by a new tool to strengthen the political capital of the coalition around mining:

Mencionaron la minería y nosotros no sabíamos nada de eso pero una vez que se vio esto se armó un nuevo grupo y se fue a hacer las entrevistas del caso. En las entrevistas de coaliciones la comunidad vio que podía defenderse y a pesar de que ha habido algunos vaivenes y gente negativa al proyecto coaliciones alrededor de minería, se ha continuado y hace poco recibimos un financiamiento para hacer un módulo de entrenamiento en Quilcas utilizando incidencia política, donde han invitado a todas las dirigencias de otros sitios. Ha sido importante para que no se sientan los únicos afectados y la metodología ha sido efectiva.

Mining was mentioned, and we didn't know anything about it. But once we learned about it, a new group was formed that went to interview. In the coalition interviews the community realized that they could defend themselves, and in spite of some difficulties and the presence of people with negative attitude towards the coalition, actions have continued. Recently we were financed for a training module in Quilcas using Political Incidence. It has been important to invite Directives from other places [affected by mining] to these meeting so that the community of Quilcas does not feel they are the only ones affected by mining. (Grupo Yanapai 2006)

When asked what benefits Grupo Yanapai gained from the work with the community, all of them indicated that the institution has gained strength in the use of different methodological approaches. With the ACF approach, the community was not the only one building their social capital. Yanapai went from working locally, with

the community, to going outside the community and learning about other actors and linking those external actors back to the community.

From the above examples of what worked best, the positive core for Grupo Yanapai would be:

1. Learning
2. Networking
3. Changes in way of thinking
4. Collaboration/Participation
5. Inclusion

Grupo Yanapai's positive core is similar to that for the members of the community interviewed. The difference is found in the addition of inclusion. Although the processes studied here never reached the levels of inclusion hoped by Yanapai, there are still positive examples of work with women in the community that the NGO is planning to use to develop strategies to increase gender equity in their work in another Andean region in Peru. The positive core applies to what the NGO perceives has worked for the community as well as to what has worked for Yanapai. Here is where we come to the realization that there has been a level of co-learning.

Dream Phase

I asked the members of Grupo Yanapai to imagine what the future could look for the community if they used what has worked for them to make things even better. One of the dreams is to have a community that engages in collective work. A path to a better future for the community is to continue to engage in holistic development. Another more explicit dream was shared by one of the oldest members of Yanapai. From the numerous talks I have shared with the different members of Grupo Yanapai, I can say without a doubt that this dream represents the thought of all of them regarding the future of the community:

...[l]o importante es tener un plan para hacer frente a la minería y en eso se está trabajando. Es importante el taller que se va a tener con OXFAM, para poder diseñar ya nuestro plan de contingencia contra Empresas mineras porque hasta ahora hemos estado peleando contra la mina sin armas... También se va a ver lo que se ha trabado en los últimos años no solo en

biodiversidad referente a recuperación de cultivos sino en biodiversidad de la flora. La comunidad han manifestado que cosas que hay en Quilcas y Colpar no hay en otro sitio. Otra cosa es turismo vivencial con miras de hacer una propuesta de turismo. Dentro de esta propuesta se incluiría terminar la piscigranja al igual una serie de alternativas. Lógicamente en estos últimos años se ha trabajado fuerte la revaloración del conocimiento y cultura. Hemos trabajado fuerte como yanapai en la revaloración con ferias de biodiversidad, concursos, etc. Los de Quilcas tienen una perspectiva bastante fuerte para solucionar problemas de liderazgo, ese es otro punto que yanapai debe ayudar, aunque al final son ellos los que deben solucionar esto.

[t]he important thing is that they have a contingency plan to face the mines and that is what we are working on. The workshop that we are having with OXFAM is very important because we will design our plan of action against the mining enterprises because up to now, we have been fighting them without weapons. In the workshop we will also look at what we have worked on for the past years, not only regarding biodiversity as recuperation of local crop varieties; but also as recovery of local flora. The community has said that the flora they have in Quilcas and Colpar is unique, you cannot find it elsewhere. Another thing is tourism. The proposal would include finishing the construction of the fish farm as well as other alternatives. Obviously in the past few years we have been strongly working on the revalue of local knowledge and culture. We have worked as Yanapai in the revaluation of the biodiversity fair, contest [i.e. the contest of traditional ploughs], etc. The people from Quilcas have a strong perspective on how to solve their leadership problem, and that is another point in which Yanapai can help though in the end, the community is the one that has to solve this.

Finally regarding the future of Grupo Yanapai, members feel it is time to work in new regions other than Quilcas and Colpar. With this last remark, they are already entering into the design phase since they give their first provocative proposition: “to take what we learned there to other places”. They have started this move and now they are in their second year of work in a peasant community in the highlands of the Department of Huancavelica. Regarding the NGO itself, all members agreed that there needs to be a renewal within the organization. The dream is to integrate new professionals into the organization, with new ideas and enthusiasm. Likewise current members need to come together and revisit the objectives and find a common vision with which they can work in harmony:

Creo que estamos iniciando un nuevo proceso en otros ámbitos pero esto de aquí a 10 años un yanapai más actualizado un grupo humano más grande, entonces debemos que combinar gente mayor y jóvenes, ya que viejos experiencia y jóvenes ganas y no creo que yanapai de acá a 10 años no crezca...hay que formar gente, tenemos que cambiar hacer mas la unión, yanapai debe ser un equipo y no una sola persona, como equipo somos yanapai, debemos pensar siempre así. La experiencia del equipo puede servir si se forma nuevas personas.

I believe we are initiating a new process in other scenarios, but ten years from now there should be a more updated Yanapai, with a larger human group, then we should combine older and younger people, since older people will provide their experience while the younger ones will provide enthusiasm. And I do not believe that Yanapai will not grow ten years from now...We have to prepare people, we have to change and promote unity, Yanapai has to be a team, it is not just one person; we should always think as a team. The experience we have gained can be useful to prepare new members

Design Phase

Most of the provocative thoughts are embedded within the quotes found in the previous phase. However, in this section I will list other provocative propositions as mentioned by members of Grupo Yanapai.

1. Recovery of local flora that is unique to Quilcas and Colpar (based on the experience Yanapai and the community gained with recovery of potato biodiversity). This can become an attractive resource to attract ecotourism.
2. Finishing the construction of the fish farm also for tourism purposes.
3. Put in practice the Political Incidence around mining approach as a continuation to the ACF approach to strengthen the negotiations with mining enterprises (by the beginning of 2006 this was already in place).
4. Continue with revalue of local knowledge and culture by continuing with the biodiversity fair and other contests that celebrate local culture.

Regarding the future of Yanapai, the provocative proposal would be to:

1. Update Yanapai with a larger human group, bringing together old members and new younger members. The older ones will provide their experience while the younger ones will provide enthusiasm.
2. Increase the sense of community within the organization, we should be more united.

According to Yanapai, everybody has a role in the sustainability of a community or an institution. Both the community and the NGO have shown resilience in the face of threats and obstacles. Likewise, both community and NGO have built on the different community capitals, and created a synergy among these capitals when they have invested their assets. The greatest assets both community and NGO have started with were their human, cultural and social capitals. The community has added its natural capital to those other capitals. Ten years of development/research processes have been years of learning for the community and NGO alike. The true success is that these processes continue once the facilitator, in this case Yanapai leaves and that the community continues to use the assets they gained in these processes. Evaluation done with Appreciative Inquiry shows that there are things that the community has kept from the processes, change has happened. If it still has not happen there has been an increase in the awareness of the need for change within the community.

Afterthoughts regarding the use of AI as a tool for Evaluation

By using AI as a tool to evaluate R&D processes, I have developed a new use for the approach. As a researcher, this evaluation gave me more elements to answer my research question regarding the sustainability of the development process now that there no longer was a formal project going on, nor the constant presence of facilitators. Going into the community and using AI was a learning process for me.

A very useful lesson I learned from the AI process was how to turn around a conversation focused on only the negatives. Telling stories seems to help achieve this change of language. Using AI helped with the idea of trying to avoid going to the

negative discourse because one of the things in development for a long time has been that we have always talked about, “What is your problem?” and how are we going to solve it. People would fall into that negative point of problems. This could be a problem, especially in large meetings where such an approach can lead to conflict between people. In the AI that I conducted in Colpar and Quilcas, only individual interviews took place. However, even in these cases avoiding dwelling for too long on problems set up the positive frame of mind and probably deflected people from dwelling on existing conflicts around the problems and taking people into a negative mind set.

It takes some initial guiding on the part of the interviewer (in this case me) to gently guide the interviewee into getting something positive out of their negative experience. That is a better starting point than trying to abruptly change the tone of the conversation. It is important to listen to what people are saying, even if it is negative in the beginning. In my experience with AI, people seemed more receptive to share good experiences when they felt that there was recognition on my part of their problems.

As I mentioned in the beginning of this chapter, when I went to the community to conduct the interviews, my objective was to get information that was actually going to serve me, more than the idea of using this for the community. However, what came up could be used by the community and by Grupo Yanapai. Likewise, what I learned from the interviews to members of Yanapai could be used by the NGO and the community. Especially because I discovered that there was a similar trend of learning between both the community and the NGO. Both of them mentioned very similar things that they learned about, similar learning processes and they shared similar views of why they thought some things had worked better than others. Their co-learning led me to believe that this was truly a participatory process. Both learned about networking, both built their capacities and both gained a lot of awareness about things that neither of them knew.

Finally, if we were to use AI to create the structure for future action I would engage the community as a whole, in two groups by gender or in smaller focus

groups also by gender (followed by a plenary session). That would mean engaging in a longer process of getting the community into an AI frame of mind (think assets not problems) to have them not only willing to participate but eager to do so because they would see it as a next step for further actions.

Summary

In this chapter, I have discussed how men and women from the communities of Colpar and Quilcas as well as members of Grupo Yanapai, see the last ten years of development processes. Using Appreciative Inquiry, I invited them to tell stories of the positive lessons and tools they gained from the time Yanapai and the community worked together.

An AI evaluation was also conducted with Grupo Yanapai. There were similarities between what the community and the NGO discovered as assets the community had gained during the 10 years of development/research processes. Regarding the institution, Grupo Yanapai learned alongside the community. Getting involved in the mining issue was something very new for them. Through working on building coalitions around that issue, the NGO has gained skills and experience in negotiating and building networks with external actors that they did not have before. Co-learning happened between Grupo Yanapai and the Community as was reflected by the mutual mentions of how they each learned from the other.

CHAPTER 10 HOW SUSTAINABLE IS HOLISTIC PARTICIPATORY COMMUNITY DEVELOPMENT IN THE FACE OF MODERNIZATION? CONCLUSIONS AND LESSONS LEARNED.

The ten years of research and development processes provided an exceptional opportunity to analyze changes in a community associated with outside interventions. I present in this dissertation a case study of how things unfolded in Colpar between 1995 and 2005. Changes within the community were seen through shifts in and among the assets possessed by the community and its individual households. The shifts resulted from investment, loss of and synergy among the different capitals and related to one of the three intervention periods.

In the Colpar case study, all three R&D processes had natural capital as the starting point of the intervention. Though the approaches to building natural capital were different; they all were grounded on strengthening human capital. Each project became a building block in the construction of a more holistic community development process. What did each project ultimately accomplish for the community? What assets and tools did the projects leave in the community that members can still use and are still using? Both questions are addressed by briefly looking back at each process.

The ILEIA period's focus was on increasing human capital for members of the community of Colpar to invest in natural capital. The idea of the community as a whole being the target of ILEIA was lost when individual households within the community took over experiments. Those with greater social, political and financial capital within the community, the known innovators and the key collaborators were selected, leaving behind other groups within the community (the poorest and less favored population). Grupo Yanapai did not insist on encouraging a more community-driven and focused process, mainly because donors and ILEIA Netherlands were more interested in the impact its PTD approach had at individual household level. As a result inclusion became a trade-off for implementation of a larger number of PTD experiments to meet donor expectations.

A positive accomplishment of the ILEIA project, despite its focus on individual households, was building cultural capital at community level. Farmer exchange visits between Cajamarca and Colpar that occurred during the first phase raised community awareness of the importance of traditional knowledge, organizational structures and bonding social capital as key elements in Colpar's development of better livelihood strategies at household and community level than those of Cajamarca peasant villages visited by the team.

During the second phase, and before becoming a tool for individual development, PTD (Participatory Technology Development) introduced the community to the possibility of bringing together scientific and local/traditional knowledge to develop technological options to achieving low external input sustainable agriculture. By giving relevance to local solutions with an important component of local knowledge, cultural capital was unexpectedly built. Why then was the project not sustainable in time? The main reason might lie in failure to engage the community in the process. ILEIA preferred to go for the relatively "easier" route of working with individual households. Engaging the community would have involved going beyond seeking for technical solutions to specific "problems".

When PTD was left behind to engage in Concerted Action through the RIMISP project, three things happened. First, the new approach provided the community tools to go one step forward and recognize that technical solutions could not always be the appropriate route to promote sustainable change in the community. Second the CA approach also took the research and development focus from agricultural production to a natural resource management. Third, as a result of becoming aware of the previous two points, the community realized that for change to happen and for it to be sustainable, Colpar needed to plan in more holistic terms. I believe this was the greatest accomplishment of this project. The community developed a holistic desired future vision of a stronger community (i.e. with improved organizational structures, community infrastructure and human capacities) that would work together to achieve change. Investment and synergy among all seven capitals give shape to the desired vision. However, to kick-start the process, three

key capitals were initially invested in: cultural, human and social capital. Investment in human capital in the form of capacity building achieved the necessary bonding and bridging social capital to get closer to the desired future vision. Similar to what happened in the ILEIA project, building cultural capital was not in the projects agenda. However, increase in cultural capital in the form of revalorization of local knowledge and biodiversity occurred as an unexpected outcome triggered by the increase in social and human capital. Community members started to interact and establish relationships with new external actors that were especially interested in and valued the community's cultural assets (traditional agricultural practices, collective labor, biodiversity, and crafts, among others).

While the above accomplishments changed the synergy among the different community capitals, the CA approach was not able to provide the necessary elements for Colpar to build its political capital effectively. Thus the community's role in decision-making regarding the management of their own resources was weak. The introduction of the ACF approach during the SANREM project came as a welcome addition to build political capital very much needed to approach such complex issues as those related to mining and land access. By investing its bridging social capital, the community attained funds from GGF (financial capital) to increase their capacities (human capital) to negotiate (political capital) with external threats (mining enterprises) or opportunities (new institutional actors introducing Political Incidence approach, again human capital) that continued to be present even when there was no longer a development project taking place. With the increase in its capacity to negotiate, the community has participated in several activities such as biodiversity fair (opportunity) and the ever complex and conflictive negotiations with the mining companies in the area.

There is a thread that links all projects. In an unintentional way, a new project would become an "upgrade" of the one that proceeded. In other words, each project was a building block of the development process. How did all projects weave together? The first thread was the capacity building process that ILEIA brought and that continued to be woven into the projects that followed ILEIA. That project started

the participatory process, introduced PAR and PRA tools that were already being used by Yanapai and women's groups to the whole of the community. Establishing participatory processes, establishing the level of trust between NGO or any other external facilitator and the community takes time, as the literature often mentions (Chambers 1997). It is not so surprising that during the first project not much change in the synergy among capitals was observed. Disregarding for a moment that the ILEIA process ended being one that focused on households rather than community, initially the basic participatory tools were utilized in the whole of the community. Thus, the process of building trust and capacity were the assets that the ILEIA project contributed to the following project. The CA approach involved using the same basic participatory tools to develop a more complex RAAKS process. From the CA approach we (Grupo Yanapai, the community and I) learned the importance of focusing on holistic approaches. We also learned that building networks and reaching individual agreements with actors within this network was not enough to lead to change. The ACF gave us the tools to look at that network built in the CA phase and see how we could bring more than one group of actors together in coalitions to have greater decision making power when addressing relevant issues. In summary, the added contributions from each of the different projects gave more definition and direction to the development process. By the end of the funding period for the last research and development project (SANREM), many community members had developed the capacity to ask questions regarding their natural resources as a result of the learning process they went through.

Using AI as an Evaluation Tool

A part of why the research I present in this document is important is that it looks at ten years of R&D processes, something that is not very frequently done. This study is especially interesting because I look at three different and sequential projects that were implemented during that period of time. The research looks at changes in community capitals and the elements that can make a process continue over time, despite the termination of outside funding. To understand the role of

community agency in changes in community capitals, it was best to find what did work, rather dwell on mistakes and what did not work. Appreciative Inquiry was the ideal evaluation tool. My contribution to AI literature is in the way I used it as an evaluation tool. For me, as a researcher, this evaluation gave me more elements to answer my research question regarding the sustainability of the development process now that there no longer a formal project or constant facilitation. Posing questions in a positive frame gave me the chance to gather stories to complete this picture. It can be very difficult to get people into that positive frame of thinking. AI gave the chance to turn a conversation from negative to positive. When the conversation focused on problems, we could always turn the tone of the conversation by asking “OK but what are some of the positive things about this experience? What is it that you gained from this?” As a result, people started to think about their experiences in more of a positive sense.

One finding from the AI evaluation is that community members interviewed have good propositions on how to make things work even better for their community in the future. Many of these proposals revolve around the importance of value added as a livelihood strategy. This is a strategy already being implemented with the support of Grupo Yanapai, aided by their link to external actors, among them the school of chefs who interested in the local cuisine. Their idea is to put Quilcas, and Colpar in the tourism map, as part of what is being called *ruta turistica* or tourism route where visitors will get to sample the traditional cuisine of the area. Prominent among these visitors would be the students in culinary arts who would use this trip as base for the development of new Andean cuisine dishes.

Another important finding from the AI evaluation is that actually there was a similar trend of learning between both the community and Grupo Yanapai. Both of them mentioned very similar things that they learned about. They both built their capacities. They both gained a lot of awareness. The evaluation helped me to realize that there is not much difference in the learning processes grassroots and NGOs go through in a participatory development process. Co-learning happened, with nether realizing the degree to which they were co-learners. An example is the

learning process the community and Yanapai had to go through to face the mining issue.

The Modernization Process, Strategies to Face and the Effects of these Strategies over the Future of the Community

Modernization in Quilcas and Colpar had an impact on households. At community level, modernity is affecting its ability to sustain communal resources and is threatening the existence of the community itself. Government intervention regarding the marking of district boundaries resulted in a significant loss of communal lands for Quilcas. Although the community has not been able to subsist solely on their agricultural production for at the least the last ten years, agriculture is still the core of the community and therefore of its identity. However, loss of natural capital (the loss of communal land) has brought a downward spiral in community capitals. Less land and an increase in the human population of the area has led community members to modify their livelihood strategies. Migration has increased in the recent years, as it is getting harder to live from agriculture. Youth no longer wants to become members of the community, as they identify more closely with urban life. The entrance of mining into communal land is also impacting the community, as the loss of pasture and crop land increases as mining activities continue in an uncontrolled manner. Figure 10.1 illustrates the changes in strategies and their causality. As can be observed, it becomes a downward spiral, as people attempt to maintain their relation to the land. The population in Colpar and Quilcas has continued to grow. With that growth, demand for land has also increased. At the same time the area of communal property has decreased (i.e. PETT laws, entrance of mining), especially the land to allot for grazing, this has increased animal pressure and therefore is affecting land quality. Crop land is also being affected by degradation. There are shorter rotations giving the land less chance to recover. The amount produced by members of the community is not sufficient to feed the family, therefore the household must seek other means of livelihood generation, such as migration to find paid work. Those that have livestock are in a slightly better position,

since they have something that they can sell in the market and get a good price for it when necessary. Here is where the social differences between community members can be found. Households that have a member that has migrated temporarily or permanently receive remittances from these members working outside. Sometimes these remittances are used to buy livestock, the sign of wealth and prestige for community members and also a source of savings. Increases in the number and size of household herds has an negative impact on communal pastures, as overgrazing continues and with it degradation.

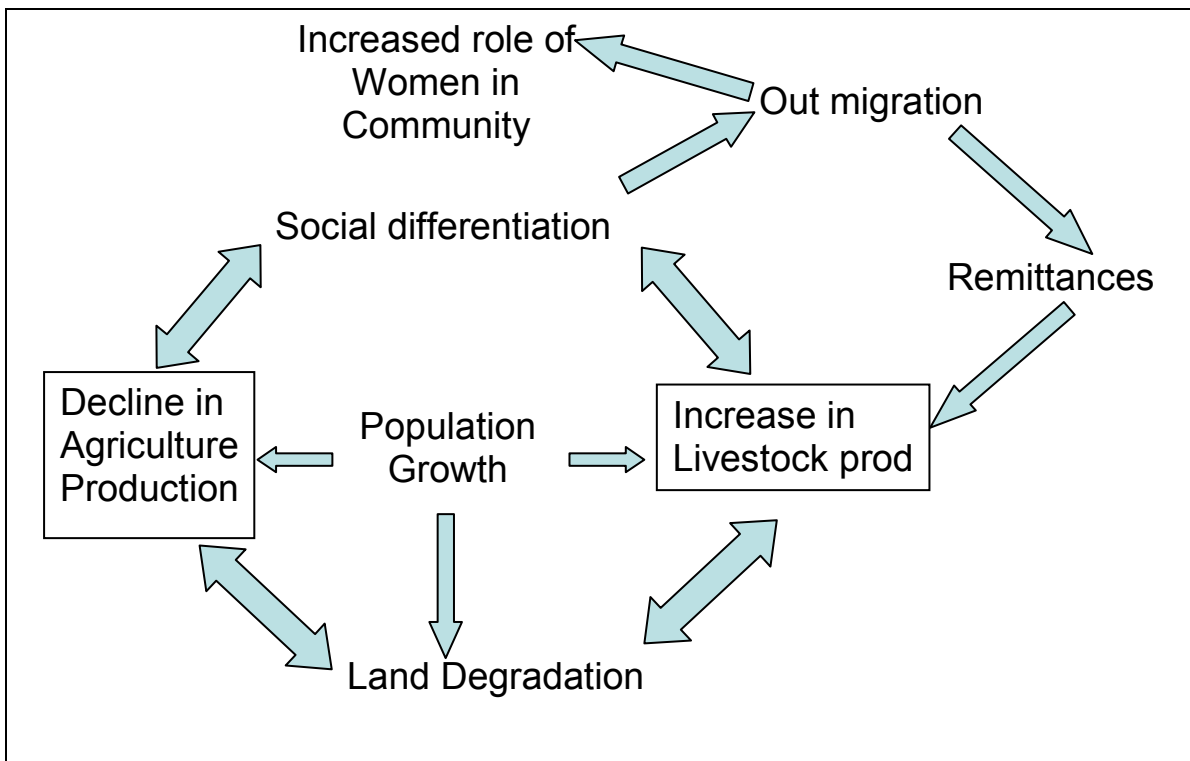


Figure 10.1 Systems link of causality and change.

In a future, there is the danger that as demand for more land for grazing increases, crop lands will decrease, and families who depend on crops (the poorest of the poor) no longer will be able to produce even the small amounts they do, forcing them to leave the community. Another effect of out migration, as seen in the above figure, is the increased importance of women in all community and household activities. They have had to adapt to the circumstances, as women mainly stay

behind and men migrate. The take on many of the agricultural tasks that were traditionally male. Likewise, their presence in political positions, such as community boards and the municipality has increased over the last ten years.

The Importance of Inclusion in Colpar's Development Process

When Grupo Yanapai started working in R&D, they did so mostly with women's groups. Therefore they had the necessary experience to make sure men and women participated in a similar manner in the three projects. Inclusion, as the literature shows, is a key element in the successful implementation of development efforts at community level. With that in mind, women were included in all processes while Grupo Yanapai served as facilitator. However, once the processes passed to the hands of the community, it was not always possible to achieve gender equality and inclusion of all social groups. Inclusion was also sacrificed during the ILEIA program. It became a trade-off for implementation of a larger number of PTD experiments to meet donor expectations. Nevertheless, with the increase of women as decision makers in the household and the community, mostly due to male out-migration but also due to empowerment of some women as a result of capacity building brought about by the different projects, the voices of women are gradually being heard and acknowledged.

Lessoned Learned

So far I have talked about the learning processes and the outcomes achieved by the community and the NGO out of these ten years of R&D processes. However, I have also gone through a parallel learning process that I must reflect on. I have a unique position within this process as an insider/outsider. I have constantly come in and out, at times as external coordinator, as evaluator, as facilitator and finally as liaison person for the different processes. I also went through a learning process, as did Colpar and Yanapai. My role became that of the person who saw how each of the new process to be started could become a continuation of the previous one. I learned to use the assets that had been gained from a previous project to support the initiation of the new one. This is an important methodological skill that other

researcher or development worker might find useful when they go to the field and finding a community that has gone through a process that has been more of generating outputs for the donor than of reaching sustainable communities. Even these projects have assets that can be used/rescued and linked to new improved projects.

An important lesson that came out of the process is that NGOs not always have the sufficient political power to negotiate on behalf of the community how a project will be designed and what the indicators of success will be. In the case of programs like ILEIA, it was a package deal in which neither community or NGO had much of a say, although tie package came with the participatory label on it. During the RIMISP period some modifications were possible, since the NGO was given slightly more liberty on how they implemented actions. The project was to focus on households and their livelihood strategies, but Grupo Yanapai tried with some success to broaden the project to the community level. Nevertheless, for an NGO to have a stronger voice with donors, it needs to develop social and political capital of its own.

Finally, Appreciative Inquiry brought another set of lessons. The use of this approach allowed a holist process of reflection as interviewees and I talked about what did work. Their mental causal models of why things did work came out in their stories of successes, and this was of great value for the evaluation process. With problems as the main focus, people would usually enumerate them and as enumeration went on, so would negative and conflictive feelings about other actors within and outside the community, come out. With AI, people started telling stories about their achievements as a community. I belief that this approach, adequately adapted to each specific situation, is an excellent tool to evaluate the impact of R&D processes. It proved to be effective in evaluating assets gained by the community and the NGO and to cross-analyze both, making it clear the similarity between the learning process of the various institutional actors.

Given the opportunity and the lessons I have learned, there would be things that I would have done differently. I would have given greater emphasis to gender

representation. I would have also eliminated the second phase of the ILEIA project. Although this phase resulted in people becoming aware of their local practices, this awareness was at an individual household level. There was no community impact. As a result of the focus on the individual household rather than the community, a rift was created between those that became experimenters and those that did not. It might have even contributed to a decline of collective work during that time.

There are still many questions raised as a result of my research. The first one relates to the continuity or sustainability of holistic development processes. We have seen throughout the document that there is some continuity of certain elements of the processes even after projects have ended. However, the strength of participation and the number of actions decreased. One of the causes of that decrease is community leadership. Each time the community changes leadership, the new community leadership comes with its own agenda, bringing change in policy within the community, and actions initiated by previous boards are ended. The community becomes divided in these circumstances. Re-integration of community to continue addressing the issues formulated during previous boards might come with the formation of new political capital at community level.

The second cause relates to the issue of inclusion. The first is how can we assure a greater gender representation in development processes? I found that as soon as the process is given to the community, women decrease their participation. What is necessary to assure participation of women as well as other unprivileged groups within the community? Would their participation assure more effective collective actions that are reflected in positive changes within the community?

Finally, how we can develop a way of measuring success at community level that is acceptable to both the community and donors and that satisfies the latter's need to have quantifiable and tangible results? So far the CCF has shown to be an approach that could accomplish this last task. However, more research must take place to create sufficient amount of research for donors to see its validity.

APPENDIX 1. INTERVIEW PROTOCOL

1. Name (to be kept confidentially)
2. Male_____ Female_____
3. Age _____
4. Interview date _____
5. Were you born in this community or are you an “in-law”?
6. If not originally from Quilcas, how long have you been living here?
7. Do you hold any position in the community? If so what position?
8. Are you affiliated/ do you belong to any other organization or association within the community?
9. Please name other community or outside organizations you belong to.
10. Household strategies:

Activity	
Agricultural Production	
Livestock Production	
Artisanry	
Wage Labor	
Business	
Music	
Others	

11. When you consider the past 10 years, how have you and your family benefited from changes?
12. When you consider the next 10 years, what hopes do you have for your family?
13. When you consider the next 10 years, what hopes do you have for your community?
14. Please tell me a story about the most positive experience you have had from the relationship with the NGO (Yanapai) regarding NRM?
15. Why do you see it as a positive experience for you?
16. Why do you see it as a positive experience for your community?

17. What do you think made this experience successful, what made the situation work?
 - a. decision making practices
 - b. networking, connections to external resources, local and bonding soc cap
18. What would you need to make it even better?
 - a. Decision making practices
 - b. networking, connections to external resources, local and bonding soc cap
19. I have heard from others in the community that mining is being allowed in the communal lands, what are your thoughts about this?
20. Have you participated in taking actions to stop the entrance of mining in communal territory?
21. What positive outcomes have come out of these actions?
22. I have heard from others that there is migration occurring in the community? What do think about that? Do you have household members that have migrated?
23. Permanent or temporary migrants?
24. Any member of your household engaged in local day labor?
25. I have heard from others that there are people in the community that use pesticides? What do think about that? Do you use them?
26. Do you think the government is taking actions to improve rural conditions (National agricultural/rural policies)?
27. Do you engage in selling any products (agricultural or crafts?)?
28. Do you sell in the community?
29. Do you purchase most of your products in the community?
30. Have you experience changes in where you sell products and where you purchase products including crafts in the last 10 years?

APPENDIX 2. THE DIFFERENT RAAK WINDOWS

Source: <http://www.iirr.org/PTD/Readings/General/RAAKS/RAAKS%20Windows.htm> Accessed 10/5/06

Phase A: Problem definition and system identification

A1 Objective of the analysis (terms of reference)

What do we want to achieve?

A2 Identifying relevant actors

Who are they?

A4 Context/environment

What factors are most important?

A3 Tracing diversity in actor objectives

What do they pursue?



A5 Redefinition of the problem situation

What are the problems to be assessed?

Agreed terms of reference or redefinition?

Phase B: Analysis of constraints and opportunities

B1 Actor analysis

What are their characteristics?

B2 Task analysis

Who does what?

B3 Communication analysis

Jargon: do actors understand each other?

What issues do they find important?

B5 Coordination analysis

Who is the most influential actor?

B7 Financial network analysis

What are accessible financial sources?

For whom and at what conditions?

B4 Integration analysis

Who has links with whom and why?

What is its significance?

B6 Knowledge network analysis

What are sources of information?

Accessible for whom?

What are strengths and weaknesses?

B8 Impact analysis

Does the system achieve what actors expect?

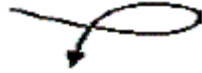
Effectiveness and efficiency?



B9 Summarizing knowledge system analysis / Understanding the social organization for innovation

What clusters, networks or subsystems can be identified?

What are main constraints and opportunities?

APPENDIX 2. Continued**Phase C: Action planning****C1 Knowledge management analysis***What can the actors do to improve the system?***C2 Actor potential analysis***Who can do what?***C3 Planning***Who does what, when and how?*

APPENDIX 3. COMMUNITY MINUTES REGARDING AGREEMENTS WITH MINING COMPANIES

ACTA 08 DE MAYO DEL 2001

ACTA DE REUNION PARA LA EXPOSICION DE PLANTEAMIENTOS ENTRE LA COMUNIDAD CAMPESINA DE QUILCAS Y LA EMPRESA MINERA AZURCO S.A.

En el paraje de Parajsho pampa antes Tuna Corral, comprensión del distrito de Quilcas, provincia de Huancayo, departamento de Junín, siendo a horas 12.20pm del día martes 08 de mayo del 2001. Encontrándonos reunidos por un lado los representantes del distrito de Quilcas: El Sr. Alcalde Rodrigo D. Rivas Ñaupari, el señor Gobernador Nemesio Tiza Ponce, señor presidente de la directiva comunal de la comunidad Campesina de Quilcas señor Herminio Suazo Gaspar y miembros directivos y los presidentes de los cinco barrios y contando con la presencia del señor director regional de energía y Minas Ingeniero Raúl Poma Lima, asimismo el representante de la defensoría del pueblo Dr. Javier Curi y por otra parte el representante de la Minera AZURCO representado por el Ingeniero Marlon Urco Velázquez gerente administrativo de la empresa, luego de una visita de inspección en horas de la mañana de todas las zonas de explotación y labores mineras en compañía de todos los mencionados líneas arriba y después de un amplio debate en el campo llegamos a la conclusión a llegar a una concertación y suscribir un acta de buen acuerdo en beneficio de ambas partes en los siguientes términos:

1. Minera AZURCO S.A. se compromete a la brevedad posible a la adjudicación del estudio de impacto ambiental de propiedad de la señora Bertha Urco García y darle el cumplimiento en la medida de la realidad.
2. La Comunidad Campesina de Quilcas solicita a la minera AZURCO SA a realizar su trabajo de explotación ubicado cerca del campamento de la compañía minera en forma ordenada y secuencial, tratando en lo posible de no seguir dañando la reserva de pasto de la comunidad en el Paraje de Tunsho. Este punto será formalizado y se concretara a la culminación del estudio geológico que en la actualidad se encuentra en ejecución el que se concluirá en un periodo de 3 a 4 meses.
3. Minera AZURCO, propone enviar un profesional en sociología para determinar las necesidades como resultado del estudio socioeconómico en la comunidad Campesina de Quilcas, dentro de sus posibilidades de mineras AZURCO ejecutara el proyecto priorizado por la Comunidad, lo que será equivalente al daño causado.
4. La comunidad Campesina de Quilcas, solicita a la empresa que a partir de la fecha se incorpore a sus comuneros como trabajadores en cuanto requiera incrementar su personal como prioridad.
5. Minera AZURCO solicita la prioridad en cuanto a la gestión, concesión del terreno superficial donde se encuentra la concesión de mineras AZURCO.
6. Minera AZURCO, solicita ala comunidad de Quilcas la autorización o sesión de las cabeceras construidas que dan acceso a las concesiones de minera AZURCO, dicha autorización deberá ser de control y vigilancia.
7. La minera AZURCO se compromete de que estos acuerdos que sé a llevado sean respetados por las empresas que continúan la explotación en caso de pasar a otra administración.
8. Este documento se formalizará el día 07 de junio del presente año 2001, en la localidad de Quilcas, lugar Local comunal a las 11.am.

No habiendo más que agregar pasamos a firmar después de leído, en fe a la verdad, siendo horas 2.45pm.

Parajshopampa 8-5-01

Firmas de:

Marlon Urco Velázquez gerente administrativo Minera AZURCO

Francisco Gamarra Superintendente MINA
 Herminio Suazo
 Daniel Rivas
 Y otros.

ACTA 04 DE OCTUBRE DEL 2001

ACTA DE COMPROMISO ENTRE LA COMUNIDAD CAMPESINA DE QUILCAS Y LA EMPRESA MINERA URCO

Consta por el presente, que reunidos en el paraje denominado Mamacocha, jurisdicción de la Comunidad Campesina del distrito de Quilcas, siendo horas 10.30 AM. Por una parte el señor Presidente del directivo comunal representado por el señor Herminio Suazo Gaspar y el Fiscal Juan Ordoñez Contreras y Ice presidente Emiliano Ordoñez Berrospi y por otra parte el representante de la Empresa "URCO" el señor Carlos Patiño Urco, en esta fecha se llevo una entrevista con referencia a las tierras de nuestra comunidad en la zona de la empresa en plena actividad y por lo cual la señora Bertha Urco García **se llegó a un acuerdo mutuo, en donar ciento cincuenta bolsas de cemento** en los siguientes calendarios:

Cincuenta bolsas dentro el plazo o termino de 15 días a partir de la fecha, y la otras 50 bolsas al termino de 30 días y por último las otras 50 bolsas al termino de 90 días, de la firma del presente documento. En Mamacocha, Quilcas a los cuatro días del mes de octubre del año dos mil uno. Luego pasamos a firmar los presentes para mayor garantía.

Carlos Patiño Urco
 Herminio Suazo Gaspar
 Juan Ordoñez Contreras

Representante de la Empresa Minera Urco
 Presidente de la comunidad Campesina de Quilcas
 Fiscal de la comunidad Campesina de Quilcas

ACTA 20 DE OCTUBRE DEL 2001

ACTA DE COMPROMISO ENTRE LA COMUNIDAD CAMPESINA DE QUILCAS Y LA SOCIEDAD MINERA JESUS PODEROSO No. 12 de HUENCAYO

Siendo las 13.00 horas de la tarde del día 20 de octubre del dos mil uno, se hizo presente el señor Herminio Suazo Gaspar con D.N.I. No. 19959009 Presidente de la Directiva Comunal del Distrito de Quilcas, y como representante de la Sociedad Minera Jesús Poderoso No. 12 de Huancayo la Sra. María Patiño Urco con D.N.I. No. 20008443, se reunieron para hacer la entrega de la donación solicitada con oficio No. 052-CCDQ – 2001 de fecha 5 de octubre del presente año que según acta firmada en el paraje de Mamacocha se acuerda la entrega de la siguiente manera.

1. Con fecha 20 de octubre se le hace la primera entrega concerniente en 50 bolsas de cemento, que será utilizada para la construcción del puente carrozable en el lugar denominado PUCASHALI (SUTULI).
2. La segunda entrega se hará el día 20 de noviembre del presente año.
3. Y la tercera entrega se hará el día 20 de diciembre del presente año.

Esta donación corresponde por el uso de las tierras de la zona eriaza, en el uso de la actividad minera en la concesión Minera JESUS PODEROSO No. 12 DE HUANCAYO.

En el Jr. Manuel Fuentes No. 188 del distrito del Tambo a los 20 días del mes de octubre se firma el siguiente documento, para mayor conformidad de ambas partes.

FIRMAS:

Herminio Suazo Gaspar
 QuilcasMaría Patiño Urco

DNI. 19959009
 DNI. 20008443

Presidente de la Comunidad Campesina de
 Representante Sociedad Minera Jesús
 Poderoso No. 12

APPENDIX 4. OTHER OUTCOMES OF ACF PROCESS

Year	Activity	Institutions partnering with Quilcas for activities
1999-	Biodiversity fairs continue to take place, with the community taking more control over the organization with each passing year.	Grupo Yanapai and different national institutions each year
2000-	Communal sheep and alpaca farm management is reorganized	Grupo Yanapai
2000	Three Quilcas farmers visited highland communities in Puno and participated in a farmer to farmer exchange of experiences. Some years later (2004) Puno peasant farmers visited Quilcas.	Grupo Yanapai- OXFAM Andes
2000	Visit by members Grupo Yanapai and Quilcas members to the SANREM research site in Cotacachi, Ecuador. Visit with second degree organization UNORCAC.	SANREM-ISU
2000	Photographic catalogue of native potato varieties. Farmers participate bringing all varieties they have to add to the photographic record and provide native or local names they are identified by.	Grupo Yanapai
2000-2002	Potato clone selection. This is a parallel activity that was initiated by the President of Yanapai.	Grupo Yanapai-CIP-INIA
2001	As part of the soil studies, a new desired future vision was constructed by the community.	SANREM0-UGA-ISU
2001	First international ACF workshop with the participation of leaders from the community of Quilcas, leaders from neighboring Casacancha and Rangra and two researchers in charge of the Ecuadorian SANREM research.	SANREM-ISU
2001 (?)	Water monitoring activities are initiated however there was no continuity and monitoring was abandoned soon	SANREM-Alabama
2002-	Visit by student from the UNALM and ISU exchange students of the graduate program Technological Innovation	ISU-UNALM GP- Grupo Yanapai
2002 (?)	Visit from 16 peasant farmers from Puno	Grupo Yanapai- OXFAM Andes
2003	Quilcas peasant farmers visit and receive in return visit from farmers in the Coast of Peru. Results in exchange (knowledge and seeds) between farmers	Grupo Yanapai-ISU and UNALM
2004	Visit by ISU team from the Sustainable Livelihoods program evaluating feasibility of initiating research work in Peru	ISU-Grupo Yanapai

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